

National Institute of Health Sciences Research Bulletin

IN THIS ISSUE:

- Does External Cardioversion Cause Myocardial Damage? Not According to this Study Using High-Sensitivity Troponin T
- An Audit of Influenza Vaccination Rates in Patients on Immunomodulatory Therapies in a Primary Care Practice
- Mental Health Consultations in a General Practice Out of Hours Service - Informing the Future Direction of Services
- The Mesocolic Hilum - An Electron Microscopic Appraisal of Anatomy
- Correlations between Electrophysiological Measures in Cochlear Implant Users

Volume 7 Issue 4

Spring 2017



Research Bulletin
Volume 7 Issue 4



ISSN: 1649-0681

Volume 7

Issue 4

2017 National Institute of Health Sciences, St. Camillus' Hospital, Shelbourne Road, Limerick, Ireland

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or any information storage and retrieval system, without permission from the contributors.

© NIHS 2017

Produced by Avid Graphic Design

If you wish to contribute to future editions of this publication, please contact:

The National Institute of Health Sciences
St. Camillus' Hospital
Shelbourne Road
Limerick

t: 061-483975
e: catherinem.kennedy@hse.ie
w: www.hse.ie/go/nihs



CLINICAL RESEARCH

Medical

A Retrospective Review of Azacitidine Therapy in an Irish University Hospital Setting **4**
Nolan, J.M., Leahy, M., O'Keefe, D., Nally, J., O'Leary, H.

A Study to Assess the Prevalence of Depression and Impact on Social Functioning in Patients Post-Stroke **5**
Daly, C., MacSuibhne, S.

Targeting Breast Cancer Outcomes - What About the Primary Relatives? **6**
Johnston, A., Sugrue, M.

Does a Nurse-Led Cardiac Rehabilitation Inpatient Education Programme Following Percutaneous Coronary Intervention Reduce the Rate of 28 Day Hospital Re-Admission? **7**
Ahern, C., Mannix, K., Cahill, C.

Medical (Published)

Does External Cardioversion Cause Myocardial Damage? Not According to this Study Using High-Sensitivity Troponin T **8**
Lobo, R., Cahill, C., Blake, O., Abbas, S., Hennessy, T., Meany, B., Kiernan, T.

Combined Education and Skin Antisepsis Intervention for Persistently High Blood-Culture Contamination Rates in Neonatal Intensive Care **9**
O'Connor, C., Philip, R.K., Powell, J., Slevin, B., Quinn, C., Power, L., O'Connell, N.H., Dunne, C.

The First Reported Case of *Burkholderia contaminans* in Patients with Cystic Fibrosis in Ireland - From the Sargasso Sea to Irish Children **10**
Power, R.F., Linnane, B., Martin, R., Power, N., Harnett, P., Casserly, B., O'Connell, N.H., Dunne, C.

Anti-RSV Prophylaxis Efficacy for Infants and Young Children with Cystic Fibrosis in Ireland **11**
Linnane, B., Kiernan, M.G., O'Connell, N.H., Kears, L., Dunne, C.

A Case of Failed Eradication of Cystic Fibrosis-Related Sinus Colonisation by *Pseudomonas aeruginosa* **12**
Linnane, B., Kears, L., O'Connell, N.H., Fenton, J., Kiernan, M.G., Dunne, C.

Medical (Ongoing)

An Audit of Influenza Vaccination Rates in Patients on Immunomodulatory Therapies in a Primary Care Practice **13**
Griffin, L., McDonnell, A., Griffin, M., Ryan, G.

Surgical

Quality Assessment in a Surgical Day Unit **14**
French-O'Carroll, R., Muldowney, M., Hollywood, M., McDonald, N., Hickey, C.

Differentiated Thyroid Cancer Management - A 12 Month Review **15**
Ahmed, T.S., Toghey, S., Spraggs, P.

Surgical (Published)

The Mesocolic Hilum - An Electron Microscopic Appraisal of Anatomy **16**
Walsh, L., O'Brien, I., O'Leary, D.P., Kiely, P.A., Dunne, C., Quandammatteo, F., Dockery, P., Coffey, J.C.

Benefits of Post-Operative Oral Protein Supplementation in Gastrointestinal Surgery Patients - A Systematic Review of Clinical Trials **17**
Crickmer, M., Dunne, C., O'Regan, A., Coffey, J.C., Dunne, S.S.

Surgical (Ongoing)

Review of Key Quality Data for Bowel Screen Colonoscopies in South Tipperary General Hospital **18**
O'Keefe, D., Marshall, R., Kelly, T., O'Leary, C., O'Regan, P., Sheikh, A., Murchan, P.

Nursing and Midwifery

An Exploration of Neonatal Nurses' and Midwives' Experiences of Supporting Mothers Breastfeeding their Premature Infants in an Irish Neonatal Unit **19**
O'Doherty, R., Bradshaw, C., Noonan, M.

Pre-Hospital/Emergency Care (Published)

Use of Telephone CPR Advice in Ireland - Uptake by Callers and Delays in the Assessment Process **20**
Oman, G., Bury, G.

Elderly Care (Published)

Comparison of Cognitive and Neuropsychiatric Profiles in Hospitalised Elderly Medical Patients with Delirium, Dementia and Comorbid Delirium-Dementia **21**
Leonard, M., McNerney, S., MacFarland, J., Condon, C., Awan, F., O'Connor, M., Reynolds, P., Meaney, A.M., Adamis, D., Dunne, C., Cullen, W., Trzepacz, P., Meagher, D.J.



CLINICAL RESEARCH

Elderly Care (Published)

Concordance between the Delirium Motor Subtyping Scale (DMSS) and the Abbreviated Version (DMSS-4) over Longitudinal Assessment of Elderly Medical Inpatients **22**

Fitzgerald, J., O'Regan, N., Adamis, D., Timmons, S., Trzepacz, P., Meagher, D.J., Dunne, C.

Development of a Novel Computerised Version of the Month Backwards Test - A Comparison of Performance in Hospitalised Elderly Patients and Final Year Medical Students **23**

Donoghue, L., Elias, T., Leonard, M., Exton, C., Dunne, C., Meagher, J., Adamis, D., Meagher, D.

Palliative Care (Published)

The Impact of a Novel Tool for Comprehensive Assessment of Palliative Care (MPCAT) on Assessment Outcome at 6 and 12 Month Follow-Up **24**

O'Reilly, M., Larkin, P., Conroy, M., Twomey, F., Lucy, M., Dunne, C., Meagher, D.J.

Intellectual Disability

The Development of a Restrictive Practice Committee in a Congregated Setting - Reflections and Barriers **25**

Stenson, C., Kerr, K., Gillan, E.

Speech and Language Therapy

A Multiple Baseline Single Case Study to Investigate Outcomes of Speech Sound Intervention - Outcomes and Considerations for Conducting Research Within Clinical Practice **26**

McGinty, C., Heraty, G., Cassol, S.

Conversation Coaching in Dementia **27**

Conway, A., Dooley, S.

Dietetics

Clinical, Behavioural, and Patient-Reported Outcomes from a Community-Based Dietetic-Led Weight Management Programme in Ireland **28**

Coyle, M., Fallows, S., Kennelly, S., Purtill, E., Glennon-Slaterry, C.

Dermatology (Published)

The Effect of a Pigmented Lesion Clinic in the Mid-West of Ireland on Melanoma Diagnosis and Management **29**

Lynch M., Tierney, E., Roche, L., Quigley, J., Farsi, M., Ramsay, B., Hackett, C., Ahmad, K.

Dermatology (Ongoing)

Analysis of Paediatric Dermatology Inpatient Referrals - A Snapshot of Patient Needs **31**

Griffin, L., Ryan, S., Ramsay B.

Dental (Ongoing)

Invasive Cervical Resorption - A Review and Case Series **32**

O'Mahony, A., McNamara, C.M.

Pharmacy (Published)

Pharmacist Consultation as Part of an Oral Anticancer Medication Clinic - Bridging the Gap in Care **33**

English, M.

Bioengineering

Correlations between Electrophysiological Measures in Cochlear Implant Users **34**

McNulty, J., Simoes-Franklin, C., Thapa, J., Reilly, R., Viani, L.

General Practice

GMS Status Affects the Primary and Secondary Care Interface in a General Practice Setting **35**

Capin, I., Wheeler, G., Meaney, N.

General Practice (Published)

General Practitioner Perspectives On And Attitudes Towards the Methadone Treatment Programme in Ireland **36**

Delargy, I., O'Shea, M.T., Van Hout, M.C., Collins, C.

Mental Health Services

Consultation with Referral Agents on the Development of a Child and Adolescent Mental Health Service for 16-18 Year Olds **37**

Clogher, É., Higgins, L.

Parents' Perspectives of the Quality of Care Provided by a Child and Adolescent Mental Health Service in the West of Ireland **38**

Kelly, M.



Contents

CLINICAL RESEARCH

Mental Health Services

A Retrospective Analysis on Children Referred to Early Intervention who received a Diagnosis of Autism Spectrum Disorders in 2015 and Early 2016 in the Sligo/Leitrim Region **39**
Watters, C., Flanagan, L.

An Audit of Self-Harm Referrals to a Child and Adolescent Mental Health Service in Ireland in 2013 **40**
Hardiman, S., Coughlan, B., Lovett, E.

A Baseline Study as Part of a Quality Improvement Initiative for the Long-Term Management of Self-Harm Patients by a Dublin Child and Adolescent Mental Health Service Team **41**
Hand, A., Sheridan, A., Mulligan, A.

An Analysis of Waiting Lists in a Child Clinical Psychology Service and the Experiences of Clinicians **42**
Kilroe, A.

Planning the Development of an Anxiety Management Programme Incorporating Service User Involvement **43**
Breen, E.

A Study to Investigate Factors Related to the Assessment by Treating Psychiatrists and General Practitioners of Eligibility for Disability Allowances on Mental Health Grounds from the Department of Social Protection **44**
Daly C., MacSuibhne S.

A Questionnaire Study to Assess Knowledge about Delirium amongst Allied Health Professionals **45**
Parvathaiah, H., Daly, C., Ni Chorcoráin, A.

A Review of Electroconvulsive Therapy in University Hospital Limerick **46**
Lulic, M., Ó'Riain, S.

A Systematic Review of the Efficacy of Harmful Behaviour Programmes for Patients in Forensic Mental Health Settings **47**
Farrell, G., Ryan, R., McCarthy, J., Graham, M.

Mental Health Services (Ongoing)

Stress Control Wexford: A Joint Initiative **48**
O'Gorman, J., Kissane, S.

POPULATION HEALTH

Public Health (Published)

Self-Harm and Help-Seeking in Irish School-Going Adolescents **49**
Doyle, L., Treacy, M.P., Sheridan, A.

Health Promotion

Pregnant Women - Why They Continue to Smoke and What They Feel Would Help Them Quit **50**
Orpen-Carey, M.E.

How Physically Active are Employees at University of Limerick Hospitals Group? **51**
Curran, M., Quinn-McDonogh, J., Moran, B., Brady, H., Cowan, C., Tobin, L.

Mapping the Characteristics of Children who Report that they 'Don't Know' the Potential Consequences of Smoking **52**
Perry, C.P., Keane, E., Molcho, M., Nic Gabhainn, S.

Health Promotion (Published)

Food and Beverage Cues in Childrens' Television Programmes - The Influence of Programme Genre **53**
Scully P., Reid, O., Macken, A., Healy, M., Saunders, J., Leddin, D., Cullen, W., Dunne, C., O'Gorman, C.

Developing and Testing the SH-PET Tool to Measure the Impacts of the Foundation Programme in Sexual Health Promotion **54**
Daly, L., Downes, C., Begley, T., DeVries, J., Sharek, D., Higgins, A.

HEALTH SYSTEMS RESEARCH

Admissions

Audit of Unscheduled Admissions in Paediatric Day-Case Surgery at University Hospital Limerick **55**
Yellin, S.A., Ó'Riain, S.

Communication

Communication at the Primary and Secondary Care Interface, Private versus Public Referrals **56**
Tobin-Schnittger P., Molloy, T.

Inpatient Groups as a Response to Patient Feedback **57**
Craven, F., Howard, M., Macklin, G., Dunne, A., Doyle, R.

Attitudes to Technology in Healthcare **58**
Stevens, L., Arthurs, J., O'Loughlin, R., Daly, P.

General Practice

Cancer Survivorship - Barriers Encountered by General Practitioners in Ireland **59**
O'Shea, M.T., Collins, C., Codd, R., Laffoy, M.



Contents

HEALTH SYSTEMS RESEARCH

Employee Health

Applying Mixed Method Research to Investigate the Impact of a Mindfulness (MBSR) Training Programme on Employees working in an Acute Hospital Setting
Kent, P., McGuire, S. **60**

Occupational Demands and the Physical Wellbeing of Paramedics in the Irish National Ambulance Service - Midlands Area
Mahon, E. **62**

Employee Health (Published)

Predictors of Health of Pre-Registration Nursing and Midwifery Students - Findings from a Cross-Sectional Survey
Deasy, C., Coughlan, B., Pironom, J., Jourdan, D., Mannix McNamara, P. **63**

Hand Hygiene (Published)

Hand Hygiene-Related Clinical Trials Reported Since 2010 - A Systematic Review
Kingston, L., O'Connell, N.H., Dunne, C. **64**

Continuing Professional Development

The Impact of a Sepsis Training Programme on the Knowledge and Self-Efficacy of Emergency Department Staff - A Pre-Test Post-Test Intervention
Hartnett, D., Tyrrell, M. **65**

Continuing Professional Development (Published)

Regulation and Registration as Drivers of Continuous Professional Competence for Irish Pre-Hospital Practitioners - A Discussion Paper
Knox, S., Dunne, S.S. Hughes, M., Cheeseman, S., Dunne, C. **66**

A National Study of Continuous Professional Competence (CPC) amongst Pre-Hospital Practitioners
Knox, S., Cullen, W., Dunne, C. **67**

Mental Health Services

Mental Health Consultations in a General Practice Out of Hours Service - Informing the Future Direction of Services
Collins, C., O'Shea, M.T., Finegan, P., Cunniffe, J., Collier, D., Curran, M., Kearns, M. **68**

Intellectual Disability (Published)

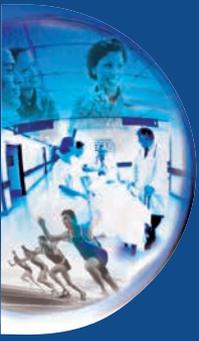
The Impact of Irish Policy and Legislation On How Adults With Learning Disabilities Make Choices
Carey, E., Griffiths, C. **69**

NEWS & EVENTS

71

NEWS FROM UNIVERSITY OF LIMERICK

76



Abstracts

Research Bulletin
Volume 7 Issue 4

A Retrospective Review of Azacitidine Therapy in an Irish University Hospital Setting



Nolan, J.M.,¹
Leahy, M.,¹
O'Keefe, D.,¹
Nally, J.,²
O'Leary, H.¹
Haematology
Department,
University Hospital
Limerick¹
Pharmacy
Department,
University Hospital
Limerick²

INTRODUCTION

Azacitidine (AZA) is a hypomethylating agent and nucleoside analogue of cytidine. Hypomethylating agents have revolutionised the therapy of intermediate-2 and high-risk myelodysplastic syndrome (MDS), chronic myelomonocytic leukaemia (CMML) and acute myeloid leukaemia (AML) in patients fit for neither intensive therapy nor haematopoietic stem cell transplantation (HSCT).

OBJECTIVE

This retrospective review aimed to examine the usage of AZA commenced for any indication during a three year period in a university teaching hospital in Ireland. Data collected pertained to patient and disease characteristics, safety, efficacy, overall and progression free survival and the effect of therapy on transfusion dependence.

METHODOLOGY

A retrospective analysis of patients receiving AZA at University Hospital Limerick in a three year period from October 2012 until October 2015 was conducted. Data was collected from patients' paper and electronic records and the electronic laboratory system. Included patients received at least one cycle of AZA. The World Health Organization Classification was used to classify disease status. Overall survival (OS) and progression-free survival (PFS) were calculated from the date of commencement of AZA therapy and were calculated using Kaplan-Meier estimates.

RESULTS

Twenty-eight (28) patients commenced AZA between October 2012 and October 2015. 64% of patients were male and the cohort had a median age of 70 years (range 42-80 years). These patients comprised 3 patients with International Prognostic Scoring System (IPSS) intermediate risk (level 2) MDS, 5 patients with IPSS high-risk MDS, 6 patients with CMML, 2 patients with MDS/Myeloproliferative Neoplasm (MPN) overlap, 1 patient with hypoplastic MDS, 1 patient with MDS-refractory anaemia with ring sideroblasts (MDS-RARS) and 10 patients with AML. Of the 10 patients with AML, 4 patients had 20-30% bone marrow myeloblasts confirmed morphologically and by flow cytometry and 6 patients had >30% blasts. 26 patients (93%) were transplant-ineligible due to age or comorbidity and 2 had received previous reduced intensity haematopoietic stem cell transplantation. An additional 2 patients had received prior intensive induction chemotherapy for AML. 55% of patients responded to therapy including achievement of stable disease. 66% of patients required red cell support initially, of whom 37% achieved red cell independence. Common Toxicity Criteria for Adverse Events (CTCAE)

grade 3 or 4 toxicities were mostly haematological, with 66% of patients experiencing same. 52% of patients required at least one admission during AZA therapy, predominantly for severe infections (88%). Median OS and PFS were as follows: AML 9.4 months and 8.7 months, high-risk MDS 3 months and 2.6 months and CMML 8 months and 4.5 months.

CONCLUSION

AZA improved OS for patients with AML who were ineligible for intensive therapy or HSCT in our institution. AZA was well tolerated in general and brought about transfusion independence in 37% of transfusion dependent patients. The most significant toxicities were haematological and relating to severe infection, often requiring hospital admission. Hypomethylating agents continue to provide an excellent therapeutic option for these difficult-to-treat patients.

A Study to Assess the Prevalence of Depression and Impact on Social Functioning in Patients Post-Stroke



Daly, C.,
MacSuibhne, S.
Department of
Psychiatry, St.
Luke's Hospital,
Kilkenny

INTRODUCTION

Depression is a common and serious complication following stroke which is largely underdiagnosed by non-psychiatric physicians in 50-80% of cases. Untreated depression may affect functional recovery, quality of life and lead to poorer rehabilitative outcomes. Post-stroke depression is associated with increased mortality and morbidity, increased cognitive impairment, and reduced quality of life. Previous studies have suggested a high prevalence of depression in post-stroke patients. Therefore, a better understanding is needed of associated risk factors and underlying pathogenesis which could help to inform research and lead to the development of innovative and targeted treatments for this condition. Although depression is common in patients following stroke it is not routinely assessed for in a hospital setting. To date few studies have been carried out in an Irish context.

OBJECTIVE

The aim of this study was to assess the prevalence of depression and impact on social functioning in post-stroke patients in a local setting.

METHODOLOGY

Post-stroke patients (n=18) were screened for the presence of depression greater than 6 weeks post-stroke using the Montgomery Asberg Depression Rating Scale (MADRS) at the stroke clinic in a local hospital. Patients were deemed to be eligible to participate if they had a confirmed diagnosis of stroke as based on World Health Organisation criteria (namely rapidly developing clinical symptoms or signs of focal or global disturbance of cerebral function lasting greater than 24 hours with no apparent non-vascular causes and CT brain or MRI evidence of stroke), were greater than 6 weeks post-stroke, were without cognitive impairment namely either delirium or dementia, were without a previous history of depression, substance misuse namely alcohol or drugs and were >18 years. Those with a prior history of depression, of substance misuse, who lacked capacity to consent, had cognitive impairment, unconscious patients and those <18 years were excluded from the study. A 5 item work and social functioning questionnaire was also administered to assess the impact on the patients' social functioning.

RESULTS

Of the 18 participants, 7 scored within the normal range, 6 had evidence of mild depression, 3 showed moderate depression and 2 were in the severe depression range. Nine of 18 (50%) of participants believed their occupational functioning to be affected. The experience of stroke may result in devastating changes resulting in a reappraisal and readjustment of an individual's social and occupational roles. Regarding the impact of stroke on social functioning 10 participants believed that their ability to work following their stroke was either markedly or very severely affected.

CONCLUSION

A total of 61% of participants showed evidence of depression, and their ability to work following their stroke was either markedly or very severely affected. Screening for depression should occur in order to ensure early identification and prevent delays in the assessment and management of patients at risk. Post-stroke depression is an eminently treatable condition which has significant impact on social and occupational functioning. Consequently it should be taken into account in the evaluation and treatment of all stroke patients. The early recognition and treatment of post-stroke depression has been shown to optimise the stroke sufferer's potential for rehabilitation and reduce the human and financial costs associated with functional and occupational impairment.

Targeting Breast Cancer Outcomes - What About the Primary Relatives?

INTRODUCTION

Breast Centre North West recently identified that 65% of newly diagnosed breast cancer patients had not been screened correctly before diagnosis resulting in increased stage of cancer at presentation.¹ This study assessed whether their primary relatives are, in turn, assessed appropriately.

METHODOLOGY

An ethically approved prospective study, involving 274 primary relatives of women diagnosed with breast cancer between 2009 and 2012 at Letterkenny University Hospital, was undertaken. Telephone interview established: demographics, menstrual history, family history verification, breast screening history. Personal risk level was calculated and whether current screening met screening guidelines. Participants were enrolled into appropriate screening programmes if currently not in one and results analysed.

RESULTS

A total of 215 of the 280 (76.8%) newly diagnosed patients responded giving details of their 274 primary relatives which made up the study cohort. Mean age 50±10 (35-75). 32% were low risk, 64% moderate and 4% high. 190/274 (69%) were being screened appropriately. 84 relatives were then assessed with: mammography in 55, Mg and US in 16. Four underwent a biopsy and to date none had cancer. Surveillance was: annual screening in 48%; Breast Check and GP in 33%; GP only in over 65s in 13%; undecided as yet 6%.

CONCLUSIONS

This study identified that only 69% of primary relatives are being screened according to international guidelines. Care to 31% can be improved and facilitated by this study. New proactive health promotion measures for breast cancer are required.

REFERENCES

Available on request.

PRESENTED

At the Annual Research Symposium in Letterkenny University Hospital on November 20th, 2015 by Alison Johnston, Clinical Research Nurse, Breast Cancer Services.

*Johnston, A.,
Sugrue, M.
Breast Centre
North West and
Donegal Clinical
Research Academy,
Letterkenny
University Hospital,
Co. Donegal*

Does a Nurse-Led Cardiac Rehabilitation Inpatient Education Programme Following Percutaneous Coronary Intervention Reduce the Rate of 28 Day Hospital Re-Admission?

Ahern, C.,
Mannix, K.,
Cahill, C.
Critical Care Unit,
University Hospital
Limerick

INTRODUCTION

As per Irish and international guidelines, all eligible patients post-Percutaneous Coronary Intervention (PCI) in an Acute Model 4 hospital should be assessed and educated by a Cardiac Rehabilitation (CR) service pre-hospital discharge. These patients are at high risk of having a cardiac event as per the SCORE risk stratification tool, thus warranting a lifestyle assessment. Using Motivational Interviewing as a communication technique, the CR team emphasis is risk factor identification and agreeing individualised, realistic and achievable goals.

METHODOLOGY

The Nurse-Led PCI clinic data at University Hospital Limerick (UHL) was examined from January 2014 to December 2015 inclusive. The data of 921 consecutive patients was analysed for re-admission rates, reason for re-admission and if the patient was seen by a specialist nurse or not during admission. This clinic has a 100% attendance rate.

RESULTS

In all, 709 males (77.1%) and 211 (22.9%) females attended. The mean age was 65.4 years. In total, 40.6% of admissions were acute events, 22.7% were acute myocardial infarction (STEMI) and 17.9% were non ST elevation MI (NSTEMI). 50.6% were admitted for angina and 8.8% for other reasons.

The number of re-admissions was 38 (4.6%). Thirteen (34%) of the patients had repeat angiography, of which 3 (7.8%) required further intervention. One (2.6%) required a permanent pacemaker implant. Two (5.2%) required medication up-titration. Twenty (52.6%) had non-cardiac symptoms of which, 10 (26.3%) suffered extreme anxiety. Two (5.2%) had respiratory infections.

The 28 day re-admission rates in UHL of the patients attending the PCI clinic is 4.09% which is under the targeted national average of 9.6%. The CR service delivered in UHL is shown to benefit patient experience and confidence post-discharge. Twenty (2.17%) patients had not received CR education prior to discharge and, of those, 11 (55%) were re-admitted.

CONCLUSION

This study concludes and recommends that every patient should receive education and advice from the CR service pre-discharge and those who do not, should receive an early follow-up telephone call.

PRESENTED

As a poster presentation at the Irish Association of Cardiac Rehabilitation Conference in the Hilton Hotel, Kilmainham, Dublin on February 27th, 2016.

Does External Cardioversion Cause Myocardial Damage? Not According to this Study Using High-Sensitivity Troponin T



Lobo, R.,¹
Cahill, C.,¹
Blake, O.,²
Abbas, S.,¹
Hennessy, T.,¹
Meany, B.,¹
Kiernan, T.¹
Cardiology
Department,
University
Hospital
Limerick¹
Biochemistry
Laboratory,
University
Hospital
Limerick²

ABSTRACT

External transthoracic direct current (DC) cardioversion is a commonly used method of terminating arrhythmias. Previous research has shown that DC cardioversion resulted in subtle myocardial injury as evidenced by CK-MB, troponin I and troponin T increase, even though only minimally. These studies were based on the outdated monophasic defibrillators and older troponin assays.

This study aimed to assess the effect of external transthoracic DC cardioversion on myocardial injury as measured by the change in the new high sensitive troponin T (Hs-trop T) using the more modern biphasic defibrillators.

Patients who were admitted for elective DC cardioversion for atrial fibrillation or atrial flutter were asked to participate. Hs-trop T levels were taken pre-cardioversion and at 6 hours post-cardioversion (in keeping with the Third Universal Definition of Myocardial Infarction guidelines). Quantitative analysis for haemolysis, icterus and lipaemia (which could result in interference with the Hs-trop T assay) were measured in each blood sample that was taken.

A total of 120 cardioversions were done. Median number of shocks was 1, and the maximum number of shocks was 6. Median cumulative energy was 150 Joules (interquartile range [IQR]=387.5 Joules) with the minimum being 50 Joules and maximum being 1,730 Joules. A total of 49 (40.8%) patients received a cumulative defibrillation energy of 300 Joules or higher. The highest energy delivered per shock was 360 Joules and median peak impedance levels was 80.80 Ohms (IQR=19.05 Ohms). Median Hs-trop T levels pre-cardioversion was 7 ng/L (IQR=7 ng/L) and post-cardioversion was 7 ng/L (IQR = 6 ng/L). A Wilcoxon signed-rank test showed no significant difference between pre-and-post cardioversion Hs-Trop T levels ($Z = -0.940$, $p = 0.347$).

CONCLUSIONS

External DC cardioversion did not result in myocardial injury as measured by high sensitive troponin T. The implications of this study are important as patients who are cardioverted and are found to have a significant troponin rise post-cardioversion should be assessed for causes of myocardial injury and not assumed to have myocardial injury due to the cardioversion itself.

PRESENTED

As an oral contribution by Dr. Ronstan Lobo at the Young Investigator Awards Competition in Washington D.C. on April 3rd, 2016.

SOURCE

Journal of the American College of Cardiology. 2016; 67(13_S):2347-2347.

Combined Education and Skin Antisepsis Intervention for Persistently High Blood-Culture Contamination Rates in Neonatal Intensive Care

ABSTRACT

Contaminated blood cultures represent challenges regarding diagnosis, duration of hospitalization, antimicrobial use, pharmacy and laboratory costs.

Facing problematic neonatal blood culture contamination (3.8%), we instigated a successful intervention combining skin antisepsis using sterile applicators with 2% chlorhexidine gluconate in 70% isopropanol prior to phlebotomy (replacing 70% isopropanol) and staff education.

In the six months prior to intervention, 364 neonatal peripheral blood samples were collected. Fourteen (3.8%) were contaminated. In the post-intervention six months, 314 samples were collected. Three (0.96%) were contaminated, representing significant improvement (Fisher's exact test: $P=0.0259$).

No dermatological sequelae were observed. The improvement has been sustained.

SOURCE

Journal of Hospital Infection.2016;93(I):105-107.



O'Connor, C.,^{1,3,4}
Philip, R.K.,²
Powell, J.,¹
Slevin, B.,³
Quinn, C.,²
Power, L.,^{1,3}
O'Connell, N.H.,¹
Dunne, C.⁴
Department of
Clinical
Microbiology,
University Hospital
Limerick¹
Department of
Paediatrics (Division
of Neonatology),
University
Maternity Hospital,
Limerick²
Infection Prevention
and Control Team,
University Hospital
Limerick³
Centre for
Intervention in
Infection,
Inflammation and
Immunity (4i),
Graduate Entry
Medical School,
University of
Limerick⁴

The First Reported Case of *Burkholderia contaminans* in Patients with Cystic Fibrosis in Ireland - From the Sargasso Sea to Irish Children



Power, R.F.,^{1,2}
Linnane, B.,^{1,2}
Martin, R.,²
Power, N.,²
Harnett, P.,²
Cassery, B.,^{1,2}
O'Connell, N.H.,^{1,2}
Dunne, C.¹
Graduate Entry
Medical School and
Centre for
Interventions in
Infection,
Inflammation and
Immunity (4i),
University of
Limerick¹
University
Hospital
Limerick²

ABSTRACT

Burkholderia contaminans is an emerging pathogen in the cystic fibrosis (CF) setting. Included in the *Burkholderia cepacia* complex (Bcc), *B. contaminans* is a Gram negative, motile, obligate aerobe previously classified as a pseudomonad. Previous reports have described *B. contaminans* isolation from patients in Portugal, Switzerland, Spain, Argentina and the USA. This, however, is the first report relating to *B. contaminans* affecting Irish patients with CF, initially detected in a paediatric setting.

Burkholderia contaminans was identified in the routine analysis of sputum from a fourteen year old boy, at his annual review and subsequently from the sputum from his 19 year old brother. *RecA* gene sequencing and pulsed field gel electrophoresis (PFGE) were unable to distinguish between the isolates, which demonstrated with susceptibility to ciprofloxacin, cotrimoxazole, meropenem, piperacillin/tazobactam and ceftazidime. Both isolates were resistant to aztreonam, with reduced susceptibility to tobramycin. Following treatment with intravenous meropenem and ceftazidime, oral ciprofloxacin and nebulised tobramycin for 6 weeks, sputum specimens from both patients were negative for *B. contaminans*. No other member of the local CF cohort proved positive.

Bcc bacteria are associated with poor prognosis in CF and decreased life expectancy, specifically leading to a more rapid decline in lung function and, in some cases, to a fatal necrotizing pneumonia known as the "cepacia syndrome". Some species exhibit innate resistance to multiple antimicrobial agents and their transmission rate can be high in susceptible patients. In that context, we describe the first incidence of CF-related *B. contaminans* in Ireland and its successful eradication from two patients, one paediatric, using an aggressive antimicrobial regimen.

SOURCE

BMC Pulmonary Medicine. 2016;16:57.

Anti-RSV Prophylaxis Efficacy for Infants and Young Children with Cystic Fibrosis in Ireland



Linnane, B.,^{1,2,3,4}
Kiernan, M.G.,³
O'Connell, N.H.,^{3,5}
Kearse, L.,^{2,3}
Dunne, C.³
Cystic Fibrosis Unit,
University Hospital
Limerick¹
National Childrens'
Research Centre,
Crumlin, Dublin²
Graduate Entry
Medical School and
Centre for
Interventions in
Infection,
Inflammation and
Immunity (4i),
University of
Limerick³
Study of Host
Immunity and Early
Lung Disease in CF
(SHIELD CF), Dublin⁴
Department of
Clinical Microbiology,
University Hospital
Limerick⁵

ABSTRACT

There is limited evidence supporting the routine use of palivizumab in paediatric cystic fibrosis (CF) patients to reduce respiratory syncytial virus (RSV) infection and related hospitalisation. Despite this, anti-RSV prophylaxis is increasingly common. This is the first report from Ireland regarding palivizumab outcomes for children with CF, under 2 years old, despite the greatest prevalence of CF globally.

An audit was performed at a tertiary hospital in Ireland's Mid-West to document all children with CF, <24 months old, who received palivizumab over a five year period and comparison made with all eligible children for the prior five year period who had not received the product (also CF patients). Palivizumab was administered to both cohorts in their first year of life. Hospitalisation rates were compared using Fisher's exact test. Incidence of RSV and *Pseudomonas aeruginosa* infection was recorded.

A total of 19 patients who received palivizumab were included in the study; comparison was made with a retrospective control group of 30 patients. Prophylactic palivizumab did not prevent hospitalisation for 10/19 patients, 3 of whom were affected by RSV. This was significantly greater than in the control group, where no hospitalisations were recorded ($p < 0.0001$). *P. aeruginosa* was isolated in one case from the study cohort, while no *P. aeruginosa* was detected in the control group.

This study, the first of its kind from Ireland where CF prevalence is highest, does not provide unequivocal support for prophylactic use of palivizumab in CF patients under 2 years. Despite being derived from a small sample size, based on these data and complementary clinical observation, we have discontinued such prophylaxis. However, should reported incidences of RSV-related hospitalisation increase, there is scientific plausibility for appropriately powered, randomised, controlled trials of palivizumab.

SOURCE

Multidisciplinary Respiratory Medicine. 2015;10:32.

A Case of Failed Eradication of Cystic Fibrosis-Related Sinus Colonisation by *Pseudomonas aeruginosa*



Linnane, B.,^{1,2,3}
Kearse, L.,^{1,3}
O'Connell, N.H.,^{1,2}
Fenton, J.,^{1,2}
Kiernan, M.G.,¹
Dunne, C.¹
Graduate Entry
Medical School and
Centre for
Interventions in
Infection,
Inflammation and
Immunity (4i),
University of
Limerick¹
University Hospital
Limerick²
National Childrens'
Research Centre
(NCRC), SHIELD CF,
Our Lady's Childrens'
Hospital, Crumlin,
Dublin³

ABSTRACT

Pseudomonas aeruginosa is a pathogen associated with cystic fibrosis that has potential to decrease lung function and cause respiratory failure. Paranasal sinuses are increasingly recognised as potential reservoirs for intermittent colonisation by *P. aeruginosa*.

This case documents investigation and outcome of *P. aeruginosa* recurrence in a male paediatric patient over an eight year period.

A 12 year old Irish male paediatric cystic fibrosis patient experienced intermittent culturing of *P. aeruginosa* from the oropharyngeal region, indicating chronic infection of the sinuses despite absence of symptoms, retaining good lung function, and normal bronchoscopy and bronchoalveolar lavage.

However, *P. aeruginosa* was isolated from a sinus wash-out and was identified as a unique strain of *P. aeruginosa* that was also cultured from cough swabs. Despite treatment, successful eradication from the paranasal sinuses was not achieved.

Few reports have addressed the paranasal sinuses as a reservoir for lung infection in cystic fibrosis patients despite increased recognition of the need to investigate this niche. In this case, attempts at eradication of *P. aeruginosa* present in paranasal sinuses including oral and nebulised antimicrobials proved unsuccessful. However, detection of *P. aeruginosa* in the paranasal sinuses instigated antimicrobial treatment which may have contributed to prevention of migration to the lower airways. Our outcome provides additional insight and may indicate utility of nasal lavage or nasal endoscopy in paediatric cystic fibrosis patients' annual review clinic visits.

SOURCE

BMC Pulmonary Medicine. 2015;15:114.

An Audit of Influenza Vaccination Rates in Patients on Immunomodulatory Therapies in a Primary Care Practice

Griffin, L.,
McDonnell, A.,
Griffin, M.,
Ryan, G.
St. John's Square
Medical Practice,
Limerick

INTRODUCTION

Patients taking immunosuppressive therapies are at increased risk for a number of vaccine-preventable infections. Both national¹ and international immunisation guidelines recommend that these patients receive the influenza vaccination annually and the pneumococcal vaccination every 5 years. Sub-optimal uptake of both vaccinations amongst patients taking immunosuppressive therapies for dermatological conditions has been demonstrated in studies in Ireland.² Recent research on vaccination status of immunocompromised patients in Rheumatological, Gastroenterology and Dermatology departments in Ireland confirmed sub-optimal uptake in every study reviewed.³

OBJECTIVE

The aim of this audit was to review all patients in a large city centre general practice on biologic medications re influenza vaccination status and practices surrounding discussion of such vaccinations. The gold standard was that all patients (100%) on immunosuppressive therapies should be identifiable and offered annual influenza vaccination.¹

METHODOLOGY

A database population analysis was performed on Health-One GP software searching the fields: 'Repeat prescriptions', 'Basic Medical Information' and 'Medications' for enbrel; humira; infliximab; stelara. Generic medication names were also searched: etanercept; adalimumab, Infliximab; ustekinumab. A separate database analysis was performed for each medication name under the search analysis 'patient with a drug as active therapy' on one day 22/04/2015. Files were individually checked to note if a patient was on an active biologic therapy at that time, if they had received seasonal influenza vaccination 2014-2015, if they had ever received seasonal influenza vaccination and whether a discussion re same/refusal had been documented?

RESULTS

Of a total patient population of 3,000, 15 patients were identified using the searches. Of these, 12 were on currently on a biologic therapy. Medical conditions identified were either dermatological or rheumatologic. No gastroenterological condition was listed. Of the 12 patients on biological immunosuppressive therapy, 6 had received the seasonal flu vaccine for that year (2014-2015) (50%). Of those who had received it, 4 patients had medical cards (66%). None of those who had not received it had any documentation describing a discussion re vaccination. The average age of patients on biologic therapy was: 49.5 years (range 29-76). Up to date vaccination records existed for all these patients.

CONCLUSION

Vaccination of this patient population with influenza seasonal vaccine is suboptimal (50%), yet broadly in line with other national studies centred in secondary care.³ Issues noted by the staff were that the patient group were difficult to identify without a uniform consensus about entering medications in medical records. Many patients on biologic therapy attend secondary care for monitoring and get 'High Tech' scripts, and such scripts may be dispensed from the pharmacy, and thus, may not be entered into the patient's active drug therapy list making these patients difficult to identify. No gastroenterology patient, for example, was identified although staff were aware that such patients existed in the practice. Patients are autonomous, and as such can refuse vaccination if they wish, but if this was the case it should be documented in the file. Factors such as potential cost to non-medical card patients for vaccinations and lack of knowledge of the healthcare providers arose as issues. Following a practice meeting to address these issues a re-audit is planned. Inclusion of additional systemic oral medications (methotrexate, azathioprine, fumeric acid esterase, cyclosporin) is planned in addition to checking pneumococcal vaccination status. Patient education and vaccination strategies need to be adapted to improve vaccination uptake in this population and prevent serious vaccine preventable illness. Co-ordinated strategies targeting primary and secondary care are likely to be needed to make significant improvement to vaccination uptake rates.

REFERENCES

Available on request.

Quality Assessment in a Surgical Day Unit

INTRODUCTION

There is an ever-growing emphasis on quality and cost in healthcare and nowhere is this more evident than in the area of day case surgery. We undertook an audit of day surgical activity of a tertiary, university affiliated teaching hospital. We examined the number of unscheduled overnight admissions as a key surrogate marker of performance. We also assessed completeness of documentation in line with recommendations from the Association of Anaesthetists of Great Britain and Ireland (AAGBI).¹

METHODOLOGY

Unplanned admissions following day surgery over a 12 month period were identified using the Hospital Inpatient Enquiry System (HIPE). Anaesthetic, surgical and medical notes were reviewed and reasons for unplanned admission were determined by the investigators. The total number of day cases receiving either general anaesthesia, regional anaesthesia or sedation in the operating theatre were identified using theatre electronic records.

Adherence to documentation standards was also examined, most notably the completeness of the anaesthesia pro forma and compliance with doctor identification. Our pro forma contains several sections in line with standard recommendations by the Royal College of Anaesthetists.²

RESULTS

A total of 2,589 patients underwent a surgical procedure on a planned day case basis during 2013 under general anaesthesia, regional anaesthesia or intravenous sedation. Seventy nine (3%) of these had an unplanned admission to hospital. This rate (3%) is acceptable when compared to a multi-centre study of 7 hospitals, which found rates to range from 0.9-9.4%.³ Seventy four (94%) of these cases received a general anaesthetic and the remainder received intravenous sedation. Eight (10%) cases received a supplementary regional anaesthetic technique.

Table 1 - Reasons for Unplanned Admissions

Surgical	49
Undetermined surgical	21
IV antibiotics overnight	10
Urinary retention	3
More extensive procedure than planned	3
Oncology consultation	2
Laparoscopic conversion to open	1
Other	9
Anaesthetic	18
Persistent postoperative pain	13
Postoperative nausea & vomiting	2
Prolonged motor block	1
Desaturation requiring reintubation	1
Allergic reaction	1

Miscellaneous

Medical deterioration (management of new atrial fibrillation, desaturation, headache)	8
Lack of escort	1
Other	3

Reasons for unplanned admissions are contained in Table 1. Forty nine (62%) of the unplanned admissions were for surgical reasons, 18 (23%) for anaesthetic reasons and 12 (15%) were for miscellaneous and social reasons. In 21 of the 49 surgical reasons the decision to admit had clearly been taken by the surgical team but the reason for admission could not be ascertained from the patients' notes.

No anaesthetic pro forma was completed in 3 of the cases examined. In the remaining 76, the sections of the anaesthetic pro forma were completed as follows: previous anaesthetic (83%), medical history (87%), medications (92%), allergies (93%), airway assessment (83%), cardiovascular assessment (67%), respiratory assessment (73%), ASA grade (89%) and type of anaesthesia planned (96%). Seventy one percent of the anaesthesia pro forma documents were signed by the anaesthetist who completed it while the Medical Council Registration Number (MCRN) was only recorded in 6% of cases. Recording of MCRN is a key recommendation by the Irish Medical Council in their Guide to Professional Conduct and Ethics for Registered Medical Practitioners.⁴

In the population we audited 8 cases or 10% were deemed unsuitable for day surgery. In 1 case this was due to co-existing medical conditions, in 6 cases it was due to the planned extent of surgery and in the last case there was no escort for the patient.

CONCLUSION

The majority of patients who attend the day ward are suitable for day case surgery. The rate of overnight unplanned admissions at 3% is acceptable for the 12 month period studied. A number of unplanned admissions were preventable showing a greater role for preoperative assessment clinics in our institution. Documentation of reasons for admission in the surgical notes was unclear in many cases and we recommend amending surgical notes to contain a specific section for this, which will facilitate future audit. There were deficiencies in MCRN recording and the anaesthesia pro forma has since been amended to include a section for this. We aim to re-audit these areas to evaluate the effectiveness of the measures instituted.

REFERENCES

Available on request.

PRESENTED

As a poster presentation at the College of Anaesthetics Audit Day in Dublin on December 11th, 2014 by Dr. Robert ffrench-O'Carroll.

ffrench-O'Carroll, R., Muldowney, M., Hollywood, M., McDonald, N., Hickey, C. Department of Anaesthesia, St. Vincent's University Hospital, Elm Park, Dublin 4

Differentiated Thyroid Cancer Management - A 12 Month Review

INTRODUCTION

TSH suppression has been a mainstay of differentiated thyroid cancer treatment for many years: long-term TSH suppression improves outcomes in patients with high risk thyroid cancers. Evidence supporting this for low risk patients, however, is lacking. In 2014 the British Thyroid Association published new thyroid cancer management guidelines reflecting this.

OBJECTIVE

This study aims to review current practice at Basingstoke and North Hampshire Hospital in relation to these new guidelines.

METHODOLOGY

A retrospective chart review was conducted of all patients attending the Thyroid Assessment Clinic between June 2014 and June 2015. Non-cancer patients and those with undifferentiated thyroid cancer were excluded from analysis. Data including demographics, histopathology, type of surgery performed, cancer staging, additional treatments received e.g. radioiodine and employment of TSH suppression, were extracted. Post-operative risk stratification of patients into low, intermediate and high risk categories was performed. Dynamic risk stratification was also undertaken based on responses to radioiodine therapy: patients were categorised into those with excellent responses (suppressed thyroglobulin, no evidence of disease on neck imaging and low risk on post-operative risk stratification), those with indeterminate responses (suppressed thyroglobulin, non-specific changes or stable subcentimetre nodes on neck imaging and an intermediate risk on post-operative risk stratification) and those with incomplete responses (thyroglobulin $>1\mu\text{g/L}$ or with rising thyroglobulin titres, persistent or newly-identified disease on imaging and with a high post-operative risk stratification score).

RESULTS

In all, 45 differentiated thyroid cancer patients were identified: Eight male (17.8%) and 37 female (82.2%) with mean age 51.6 years (range 22-85, SD 15.7). Intervals from initial treatment ranged from 0 to 22 years (mean 6.02, SD 5.07). Twenty eight patients (62.2%) had papillary thyroid cancer, 15 patients (33.3%) had follicular cancer, 2 patients (4.4%) had follicular variant papillary carcinoma and 2 patients (4.4%) had Hürthle cell carcinoma. Histological subtype was unavailable for 2 patients. Forty three patients had undergone total thyroidectomy, 19 with level VI neck dissections (42%). Six patients (13.3%) required selective lateral neck dissections. Two patients had previously had surgery overseas, one undergoing a subtotal thyroidectomy and the other a hemithyroidectomy. Thirty nine patients (86.7%) received radioiodine therapy and one patient

received external beam radiotherapy. Staging distribution was: stage I 44.4%; stage II 8.9%; stage III 24.4%; stage IVa 11.1%; stage IVb 2.2%; stage IVc 4.4%; unknown 4.4%. Responses to radioiodine therapy were excellent in 15 patients (33.3%), indeterminate in 17 patients (37.8%), incomplete in 7 patients (15.6%) and unknown in 6 cases (13.3%). Based upon the new guidelines, the following recommendations would apply for this cohort: (1) maintenance of TSH in the low-normal range 0.2-2.0 mU/L for 14 patients (31.1%); (2) suppression of TSH between 0.1-0.5 mU/L for 5-10 years for 13 patients (28.9%); (3) suppression of TSH <0.1 mU/L for 5-10 years for 5 patients (11.1%) [historical patients] and (4) indefinite TSH suppression below 0.1 mU/L for 13 patients (28.9%).

CONCLUSIONS

Concordance with the recommendations was seen in 16 patients (35.6%). Full TSH suppression could be relaxed for two patients in the future. Long term TSH suppression is not without risk: adverse effects include atrial fibrillation, osteoporosis and risks of cardiovascular disease and death. Aggressive TSH suppression is not required for all thyroid cancers: low risk cases treated by hemithyroidectomy and those who have not received radioiodine ablation simply require the TSH to be maintained in the low-normal range. Decisions regarding TSH suppression are best made and supervised on an individual case basis by thyroid cancer multidisciplinary teams, with the degree of TSH suppression being reviewed every few years and balanced against potential adverse skeletal and cardiac effects. Further data to support this practice will become available in the ensuing years as the guidelines become more widely accepted.

Ahmed, T.S.,¹

Toghey, S.,²

Spraggs, P.²

Department of ENT Surgery, Dorset County Hospital, Dorchester, UK¹

Department of ENT Surgery, Basingstoke and North Hampshire Hospital, Basingstoke, UK²

The Mesocolic Hilum - An Electron Microscopic Appraisal of Anatomy



Walsh, L.,^{1,2,3}
O'Brien, I.,⁴
O'Leary, D.P.,¹
Kiely, P.A.,³
Dunne, C.,³
Quandamatteo, F.,⁴
Dockery, P.,⁴
Coffey, J.C.^{1,2,3}
Surgical Professional
Unit, Department of
Surgery¹
Graduate Entry
Medical School,
Limerick²
Centre for
Interventions in
Infection,
Inflammation and
Immunity (4i),
Graduate Entry
Medical School,
University of
Limerick³
Department of
Anatomy, National
University of Ireland,
Galway⁴

ABSTRACT

The mesocolic hilum is the interface between the mesentery and the gastrointestinal tract (GIT). To date, no studies have been undertaken to formally assess the anatomic appearance of the mesocolic hilum. Scanning electron microscopy (SEM) allows for accurate determination and appraisal of histologic structure and topography.

The aim of this study was to determine the microscopic anatomy of the mesocolic hilum.

Human cadaveric samples were harvested and all anatomic practice adhered to appropriate national legislation. Thick-section samples were dehydrated accordingly before being mounted to metal studs and sputter-coated in gold. All analysis was conducted using a Hitachi S2600N Variable Pressure Scanning Electron Microscope.

SEM was performed of the mesocolic hilum to characterise its structural topography. This demonstrated a complex and highly vascularised structure. The mesenteric connective tissues were clearly seen to invest the serosa of the GIT. This connective tissue extended into the *muscularis externa* creating radial and circumferential septa within the longitudinal and circular muscle layers respectively. The mesenteric connective tissue is also noted to contribute to the submucosa and mucosa of the GIT. Arterioles are seen to extend from the mesentery penetrating the serosa of the GIT. Vascular beds surrounded in collagen and elastin fibres are noted in abundance throughout the hilum.

This is the first study to appraise the structural microscopic anatomy of the mesocolic hilum. SEM demonstrates a complex, vascularised margin with significant contributions from the attached mesentery. Improved understanding of surgical anatomy contributes to improved techniques in surgical practice.

PRESENTED

At the 24th Sylvester O'Halloran Perioperative Scientific Symposium in the Graduate Entry Medical School, University of Limerick from March 4th to 5th, 2016 by Leon Walsh.

SOURCE

Irish Journal of Medical Science. 2016;185(Suppl 2):s97.

Benefits of Post-Operative Oral Protein Supplementation in Gastrointestinal Surgery Patients - A Systematic Review of Clinical Trials

ABSTRACT

The aim of this research was to evaluate published trials examining oral post-operative protein supplementation in patients having undergone gastrointestinal surgery and assessment of reported results.

Database searches (MEDLINE, BIOSIS, EMBASE, Cochrane Trials, Cinahl and CAB), searches of reference lists of relevant papers, and expert referral were used to identify prospective randomized controlled clinical trials. The following terms were used to locate articles: 'oral' OR 'enteral' AND 'postoperative care' OR 'post-surgical' AND 'proteins' OR 'milk proteins' OR 'dietary proteins' OR 'dietary supplements' OR 'nutritional supplements.' In databases that allowed added limitations, results were limited to clinical trials that studied humans, and publications between 1990 and 2014. Quality of collated studies was evaluated using a qualitative assessment tool and the collective results interpreted.

Searches identified 629 papers of which, following review, 7 were deemed eligible for qualitative evaluation. Protein supplementation does not appear to affect mortality but does reduce weight loss, and improve nutritional status. Reduction in grip strength deterioration was observed in a majority of studies, and approximately half of the studies described reduced complication rates. No changes in duration of hospital stay or plasma protein levels were reported. There is evidence to suggest that protein supplementation should be routinely provided post-operatively to this population. However, despite comprehensive searches, clinical trials that varied only the amount of protein provided via oral nutritional supplements (discrete from other nutritional components) were not found. At present, there is some evidence to support routinely prescribed oral nutritional supplements that contain protein for gastrointestinal surgery patients in the immediate post-operative stage.

The optimal level of protein supplementation required to maximise recovery in gastrointestinal surgery patients is effectively unknown, and may warrant further study.

SOURCE

World Journal of Gastrointestinal Surgery. 2016 Jul 27; 8(7)521-532.



*Crickmer, M.,^{1,2}
Dunne, C.,^{1,2}
O'Regan, A.,^{1,2}
Coffey, J.C.,^{1,2,3}
Dunne, S.S.^{1,2}
Graduate Entry
Medical School,
University of
Limerick¹
Centre for
Interventions in
Infection,
Inflammation and
Immunity (4i),
Graduate Entry
Medical School,
University of
Limerick²
Department of
Surgery, University
Hospital Limerick³*

Review of Key Quality Data for Bowel Screen Colonoscopies in South Tipperary General Hospital

O’Keeffe, D.,
Marshall, R.,
Kelly, T.,
O’Leary, C.,
O’Regan, P.,
Sheikh, A.,
Murchan, P.
Endoscopy Unit,
South Tipperary
General Hospital,
Clonmel, Co.
Tipperary

INTRODUCTION

BowelScreen is a government funded, quality assured programme run by the National Screening Service in Ireland. The screening service needs to ensure quality assurance (QA) according to national guidelines. A Conjoint Board in the Royal College of Physicians (RCPI) and Royal College of Surgeons of Ireland (RCSI) has launched National Quality Assurance Programmes, in collaboration with the National Cancer Control Programme. These guidelines provide a framework for each Endoscopy unit to ensure patient safety and optimal outcomes, as well as timely, accurate and complete diagnoses and reports. South Tipperary General Hospital (STGH) is one of the screening centres in Ireland.

OBJECTIVE

The aim of this audit was to look at the key quality data for colonoscopies in STGH and relate these to the national guidelines to ensure that the service provided is of the highest possible standard.

METHODOLOGY

The data was available via a database in STGH which was developed by the National Quality Assurance Intelligence System (NQAIS) in collaboration with the Health Service Executive Health Intelligence Unit.

The national guidelines suggest recording data in accordance with best international practice. These include sedation rates and analgesic doses, comfort levels, tattooing, completion rates, polyp detection rates, polyp recovery, bowel preparation, diagnostic colorectal biopsies for persistent diarrhoea, colonic perforation, and post-polypectomy bleeding.

All the patients who underwent colonoscopy had a positive Faecal Immunochemical Test as part of the bowel screen. The data from this group of patients from July 2014 until May 2016 was reviewed in the Endoscopy unit in STGH. The key quality data refers to information that is recorded in the database which allows for audit and review. The ‘quality indicator’ refers to outcomes for which there is enough available evidence to have a minimum standard recommended. Where there is insufficient evidence available on which to base a standard, there are ‘key recommendations’ which have been endorsed by the Conjoint Board of RCPI and RCSI.

RESULTS

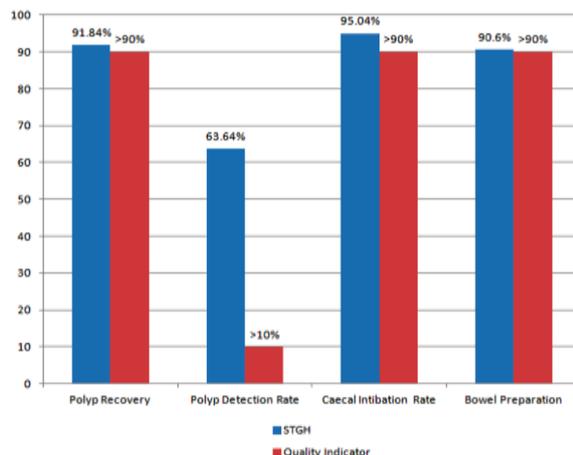
Demographics: 484 patients in total: 293 male and 191 female
Mean age: 68.78
Age range: 60-72

Table 1 - Median Sedation and Analgesic Doses:

	Midazolam	Pethidine	Fentanyl
<70yo	7mg	50mg	100mcg
>70yo	5mg	25mg	100mcg

Median Comfort score (using the modified Gloucester scale): 1
Modified Gloucester score 1: No discomfort - resting comfortably throughout
Tattooing: Tattooing was recorded appropriately in cases for suspected malignant tumours

Figure 1 - STGH Data Compared with Quality Indicator



There were no adverse events recorded since starting the bowel screening in STGH. Patients were categorized into low/intermediate/high risk. The adenoma detection rate was 58.6%.

CONCLUSION

STGH is compliant with many of the key recommendations and quality indicators in the QA National Programme. It is essential to continually audit and review the data so that improvement can be made when necessary.

An Exploration of Neonatal Nurses' and Midwives' Experiences of Supporting Mothers Breastfeeding their Premature Infants in an Irish Neonatal Unit



O'Doherty, R.,¹
Bradshaw, C.,²
Noonan, M.²
Neonatal Unit,
University
Maternity Hospital,
Limerick¹
Department of
Nursing and
Midwifery,
University of
Limerick²

INTRODUCTION

Promotion, protection and support of breastfeeding and of feeding with breast milk in neonatal units is vital and has even more pronounced health benefits for preterm infants than full-term infants. Despite this, the rates of breastfeeding remain low in many neonatal units internationally. In many countries the breastfeeding process is not initiated to the same extent as in term infants and even when the mother tries to establish breastfeeding, the success rates of breastfeeding at discharge are relatively low compared to infants born at term. The neonatal environment presents unique challenges to breastfeeding and to the provision of breast milk for the premature infant. Premature infants are usually separated from their mothers, and the role of caregiver shifts to the neonatal nurse and/or midwife. In addition, many premature infants are attached to lifesaving equipment and their prematurity also affects their ability to feed orally.

OBJECTIVE

To explore neonatal nurses' and midwives' experiences of supporting mothers breastfeeding their premature infants in an Irish neonatal unit.

METHODOLOGY

A descriptive qualitative approach was utilised in conducting this research. After receiving ethical approval thirteen nurses and/or midwives were recruited from one neonatal unit in the Mid-West of Ireland. In depth semi-structured interviews were carried out and interview transcripts were subsequently analysed using Burnard's Thematic Data Analysis framework (2006).

RESULTS

Three themes were identified from the data. The first theme to be identified was **influence of the environment**. This theme incorporated sub-themes of privacy and neonatal ward layout. **Education for mothers and staff** was the second theme recognised from the data which included benefits of breast milk, consistent accurate advice, and medicalisation of breastfeeding. Finally, the third theme was the **pressure of time** experienced by the nurses and/or midwives when supporting mothers breastfeeding their premature infants which included the sub-themes staff shortages and workload.

CONCLUSIONS

Many of the participants reported similar attitudes and experiences when discussing support of women breastfeeding their premature infants. Findings demonstrated the importance of the design of a neonatal unit, which needs to be considered when developing or reconfiguring neonatal units. Account needs to be taken of the influence of space and privacy upon supporting mothers to breastfeed their premature infants. A focus on breastfeeding education for neonatal nurses and midwives is recommended to ensure consistency and continuity in information given to women and to maximise evidence-based support provided to women and their babies. Development of written information leaflets specific to the needs of mothers breastfeeding their premature infants would enhance and support the quality of information provided. Recruitment of additional neonatal nurses and midwives to alleviate workload and increase the time staff can spend supporting breastfeeding might also be an important factor in increasing initiation and continuation rates of breastfeeding in neonatal units. Employment of a lactation consultant within a neonatal unit was also considered to be of benefit.

Use of Telephone CPR Advice in Ireland - Uptake by Callers and Delays in the Assessment Process



Oman, G.,¹
Bury, G.²
National
Ambulance
Service, Tullamore,
Co. Offaly¹
School of Medicine
and Medical
Science, University
College Dublin²

ABSTRACT

Telephone CPR (T-CPR) has significant variations in time from call receipt to first compression, with reported delays of up to five minutes. Ireland's National Ambulance Service (NAS) uses T-CPR based on standard AMPDS (Advance Medical Priority Dispatch System) questions.

We aimed to identify the time to first compression and the times needed for question blocks. Ireland has a low survival rate from out-of-hospital cardiac arrest, (6% in 2013).

A retrospective review of all cardiac arrests in a two-year period was carried out in one NAS region. All cardiac arrests were identified from the national registry and audiotapes and Patient Care Reports reviewed, together with survival data. Times from call handover were noted and categorised in terms of the key question items.

A total of 202 cardiac arrests occurred in the period (36/10⁵/year); 30 (14.9%) patients were not in cardiac arrest at the time of the call. Records were available for 145/172 cardiac arrests at the time of the call. In 63/145 (43.4%) cases, the caller was not at the patient's side. Of the remaining 82 cases, in 13/82 (15.8%) CPR was underway (two survivors), in 22/82 (26.8%) the caller would not attempt T-CPR (one survivor); in 47/82 (57.3%), T-CPR was carried out (two survivors). Median time to first compression was 05:28 minutes (range 03:18 to 10:29).

Repeated questioning in relation to the patient's condition caused most of the delays.

Many callers are willing to attempt T-CPR but the questioning/instruction process causes significant delays. A focused, brief questioning process is required.

SOURCE

Resuscitation.2016;102:6-10.

Comparison of Cognitive and Neuropsychiatric Profiles in Hospitalised Elderly Medical Patients with Delirium, Dementia and Comorbid Delirium-Dementia

ABSTRACT

Differentiation of delirium and dementia is a key diagnostic challenge but there has been limited study of features that distinguish these conditions. We examined neuropsychiatric and neuropsychological symptoms in elderly medical inpatients to identify features that distinguish major neurocognitive disorders.

The setting for this research was a university teaching hospital in Ireland. The study participants were 176 consecutive elderly medical inpatients (mean age 80.6+/-7.0 years (range 60-96); 85 males (48%)) referred to a psychiatry for later life consultation-liaison service with Diagnostic and Statistical Manual of Mental Disorders (DSM) IV delirium, dementia, comorbid delirium-dementia and cognitively intact controls. Participants were assessed cross-sectionally with comparison of scores (including individual items) for the Revised Delirium Rating Scale (DRS-R98), Cognitive Test for Delirium (CTD) and Neuropsychiatric Inventory (NPI-Q).

The frequency of neurocognitive diagnoses was delirium (n=50), dementia (n=32), comorbid delirium-dementia (n=62) and cognitively intact patients (n=32). Both delirium and comorbid delirium-dementia groups scored higher than the dementia group for DRS-R98 and CTD total scores, but all three neurocognitively impaired groups scored similarly in respect of total NPI-Q scores. For individual DRS-R98 items, delirium groups were distinguished from dementia groups by a range of non-cognitive symptoms, but only for impaired attention of the cognitive items. For the CTD, attention (p=0.002) and vigilance (p=0.01) distinguished between delirium and dementia. No individual CTD item distinguished between comorbid delirium-dementia and delirium. For the NPI-Q, there were no differences between the three neurocognitively impaired groups for any individual item severity.

The neurocognitive profile of delirium is similar with or without comorbid dementia and differs from dementia without delirium. Simple tests of attention and vigilance can help to distinguish between delirium and other presentations. The NPI-Q does not readily distinguish between neuropsychiatric disturbances in delirium versus dementia. Cases of suspected behavioural and psychological symptoms of dementia should be carefully assessed for possible delirium.

SOURCE

BMJ Open. 2016;6(3):e09212.

Leonard, M.,^{1,2,3}
McInerney, S.,⁴
MacFarland, J.,^{1,5}
Condon, C.,^{1,2}
Awan, F.,^{1,2,3}
O'Connor, M.,^{1,6}
Reynolds, P.,^{1,3}
Meaney, A.M.,^{1,3}
Adamis, D.,^{1,2,7,8}
Dunne, C.,^{1,2}
Cullen, W.,^{1,2}
Trzepacz, P.,^{9,10,11}
Meagher, D.J.^{1,2,3}
Graduate Entry Medical School, University of Limerick¹
Cognitive Impairment Research Group, Centre for Interventions in Infection, Inflammation & Immunity (4i), Graduate Entry Medical School, University of Limerick²
Department of Psychiatry, University Hospital Limerick³
St Michael's Hospital, University of Toronto, Toronto, Ontario, Canada⁴
Department of Acute Psychiatry, Mid-Western Regional Hospital, Ennis⁵
Department of Geriatric Medicine, University Hospital Limerick⁶
Research and Academic Institute of Athens, Greece⁷
Sligo Mental Health Services, Ballytivan, Sligo⁸
Indiana University, School of Medicine, Indianapolis, Indiana, USA⁹
University of Mississippi Medical School, Jackson, Mississippi, USA¹⁰
Tufts University School of Medicine, Boston, Massachusetts, USA¹¹

Concordance between the Delirium Motor Subtyping Scale (DMSS) and the Abbreviated Version (DMSS-4) over Longitudinal Assessment of Elderly Medical Inpatients

ABSTRACT

Delirium is a common neuropsychiatric syndrome that includes clinical subtypes identified by the Delirium Motor Subtyping Scale (DMSS).

The aim of this study was to explore the concordance between the DMSS and an abbreviated 4-item version in elderly medical inpatients.

Elderly general medical admissions (n=145) were assessed for delirium using the Revised Delirium Rating scale (DRS-R98). Clinical subtype was assessed with the DMSS (which includes the four items included in the DMSS-4). Motor subtypes were generated for all patient assessments using both versions of the scale. The concordance of the original and abbreviated DMSS was examined.

The agreement between the DMSS and DMSS-4 was high, both at initial and subsequent assessments (κ range 0.75–0.91). Intraclass Correlation Coefficient (ICC) for all three raters for the DMSS was high (0.70) and for DMSS-4 was moderate (0.59). Analysis of the agreement between raters for individual DMSS items found higher concordance in respect of hypoactive features compared to hyperactive.

The DMSS-4 allows for rapid assessment of clinical subtype in delirium and has high concordance with the longer and well-validated DMSS, including over longitudinal assessment. There is good inter-rater reliability between medical and nursing staff. More consistent clinical subtyping can facilitate better delirium management and more focused research effort.

SOURCE

International Psychogeriatrics. 2016;28(5):845-851.



Fitzgerald, J.,^{1,2}
O'Regan, N.,³
Adams, D.,^{2,4}
Timmons, S.,³
Dunne, C.,^{1,2}
Trzepacz, P.,^{6,7,8}
Meagher, D.J.^{1,2,9}
Graduate Entry
Medical School,
University of
Limerick¹
Cognitive
Impairment
Research Group,
Centre for
Interventions in
Infection,
Inflammation and
Immunity (4i),
Graduate Entry
Medical School,
University of
Limerick²
Centre for
Gerontology and
Rehabilitation, St.
Finbarr's Hospital,
Cork³
Sligo-Leitrim Mental
Health Services,
Manorhamilton
Road, Sligo⁴
Indiana University
School of Medicine,
Indianapolis,
Indiana, USA⁵
Lilly Research
Laboratories,
Indianapolis,
Indiana, USA⁶
University of
Mississippi Medical
School, Jackson,
Mississippi, USA⁷
Tufts University
School of Medicine
Boston,
Massachusetts,
USA⁸
Department of
Psychiatry,
University Hospital
Limerick⁹

Development of a Novel Computerised Version of the Month Backwards Test - A Comparison of Performance in Hospitalised Elderly Patients and Final Year Medical Students

Donoghue, L.,¹

Elias, T.,²

Leonard, M.,^{1,2}

Exton, C.,^{1,2}

Dunne, C.,^{1,2}

Meagher, J.,²

Adamis, D.,^{1,2,3}

Meagher, D.,^{1,2,4}

Graduate Entry

Medical School,

University of

Limerick¹

Cognitive Impairment

Research Group,

Graduate Entry

Medical School,

University of

Limerick²

Sligo-Leitrim Mental

Health Services, Sligo

Regional Hospital³

Department of

Psychiatry,

University

Hospital

Limerick⁴

ABSTRACT

The Months Backwards Test (MBT) is a commonly used bedside test of cognitive function, but there is uncertainty as to optimal testing procedures. We examined performance among hospitalised elderly patients and cognitively intact young persons with verbal and computerised versions of the test.

Fifty acute elderly medical inpatients and fifty final year medical students completed verbal (MBTv) and computerised (MBTc) versions of the MBT and the Montreal Cognitive Assessment (MoCA). Completion time and errors were compared.

Thirty four participants scored <26 on the MoCA indicating significant cognitive impairment. The mean MoCA scores in the elderly medical group (23.6±3.4; range 13-28) were significantly lower than for the medical students (29.2±0.6; range 28-30: $p<0.01$). For the verbal months backwards test (MBTv), there were significantly more errors and longer completion times in the elderly medical patients (25.1±20.9 vs. 10.5±4.5; $p<0.05$). Completion times were 2-3 times longer for the MBTc compared to the MBTv (patients: 63.5±43.9 vs. students 20.3±4.4; $p<0.05$). There was high correlation between the two versions of the MBT ($r=0.84$) and also between the MBTc and the MoCA ($r=0.85$). The MBTc had higher correlation with visuospatial function (MBTc $r=0.70$, MBTv $r=0.57$). An MBTc cut-off time of 30s for distinguishing performance (pass/fail) had excellent sensitivity (100%) with modest specificity (44%) for cognitive impairment in elderly medical patients.

The computerised MBT allows accurate and efficient testing of attention and general cognition in clinical populations.

SOURCE

Computers in Biology and Medicine. 2016;68:1-8.

The Impact of a Novel Tool for Comprehensive Assessment of Palliative Care (MPCAT) on Assessment Outcome at 6 and 12 Month Follow-Up



O'Reilly, M.,¹
Larkin, P.,²
Conroy, M.,¹
Twomey, F.,¹
Lucey, M.,¹
Dunne, C.,³
Meagher, D.J.³
Milford Hospice,
Castletroy,
Limerick¹
School of Nursing,
Midwifery and
Health Systems,
University College
Dublin²
Graduate Entry
Medical School,
University of
Limerick³

ABSTRACT

Assessment in palliative care settings should be focused, sensitive, specific and effective in order to minimize discomfort to vulnerable and often highly morbid patients. This report describes the development of an admission assessment protocol for a Specialist Palliative Care Inpatient Unit (SPCU) and its implementation into clinical practice.

The objective of this study was to develop and investigate the impact of the implementation of a Specialist Palliative Care admission assessment tool on documentation of key patient needs.

The outcome of a systematic literature review was used to develop an admission assessment protocol (the intervention) in a SPCU. Mixed methods were utilized to facilitate a comprehensive evaluation pre- and post-intervention to test the effectiveness, feasibility and acceptability of the intervention.

The documented evidence of pain assessment improved from a baseline rate of 71% to 100% post-intervention. This improvement was maintained 12 months post-introduction of the tool ($P < 0.001$). The documented evidence of screening for spiritual distress increased from a baseline rate of 23% to 70% at six months and to 82% at 12 months ($P < 0.001$). The number of referrals made in the first 24 hours after assessment increased post-intervention (physiotherapy, $P = 0.001$; occupational therapy, $P = 0.001$; social work, $P = 0.005$; pastoral care, $P = 0.005$); this was maintained at 12 months. Significantly, more clinicians (88%) agreed that palliative care domains were comprehensively assessed post-intervention in comparison to 59% pre-intervention ($P = 0.01$).

Introducing the MPCAT was associated with significant improvement in assessment of multiple important aspects of patient need.

SOURCE

Journal of Pain and Symptom Management. 2016 Jul; 52(1):107-16.

The Development of a Restrictive Practice Committee in a Congregated Setting - Reflections and Barriers



Stenson, C.,
Kerr, K.P.,
Gillan, E.
Psychology
Services, HSE
West, Sligo

INTRODUCTION

Restrictive practice is defined as practice that (a) limits an individual's movement, activity or function, (b) interferes with an individual's ability to acquire positive reinforcement, (c) results in the loss of objects or activities that an individual values or (d) requires an individual to engage in a behaviour that the individual would not engage in given freedom of choice.¹ Literature in the area of Intellectual Disability reports that restrictive behaviour management practices including use of psychotropic medication to manage behaviour are common.² The literature also suggests that restrictive practices should be sanctioned by management before being employed for a defined time period.³ This paper adopts an evidence-based approach to preventing, limiting and eliminating the use of restrictive practices to protect the Rights of Persons with Disabilities (the rights, freedoms and inherent dignity of people with disabilities).⁴

OBJECTIVE

The aim of the research is to outline the development of a pilot Restrictive Practice Committee within traditional service delivery. The paper highlights barriers encountered throughout the process and identifies actions to overcome these.

METHODOLOGY

A six month pilot Restrictive Practice Committee was set up in January 2016 in a congregated setting for people with Intellectual Disabilities (n=107). The Committee comprised of the Service Manager, Service Area Manager, Senior Psychologist and two Assistant Psychologists. The Committee was responsible for monitoring the level of restrictive practice across physical restraint, chemical restraint, restricting access, mechanical restraint, seclusion and other practices. The Committee met on a monthly basis to consider all requests to use practices which may have been considered restrictive. The Committee reflected upon evidence of assessment and current/previous intervention and authorised/rejected requests for restrictive practice. All requests were considered in a time-based context and emphasis was placed upon generating a least restrictive way of supporting individuals.

RESULTS

The Committee received a total of 31 applications for planned restrictive practice (mechanical restraint (14), restricting access (11), physical restraint (4), chemical restraint (2)). None of the 31 applications were fully complete and on those grounds no outright approvals were granted by the Committee. There were 28 approvals subject to submission of additional information by staff teams within specified time frames and 3 outright rejections. All applications requesting the approval of restrictive practice already in place were approved with a stipulation that supplementary information (e.g. results from previous interventions attempted) would be forwarded to the Committee. Requests for new restrictive practices were rejected until sufficient support for the application was provided (e.g. evidence that less restrictive practice had been attempted previously). The majority of applications were for obvious restrictive practices such as helmets and harnesses. Less obvious practices such as instances of seclusion were unlikely to be reported by staff. One particularly salient barrier was a lack of awareness or inability to identify restrictive practice by staff. Many applications identified one restrictive practice however other restrictions became evident when the application was evaluated. In addition, staff reported difficulties in identifying what constitutes evidence-based practice. The committee also noted staff difficulties in devising proactive strategies. Other barriers identified during the pilot included issues obtaining consent and collaborating with other stakeholders.

CONCLUSIONS

Whilst some applications provided a detailed insight with regard to support needs, interventions and evidence base other applications lacked information, which resulted in a delay in processing the application. Additional information was frequently requested for consent, past interventions and evidence base. Management training in the area of restrictive practice and the practicalities of making an application has been delivered. Awareness training is in development for frontline staff to aid recognition of all forms of restrictive practice and to overcome identified barriers.

REFERENCES

Available on request.

A Multiple Baseline Single Case Study to Investigate Outcomes of Speech Sound Intervention - Outcomes and Considerations for Conducting Research Within Clinical Practice



McGinty, C.,
Heraty, G.,
Cassol, S.
Speech and
Language Therapy
Department,
St. Mary's HQ,
Castlebar, Co.
Mayo

INTRODUCTION

Evidence-based practice (EBP) is acknowledged as an important principle in the delivery of intervention to children with speech sound disorders. However, previous research into the effectiveness and efficiency of therapy approaches has largely been conducted in optimal experimental conditions.¹ These interventions may be difficult to implement in clinical practice because of resource constraints. The need for evaluating outcomes of speech sound intervention in a typical clinical context has been previously acknowledged in the literature.^{2,3}

OBJECTIVES

This study aimed to:

1. Evaluate the effectiveness of intervention for preschool children with speech sound disorders.
2. Investigate the benefits and challenges of conducting research within clinical practice.

METHODOLOGY

A multiple baseline single case study approach was used with three children, aged between 3.9 and 4.7 years, who presented with similar phonological disorders. The dependent variables of the research were severity (Percentage of Consonants Correct in single words and connected speech) as measured using the Diagnostic Evaluation of Articulation and Phonology⁴ and a transcribed speech sample, and intelligibility (measured using the Intelligibility in Context Scale (ICS)).⁵ These measures were administered during baseline, immediately post-intervention and at a 3 month follow-up. Three sets of experimental probes were designed to assess generalisation and maintenance of learned skills. Each set of probes consisted of 30 pictures, representing the following phonemes in all word positions; 10 containing the treated target phoneme, 10 containing an untreated phoneme where generalisation was expected, and 10 containing untreated unrelated phonemes where generalisation was not expected. Probes were administered twice during the pre-intervention control period, four times during therapy and once at follow-up. Following assessment, each child received an individually designed intervention programme consisting of 8 therapy sessions. The dose form (therapy strategies) and frequency (how learning episodes are spaced over time) was varied for each child, but the minimum therapy dose (the number of learning episodes per session) was consistent.

RESULTS

Immediately post-intervention, all participants made improvements in treated target phonemes. Two children made improvements in the production of untreated phonemes where generalisation was expected. These two children made clinically significant improvements in intelligibility and severity. There was no change in participants' production of untreated phoneme probes where generalisation was not expected. All participants maintained improvements at follow-up.

CONCLUSION

This study demonstrated the benefits and challenges of conducting research in practice. The opportunity to systematically evaluate speech sound intervention was clinically rewarding and highlighted the importance of target selection and dosage, while providing the opportunity to become a more scientific practitioner.

PRESENTED

As a poster presentation at the 30th World Congress of the International Association of Logopedics and Phoniatrists (IALP) in Dublin from August 21st to 25th, 2016.

REFERENCES

Available on request.

Conversation Coaching in Dementia



Conway, A.,
Dooley, S.
Speech and
Language Therapy
Department,
St. Columille's
Hospital,
Loughlinstown,
Co. Dublin

INTRODUCTION

In Ireland, people with early stage dementia are typically not referred for cognitive communication assessment. Communication difficulties are inherent in a diagnosis of dementia. Speech and language therapists (SLTs) are well placed to work with individuals and family carers throughout the course of the illness to identify communication difficulties and needs. By providing support, enabling understanding and recommending strategies, SLTs are able to work with carers and people with dementia (PWD) to help maintain their interpersonal relationships.

OBJECTIVES

The aims of this intervention were (1) to provide psychosocial support to the PWD and their caregivers, (2) to provide education to PWD and their family caregivers about facilitating communication in dementia, and (3) to identify individual communication strategies to enhance communication.

METHODOLOGY

Five couples were selected who were attending the day hospital service in St. Columille's Hospital. The selection process was based on strict inclusion criteria. A six-week intensive communication intervention was delivered. This entailed both group and individual-based sessions, including a community outing. We used a range of outcome measures, both standardised and informal. This intervention was delivered by two SLTs. A core conversational analytic approach through video analysis was used to identify individualised communication support strategies. Group sessions consisted of an educational focus, through didactic and experiential learning methods.

RESULTS

All members of the group improved their functional communication ability and required a reduced level of communication support as measured by standardised communication tools. The incidence of communication breakdown was reduced significantly with couples using prescribed communication support strategies on average 83% of the time. Members of the group developed a leaflet entitled '*Supporting Communication in Dementia*' which was circulated throughout the hospital and in local community centres. All members of the group reported positive outcomes. Some of their testimonials included comments such as "I've made a great change. Now I'm in the moment, more aware of how I sound. I'm not afraid, I know the parameters already."

CONCLUSION

This is an effective and transferable group intervention which targets the individualised needs of PWD and their family caregivers.

PRESENTED

As a poster presentation at the Alzheimer's Disease International Conference in Budapest from April 21st to 24th, 2016 by Aifric Conway and Suzanna Dooley.

Clinical, Behavioural and Patient-Reported Outcomes from a Community-Based Dietetic-Led Weight Management Programme in Ireland

INTRODUCTION

In Ireland, 61% of adults are overweight (37%) and obese (24%).¹ As a consequence of increasing obesity rates, the incidence of obesity-related chronic disease such as Type 2 Diabetes and cardiovascular disease is expected to rise by 20-30% in Ireland by 2020.² There is strong evidence that even modest weight loss of 5-10% can improve chronic disease risk factors.³ Group weight management programmes are seen to be more time efficient and cost-effective,⁴ but there is a lack of data on their use in Ireland.

OBJECTIVE

The aim of this study was to determine to what extent a structured group community-based weight management programme can impact upon obesity levels and obesity-associated risk factors in routine primary care.

METHODOLOGY

This is a retrospective study of data collected as a routine part of service delivery of a community-based dietetic-led 6 month weight management programme between August 2012 and August 2014. The programme was delivered over five locations in four midland counties of Ireland in the Health Service Executive (HSE) Midlands Area. The intervention was a time-limited structured educational lifestyle programme, employing cognitive behavioural therapy techniques alongside a 600kcal deficit diet, and diet and physical activity advice. The 6 month programme consisted of an initial intensive 4 week programme providing a weekly 2.5 hour session, with a 2 hour refresher session at the 3 month and 6 month time point. Sufficient data was collected for 244 adults. Primary outcome measures were weight change and proportion of patients achieving $\geq 5\%$ loss at 6 months. Behavioural change and quality-of-life was assessed at baseline, 3 months, and 6 months using validated questionnaires.

RESULTS

Of the 244 eligible participants; 64% were female; 54% were programme 'completers'. Mean baseline weight was 103.3 kg (BMI 38.1 kg/m²); 64.8% had a BMI >35 kg/m², and 37.0% a BMI >40 kg/m². Weight loss of $\geq 5\%$ at 6 months was observed in 9% of total sample and 13% of completers. Significant weight change from baseline at each time point was observed for the total sample and completers ($p < .05$), but not for non-completers. Mean weight change was -0.9 kg (95% CI = -0.6 to -1.1 kg) at 4 weeks, -1.7 kg (95% CI = -0.9 to -3.4 kg) at 3 months, and -2.6 kg (95% CI = -0.7 to -3.7 kg) at 6 months. Waist circumference reduced significantly by -2.5 cm at 4 weeks, -4.6 cm at 3 months, and -5.2 cm at 6 months. Positive trends were observed for reductions in blood lipids, and for dietary and physical activity behavioural change.

CONCLUSION

This weight management programme achieves clinically valuable weight loss and positive behaviour change within routine primary care.

REFERENCES

Available on request.

PRESENTED

At the Irish Nutrition and Dietetic Institute Weight Management Study Day in St. James's Hospital, Dublin on May 5th, 2015 by Michelle Coyle.

Coyle, M.,^{1,2}
Fallows, S.,¹
Kennelly, S.,²
Purtill, E.,²
Glennon-Slattery, C.²
Department of
Clinical Sciences and
Nutrition, University
of Chester, Cheshire,
UK¹
Department of
Community Nutrition
and Dietetic Service,
Community
Healthcare
Organisation Area 8,
HSE Dublin Mid-
Leinster²

The Effect of a Pigmented Lesion Clinic in the Mid-West of Ireland on Melanoma Diagnosis and Management

ABSTRACT

Melanoma (MM) incidence in Ireland is amongst the highest in Europe with 984 new cases of melanoma diagnosed in Ireland in 2013.¹ Pigmented lesion clinics (PLC) were established in the UK from the late 1980's with the aim of improving early detection of melanoma and reducing melanoma-related mortality. To date there has been little evidence to demonstrate that PLC have led to a reduction in the Breslow thickness of melanomas. The Mid-West of Ireland encompasses counties Limerick, Clare and North Tipperary and has a population of 377,900.² An audit of melanomas excised in the Mid-West of Ireland from 2010-2011 was performed in our department previously (unpublished data).

A PLC was introduced in University Hospital Limerick (UHL) in October 2012 with the aim of reviewing patients with suspicious lesions within two weeks of referral. The melanoma multidisciplinary meeting (MDT) is a key part in providing best practice treatment and care to melanoma patients and was established in January 2013. The aim of this re-audit was to assess the effect of the PLC and melanoma MDT on melanoma Breslow thickness and melanoma management.

We analysed retrospectively the invasive melanomas excised in the Mid-West of Ireland over a two-year period (2013-2014) after the advent of the PLC and melanoma MDT. We compared these 2013-2014 results to the results from the audit of melanomas excised in 2010-2011. Patients with lentigo maligna, MM *in situ*, and metastatic MM were recorded and analysed separately.

A computer-generated list of all cutaneous MM specimens for 2013-2014 was obtained from the Histology Department of UHL. Patient medical charts of confirmed cases of MM were reviewed and demographic and clinical data were collected. Histopathology reports for each of these cases were reviewed.

Demographic and clinical data were summarised using descriptive statistics (SPSS version 20). T-tests (or the appropriate alternative for non-parametric data), using two-sided tests, were used to determine whether significant differences between the two sets of data (melanomas excised in 2010-2011 and 2013-2014) existed. Chi squared analyses was used to test for significant differences in categorical variables between the sets of data obtained.

Demographics and clinical characteristics:

The histopathology department in UHL provided results of 185 patients in 2013-2014 with a diagnosis of melanoma which included: invasive MM (n=107), lentigo maligna/melanoma *in situ* (n=58), metastatic melanoma (n=10) and other non-melanoma diagnoses (n=10, excluded from audit). The number of invasive melanomas excised in 2010-2011 and 2013-2014 almost doubled from 54 (2010-2011) to 107 (2013-2014) (98% increase) (Table 1).

Table 1 - Demographics and Clinical Characteristics

Invasive melanomas	2010-2011 N=54	2013-2014 N=107	P value
Age, years (IQR)	63 (48-76)	68 (55-82)	0.07
Gender, female(%)	24 (44)	54 (50)	0.47
Melanoma subtype			
SSMM (%)	31 (57)	67 (63)	0.52
Nodular MM (%)	11 (20)	19 (18)	0.67
Lentigo maligna melanoma	0	9 (8)	
Acral lentiginous MM (%)	0	5 (5)	
Spitzoid Melanoma (%)	0	1 (1)	
NOS (%)	12 (22)	6 (6)	0.002
Total	54	107	
Other melanoma diagnoses			
Lentigo Maligna/ Melanoma <i>in situ</i>	17 (22)	58 (33)	0.07
Metastatic Melanoma	6 (8)	10 (6)	0.53
Total	77	175	

P<0.05, significant difference between the two groups. Data are expressed as median (interquartile range (IQR)) for continuous variables and as numbers (percentages) for dichotomous variables. P values determined using the independent samples Mann-Whitney U test and Chi Square test for categorical variables. SSMM, superficial spreading melanoma; MM, melanoma; NOS, not otherwise specified.

The median age of patients with invasive MM was 63 (IQR 48-76) years in 2010-2011 and 68 (IQR 55-82) years in 2013-2014 (p=0.07). In 2010-2011 44% (n=54) of patients with MM were female and 50% (n=107) were female in 2013-2014 (p=0.47). The subtype of melanomas excised in 2013-2014 were superficial spreading MM (n=67, 63%), nodular MM (n=19, 18%), lentigo maligna MM (n=9, 8%), acral lentiginous MM (n=5, 5%), spitzoid MM (n=1, 1%) and not otherwise specified (NOS) (n=6, 6%). The proportion of melanoma excisions that were lentigo maligna or melanoma *in situ* increased from 22% (n=17) in 2010-2011 to 33% (n=58) in 2013-2014 (p=0.07).

Excisions by specialty:

There was a significant rise in the rate of excisions by the Dermatology Department compared to non-dermatology disciplines from 19% (n=54, 2010-2011) to 56% (n=107, 2013-2014) (p<0.0001). There was a significant difference in the diagnostic accuracy of suspected melanoma by Dermatologists (100%, n=10, 2010-2011; 97%, n=60, 2013-2014) compared to clinicians in non-

Lynch, M.,
Tierney, E.,
Roche, L.,
Quigley, J.,
Farsi, M.,
Ramsay, B.,
Hackett, C.,
Ahmad, K.
Dermatology
Department,
University Hospital
Limerick



dermatology disciplines (44%, n=41, 2010-2011; 32% n=41, 2013-2014) during both time periods (2010-2011: p=0.001; 2013-2014: p<0.0001).

Breslow thickness

There was a non-significant decrease in the median Breslow thickness of melanomas from 1.3mm (0.6-2.6) in 2010-2011 to 1.0mm (0.5-2.3) in 2013-2014 (n=145, p=0.48, (NOS=16) (Table 2).

Table 2 - Breslow Thickness

Invasive melanomas	2010-2011 N=54	2013-2014 N=107	P value
Breslow thickness, mm (IQR)	1.3 (0.6-2.6)	1.0 (0.5-2.3)	0.48
Breslow thickness \leq 1 mm (%)	22 (46)	50 (52)	0.52
Breslow thickness 1.01-4mm (%)	20 (42)	32 (33)	0.31
Breslow thickness >4mm (%)	6 (13)	15 (15)	0.63

P<0.05, significant difference between the two groups
Data are expressed as median (interquartile range (IQR)) for continuous variables and as numbers (percentages) for dichotomous variables. P values determined using the independent samples Mann-Whitney U test and Chi Square test for categorical variables.

There was no significant increase in the proportion of early histological stage melanomas (\leq 1mm) diagnosed from 46% (n=48, 2010-2011) to 52% (n=97, 2013-2014) (p=0.52). The proportion of intermediate-thickness melanomas (1.01-4mm) decreased from 42% (n=48) to 33% (n=97) (p=0.31). The median time from the date of the excision biopsy to the date of the histology report increased non-significantly from 14 days (7-22) in 2010-2011 to 16 days (10-23) in 2013-2014 (n=152, p=0.47, not available = 9). The median time from the date of the histology report to the date of the wide local excision decreased from 46 days (28-61) in 2010-2011 to 34 days (16-55) in 2013-2014 (n=81, p=0.16, not available = 86).

CONCLUSION

The PLC has led to an increase in the number of melanomas excised by Dermatologists in the Mid-West of Ireland which has led to higher diagnostic accuracy.

PRESENTED

As a poster presentation at the British Association of Dermatologists Annual Meeting from July 5th to 7th, 2016.

As a poster presentation (1st Prize Winner) at the Irish Association of Dermatologists Spring Meeting in Cork on April 13th, 2016.

REFERENCES

Available on request.

SOURCE

- British Journal of Dermatology. 2016; 175:130-131.
- Irish Journal of Medical Science. 2017 Feb 8. [Epub ahead of print] PMID:28176195

Analysis of Paediatric Dermatology Inpatient Referrals - A Snapshot of Patient Needs



Griffin, L.,¹
Ryan, S.,²
Ramsay, B.²
St. John's Square
Medical Practice,
Limerick¹
Dermatology
Department,
University Hospital
Limerick²

INTRODUCTION

Although dermatology is primarily outpatient based, a significant amount of time is spent providing consultations to other specialties in inpatients. Previous studies have highlighted the number and range of presentations seen by the Dermatology team on a consultation basis.

OBJECTIVE

The aim of this research was to examine paediatric referrals more closely to determine the nature of medical issues and whether childrens' needs could be addressed (educational aspects, GP, junior doctor, service needs). Admission to hospital is a stressful and potentially difficult thing for a child and family. The cost of admission is significant.

METHODOLOGY

A review was carried out of paediatric inpatient consultation data from January 2011 to September 2011 at University Hospital Limerick. The data was analysed gathering information on the reason for consultation, the reason for inpatient admission, whether the patient was known to the dermatology team, whether the condition could have been managed as an outpatient and if follow-up was required.

RESULTS

A total of 107 paediatric referrals were recorded during this period; 86% of these patients were admitted primarily for a dermatological complaint. The underlying diagnoses, as recorded by the dermatology team, were infectious exacerbation or flare-up of eczema (42%), eczema alone (12%), the remainder including management of chicken pox, urticaria, hand, foot and mouth disease, napkin dermatitis, molluscum/warts and cellulitis. A total of 69% of patients were new to the department. A total of 49% required a follow-up appointment in the outpatient clinic.

CONCLUSIONS

Eczema represented 54% of the referrals from the paediatric population. This is not surprising considering it affects between 5-20% of children. At the time of this study UHL Dermatology Department was expanding with the addition of a second dermatology consultant and continues to expand (now consisting of three full time consultants). New eczema referrals were seen in a fortnightly clinic with a significant waiting time. Our study shows that the majority of patients seen on consult were new referrals, deemed to need acute inpatient treatment and required a follow-up appointment suggesting that the

current service provision for children with eczema in the region was insufficient. Strategies to empower GPs to successfully treat mild to moderate disease have been employed through education on emollients, bathing, adequate topical steroid use and judicious use of antibiotics. Appointment of new consultants and Advanced Nurse Practitioners can allow increased access to outpatient clinics. The expanding Dermatology Department includes a purpose-built new Dermatology Day Treatment Centre, which will significantly expand the services available for the patients with decompensating skin disease and enable us to intervene and prevent admissions. Previously published audits have demonstrated the positive impact of a single dermatology team consultation on the quality of life in infants with atopic eczema and their families.

REFERENCES

Available on request.

Invasive Cervical Resorption - A Review and Case Series



O'Mahony, A.,
McNamara, C.M.
St. James's
Hospital,
Dublin 8

INTRODUCTION

Invasive Cervical Resorption (ICR) of roots of teeth exhibits very aggressive symptoms and is difficult to manage. With loss of calcified root structure due to this resorptive process, the risk of tooth loss is significant.

OBJECTIVE

The aim of this study was to determine the number of Oro-Facial patients at the Dublin Cleft Centre who experienced ICR, where tooth loss became inevitable.

METHODOLOGY

A retrospective investigation of all Oro-Facial patients treated at the Cleft Centre, St James's Hospital, Dublin was carried out. All patients' records, clinical and radiological, were reviewed. Subjects, where tooth loss became inevitable, due to ICR, were targeted.

RESULTS

Of a total of 588 Oro-Facial patients, 15(2.55%) subjects were identified. 8 males, 7 females, mean age at diagnosis 35 years. Cleft Type: 11 (73.3%) Unilateral Cleft Lip and Palate; 4 (26.7%) Bilateral Cleft Lip and Palate: Teeth affected: 13 (86.7%) maxillary central incisor, 2 (13.3%) maxillary lateral incisor, 2 (13.3%) maxillary canine, 1 (6.6%) both a central and lateral incisor affected. 10 (66.7%) presented with Class 4 ICR resulting in immediate tooth loss. 5 (33.3%) subjects developed ICR during prosthodontic treatment. Tooth loss for this cohort, though not immediate, was inevitable. 10 (66.7%) had undergone osteotomies.

CONCLUSIONS

ICR, given its aggressive nature and ill-understood aetiology, poses significant treatment challenges. ICR's most severe form, Class 4, as found in our 15 subjects, leads inevitably to tooth loss. Prevalence of 2.55% is consistent with other studies. The slow-moderate progression of ICR may explain the late presentation found in this study, (mean age 35 years), reinforcing the importance of long-term follow-up of this special dental care group.



English, M.
Mid-Western
Cancer Centre,
University Hospital
Limerick

Pharmacist Consultation as Part of an Oral Anticancer Medication Clinic - Bridging the Gap in Care

ABSTRACT

In recent times the treatment of cancer has changed with the introduction of many oral target therapies including the tyrosine kinase inhibitors. There are clear benefits to using the oral route for treatment, however, oral therapy is also associated with risks including toxicity and drug/food interactions, and these have been recognised by a number of organisations worldwide. In addition, the responsibility for administration of therapy is in the hands of the patient. This requires a high level of patient competence and patient education.

There is currently a gap in the care system for patients treated with Oral Anticancer Medication (OAM). We set out to incorporate a pharmacist consultation into an OAM clinic to address this need.

Patients attending the OAM clinic were reviewed by a pharmacist following review by a doctor.

Five key performance indicators were identified for target by the pharmacist. These were prescription verification, checking that product dispensed concurred with prescription, counselling on safe handling and correct administration, checking drug interactions with concomitant medication and answering medication related queries. All consultations were documented and interventions recorded.

In a 6 month period, 124 consultations have been recorded for 44 individual patients. A total of 24 interventions were recorded for 20 individual patients (45% of patients). Interventions included: incorrect dose on prescription (n=1), unclear directions on prescription (n=1), incorrect strength on label (n=1), expired product dispensed (n=1), paracetamol administration with chemotherapy (n=2), identification of an interacting drug with OAM (n=18). Outcomes included stopping a potentially interacting drug, switching to another drug (not OAM), enhanced monitoring, dose reduction, changing administration time and liaising with GP or community pharmacist.

Our results confirmed there is a need for a pharmacist consultation as part of an OAM clinic, in particular to check drug interactions with concomitant medication. In an era of increased tyrosine kinase prescribing this is of particular importance with potential for increased toxicity or treatment failure due to drug interactions.

SOURCE

Journal of Clinical Oncology. 2016:34.

Correlations between Electrophysiological Measures in Cochlear Implant Users

McNulty, J.,^{1,2}
 Simoes-Franklin, C.,^{1,2}
 Thapa, J.,¹
 Reilly, R.B.,^{2,3,4}
 Viani, L.¹
 The National Cochlear Implant Programme (NCIP), Beaumont Hospital, Dublin¹
 Trinity Centre for Bioengineering, Trinity College Dublin²
 School of Engineering, Trinity College, Dublin³
 School of Medicine, Trinity College, Dublin⁴

INTRODUCTION

A cochlear implant (CI) is an electronic prosthesis capable of restoring some degree of hearing to individuals with sensorineural hearing loss. Each recipient has their own unique CI programme or map. Such maps are programmed either through behavioural feedback from the user, whenever possible, or through the use of electrophysiological objective measures. Two of the most common objective measures used in clinical practice are the Electrically Evoked Stapedial Reflex Threshold (ESRT) and Neural Response Telemetry (NRT).

ESRTs are a highly useful clinical tool as they are a good predictor of comfort levels,^{1,2} but can be difficult to obtain as they require healthy middle ear function, additional equipment, the insertion of a recording probe into the user's ear and for the user to remain motionless during the process. In contrast, NRTs are easier to measure as they use standard programming equipment and do not require CI recipients to sit still.

OBJECTIVE

The premise of this study is to investigate whether a correlation exists between ESRTs and NRTs, in order to reduce the need to obtain ESRTs in the clinic.

METHODOLOGY

The study was conducted retrospectively using clinical data available in the National Cochlear Implant Programme (NCIP) database. NRT data recorded intra-operatively (IO) and post-operatively (PO) at approximately 1 year following implantation was extracted from Custom Sound to be correlated with ESRT values.

ESRT measurements from 46 implants were analysed. From these 46 CI, 39 had IO NRT data and 32 had PO NRT data. Measurements were collected from 3 electrodes in the implanted array of each CI: one at the base (E3), one at the middle (E11) and one at the apex (E22).

RESULTS

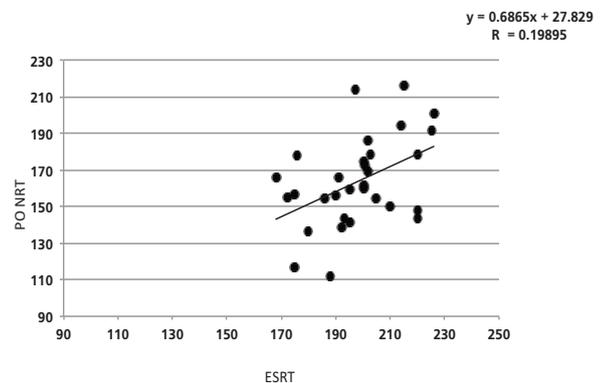
Table 1 summarises the results of the study, displaying Pearson's test correlation coefficients. Correlations ranged from non-correlated (E22: PO NRT vs ESRT) to moderately correlated (E3: PO NRT vs ESRT). The highest correlation and only statistically significant result was obtained in E3 in the PO NRT-ESRT comparison, displayed in Figure 1 ($r=0.4461$, $p<0.05$).

Table 1 - IO & PO NRT vs ESRT Correlation Coefficients

	E22	E11	E3
IO NRT vs ESRT (n=39)	0.2526	0.272	0.3156
PO NRT vs ESRT (n=32)	0.0656	0.1345	0.4461*

* $p<0.05$

Figure 1 - Scatter Plot of PO NRT vs ESRT for the Basal Electrode (E3)



In both the IO NRT and PO NRT outcomes, the highest correlation was identified in the basal electrode indicating that the location of the electrode in the array may influence the NRT-ESRT relationship.

CONCLUSION

NRT measurements are not an accurate predictor of ESRT levels in paediatric CI users, based on the overall poor strength of the correlations obtained in this study. However, given the statistically significant correlation found in the basal electrode in the PO NRT-ESRT comparison, this study lends further support to the consensus that electrode location impacts certain electrophysiological measures.^{1,2}

REFERENCES

Available on request.

GMS Status Affects the Primary and Secondary Care Interface in a General Practice Setting



Capin, I.,¹
Wheeler, G.,²
Meaney, N.³
Ennistymon
Medical Centre,
Co. Clare¹
Graduate Entry
Medical School,
University of
Limerick²

INTRODUCTION

The Irish healthcare system is divided into a public and private sector. The Health Service Executive (HSE) offers a medical card to single persons under 65 whose weekly income falls below €184 weekly, and those 66 and over, whose weekly income is less than €201.50. Medical cards are also now given to those under the age of 6 and over the age of 70.

The medical card entitles the holder to free family doctor visits, prescriptions, public hospital access and dental work amongst other services. Therefore, medical cardholders on average have a lower income than those with private health insurance. Persons from low-income households are more likely to become ill and frequent the family doctor. Due to a lack of financial resources, low-income families are less likely to have proper nutrition, adequate housing and education with regard to health.

The healthcare system is multifaceted and made up of different levels of care. Quite often, the GP is considered a member of the primary care team, seeing as he/she is often the first point of contact for a patient. Often, a GP must seek medical opinion from specialists; this is considered to be secondary care. The relationship and communication between the two levels of care is critical in terms of management of conditions.

OBJECTIVE

This study will explore the interface between primary and secondary care focusing on the effect that GMS status has on return letter time.

METHODOLOGY

The study was conducted at a general practitioner surgery in Ennistymon, Co. Clare. The surgery had two full time GPs, two part time nurse practitioners, two part time secretaries and 3,174 active patients. All patients over age 50 with >1 visit in the last two years were included in the study. Clinical records were accessed with Socrates healthcare programme, and statistical analysis was completed using both SPSS and Microsoft Excel 2010. Ethical approval was granted by the HSE Mid-Western Regional Hospital Ethics Committee.

RESULTS

The results of this study showed that medical card holders (M=17.86, SD=14.39) frequent the GP more than private patients (M=8.63, SD=6.83), $t(98)=4.07$, $p<0.01$. This may be due to the fact that people of lower socio-economic status are on average in poorer health than those more privileged. The private patient population had a mean of 1.57 (95% CI 1.21-1.93) chronic illnesses per person. On the other hand, GMS patients had a mean of 2.71 (95% CI 2.27-3.15) chronic illnesses. Naturally, more chronic illnesses yield more GP visits.

GMS patients were referred more often (M=1.78, SD=1.88) than private patients (M=1.02, SD=1.05) over the course of the past two years. Interestingly enough, the amount of time it took for a response to be received back to the GP, from the secondary healthcare professional took a significantly longer period of time in the GMS population. It took 3.06 (M=3.06, SD=1.90) weeks for a private patient's response letter to be received by the GP, whereas it took 4.52 weeks for a GMS patient's response letter to be received (M=4.52, SD=2.89), $t(58)=2.34$, $p<0.05$.

CONCLUSIONS

This study revealed a number of findings for this particular cohort of patients. Those who hold a medical card visited the GP on average 17.86 times in the last two years while private patients saw the GP an average of 8.63 times. Medical cardholders have a statistically significant larger amount of chronic illnesses than private health insurance patients. In the last two years, GMS patients were referred from primary healthcare services to secondary healthcare services more often than private patients. On a final note, response letters from secondary healthcare services to the GP take on average 1.46 weeks longer when discussing a GMS patient compared to a private patient.

General Practitioner Perspectives On And Attitudes Towards the Methadone Treatment Programme in Ireland



Delargy, I.,¹
O'Shea, M.T.,²
Van Hout, M.C.,¹
Collins, C.²
Department of
Substance Misuse,
Irish College of
General
Practitioners,
Dublin¹
Department of
Research, Irish
College of General
Practitioners,
Dublin²

ABSTRACT

Methadone maintenance treatment in Ireland is provided in addiction clinics, and in primary community care settings by Level 1 and 2 specialist trained general practitioners (GPs). The Irish College of General Practitioners (ICGP) provides training and regulates the Methadone Treatment Programme (MTP). The study aimed to assess and compare GP perceptions of the scale of local illicit drug use, attitudes toward and obstacles in the provision of methadone treatment and preferred adjunct modalities.

In 2006 and 2015, an online survey was undertaken with all Level 1 and 2 registered GPs in the MTP. In 2006, there were 207 responses from 600 questionnaires sent, giving a response rate of 34.5%. In 2015, there were 217 responses from 949 questionnaires sent, giving a response rate of 22.87%. Where possible the analysis outlined below is based on comparisons between GPs who had patients on the methadone treatment protocol from the 2015 survey (n=170) and the initial 2006 survey (n=147).

The majority of participants were male, aged between 35 and 60 years, treated between 1 and 25 patients in urban areas. In 2015, 44.7% with registered methadone patients reported no obstacles to taking on more (32% in 2006). In relation to GPs with no current methadone patients, reasons for not taking patients in 2015 were similar to 2006, and centred on no referrals or demand, and concern for negative affect on private patients. Majority attitudes toward the MTP remained positive, with one exception relating to greater disagreement in 2015 with the statement that supervised daily dispensing prevents patients from working (p<0.05). Preferred adjunct services remained constant; addiction counselling, inpatient detoxification, employment schemes and consultant psychiatric services.

The study illustrates a generally positive attitude toward the Irish MTP. Efficient referral mechanisms for stabilised patients to primary care settings, and greater psychosocial, vocational and detoxification supports are warranted.

SOURCE

Heroin Addiction and Related Clinical Problems. Published Ahead of Print. March 2016.

<http://www.heroinaddictionrelatedclinicalproblems.org/harc-p-archives.php>

Consultation with Referral Agents on the Development of a Child and Adolescent Mental Health Service for 16-18 Year Olds



Clogher, É.,
Higgins, L.²
Department of
Psychology,
University of
Limerick,¹
Mater Child and
Adolescent Mental
Health Service,
Ballymun,
Dublin 9²

INTRODUCTION

In preparation for the extension of Child and Adolescent Mental Health Services (CAMHS) to 16-18 year olds, this research consulted with referral agents to gain information on the 16 and 17 year olds they may refer; their presenting difficulties, clinical needs, barriers to engagement and suggestions for maximising engagement. Referral agents' understanding of CAMHS referral criteria and their experience of the service was also assessed.

METHODOLOGY

Eighty questionnaires were posted to professionals in the community working with 16-18 year olds. Input was sought from professionals who had previously referred to CAMHS and professionals who had not referred but were eligible to do so. Five semi-structured interviews were conducted with a representative sample of professionals working with 16-18 year olds.

RESULTS

Overall, referral agents indicated satisfaction with the service provided by CAMHS. Many indicated a lack of clarity on the referral criteria and expressed a desire for more communication and more information on the service.

CONCLUSIONS

This research indicated a need to clearly define CAMHS core business and referral criteria to key services within the community prior to, or coinciding with the commencement of services for 16-18 year olds.

Parents' Perspectives of the Quality of Care Provided by a Child and Adolescent Mental Health Service in the West of Ireland



Kelly, M.
Child and
Adolescent Mental
Health Service,
Nenagh,
Co. Tipperary

INTRODUCTION

The following abstract summarises a small-scale research project completed as part of the Doctorate in Clinical Psychology at the University of Limerick.

OBJECTIVE

The aim of the research was to evaluate and explore parents' perceptions of the quality of care provided by a Child and Adolescent Mental Health Service (CAMHS) in the West of Ireland.

METHODOLOGY

The mixed methods design included twenty parents completing a specially devised quantitative questionnaire and three parents participating in a qualitative interview. All participants were parents of children who had attended at least three CAMHS appointments. Parents were asked to participate in the research by CAMHS clinicians when they attended appointments. Data was analysed using descriptive statistics and thematic analysis.

RESULTS

Results from the quantitative questionnaires and the qualitative interviews indicated that the majority of parents evaluated the specific CAMHS as a quality service. The findings reflected existing service user identified themes and sentiments in quality of care mental health research. New themes related to quality of care in the specific CAMHS were also revealed.

CONCLUSION

The majority of parents positively rated established areas of quality care including recovery focused case management, positive staff interactions, group involvement, staff accessibility, psycho education and building facilities. However, some new and specific themes related to quality of care which would benefit from continued improvement were identified. These included increased information on medication, shortened initial waiting lists, reduced staff turnover, individual appointments for parents and detailed appointment letters. The findings indicate areas of current quality and possible future improvement for the specific CAMHS. Improved governmental funding, resource allocation and clinician creativity may facilitate the recommended quality based improvements.

A Retrospective Analysis on Children Referred to Early Intervention who Received a Diagnosis of Autism Spectrum Disorder in 2015 and Early 2016 in the Sligo/Leitrim Region

Watters, C.,
Flanagan, L.
Early Intervention,
Nazareth House,
HSE, Sligo

INTRODUCTION

The HSE Early Intervention Team (EIT) uses a family-centred approach to enhance family functioning and quality of life for children aged 0-6 presenting with two or more complex needs. This team is comprised of multiple healthcare professionals who offer multidisciplinary care to promote the integration and inclusion of individuals with a range of disabilities, including Autism Spectrum Disorder (ASD). It is important that healthcare services such as EIT undergo continuous evaluation to ensure timely and reliable diagnosis.¹

OBJECTIVES

This evaluation was conducted to inform healthcare providers working in EIT on the most up-to-date practice in the ASD diagnostic pathway. The main aim of this research was to evaluate the ASD diagnostic pathway, taking the referral process into account.

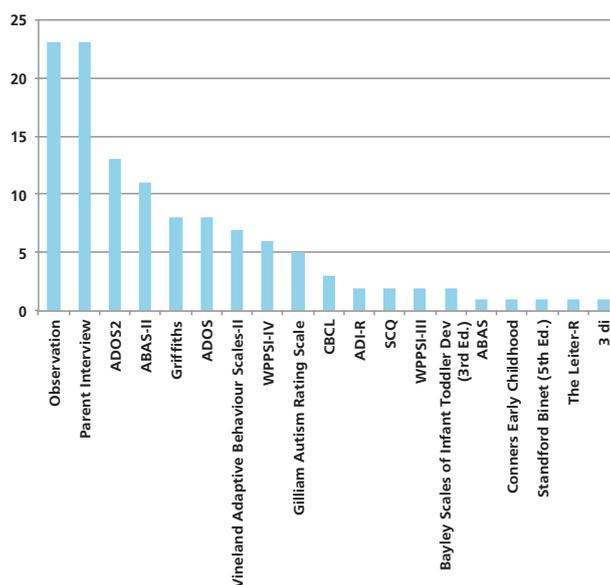
METHODOLOGY

A retrospective analysis was conducted on all of the children in the Sligo/Leitrim area who were diagnosed with ASD in 2015 and early 2016 (January, February, March) either privately or through the HSE. This involved files being examined by the authors for information regarding the referral process and the ASD diagnostic pathway. A template was designed and utilised to aid the data collection process.

RESULTS

During this timeframe, a total of 123 children were referred to EIT. Twenty-three children received an ASD diagnosis (19 Male, 4 Female). Upon referral, the average age was 2 years, 6 months. The average age to receive a diagnosis of ASD was 3 years, 9 months. The referrals came from Public Health Nurses (30%), Paediatricians (23%), Speech and Language Therapists (23%), Clinical Psychologists (8%), GPs (8%), Audiology (4%) and Community Facilitator for Disability (4%). The main presenting concerns at time of referral to EIT were social-communication delays, poor joint attention and interaction as well as lack of appropriate eye contact. In line with best practice, the analysis revealed a wide range of measures used to aid the diagnostic process. (See Figure 1).

Figure 1 - Diagnostic Instruments Used



CONCLUSION

Accurate and early diagnosis increases the opportunity to seek appropriate specialist intervention, resulting in improved future outcomes. However, due to limited resources, there can be a large amount of time between initial referral and diagnosis. Previous research has concluded that the most popular contemporary assessment of adaptive functioning was the Vineland Adaptive Behaviour Scales.^{1,2} However, the change in diagnostic instruments is reflective of the literature and PSI guidelines.³ Services need to ensure they maintain effective use of the limited resources available to ensure timely and appropriate delivery of an ASD diagnosis. Future research could focus on systematically examining the nature and types of interventions recommended following the diagnosis of ASD, as well as evaluating the effectiveness of these interventions.

REFERENCES

Available on request.

An Audit of Self-Harm Referrals to a Child and Adolescent Mental Health Service in Ireland in 2013

Hardiman, S.,¹
Coughlan, B.,¹
Lovett, E.²
Department of
Psychology,
University of
Limerick ¹
Child and Adolescent
Mental Health
Services, Cork ²

INTRODUCTION

Self-harm is considered a significant public health issue particularly within the adolescent population. While the definition of self-harm varies across research, it can be broadly understood as a behavioural expression of psychological distress aimed at relieving overwhelming thoughts and emotions. It is one of the strongest predictors of suicide in adolescence and substantially increases the risk of death in this cohort. Adolescents presenting with Deliberate Self-Harm (DSH) represent a significant portion of referrals to Child and Adolescent Mental Health Services (CAMHS) in Ireland. The current study adds to our understanding of this issue through profiling client characteristics and service provision.

METHODOLOGY

This research involved conducting an audit of referrals of DSH over a 1 year period (2013) within a CAMHS service in Co. Cork. The first stage identified those who had been referred for DSH through the examination of all referrals to the service in 2013. Thirty one referrals involving self-harm were highlighted (29 females, 2 males), and their files reviewed. Data collected included demographics (i.e. age, gender), information pertaining to the nature of self-harm (i.e. method of DSH), and service-based information (i.e. source of referral, level of service engagement, primary worker by discipline, waiting list allocation and waiting time). The data were subsequently analysed, using SPSS statistical software.

RESULTS

The results from the audit indicated that more females than males were referred to CAMHS for self-harm (See Figure 1). This is in line with current research and national statistics on self-harm in Ireland. Seventy four percent of presentations fell between 11-15 years old, which is below the expected age range-based on the national average from 2012 which identified a peak age of 15-19 years for females.

Figure 1 - Frequency of Self-Harm by Age and Gender Distribution of Self-Harm Referrals



Methods of DSH included: cutting behaviours involving razors, scissors, blunt objects, broken glass, knives, and scratching with finger nails (87%) and to a lesser extent; attempted smothering; friction burning; punching oneself and unspecified DSH (13%).

The least number of referrals for DSH occurred in the summer months. All referrals of DSH were allocated to the priority waiting list with 74% given emergency appointments. Most referrals were seen in less than one week with 78% of individuals waiting less than three months for an appointment. The rate of client take up for offered appointments was 77.5% indicating a high rate of retention once engaged with the service. Over half of self-harm referrals were seen primarily by psychiatry or psychology (52%). The next most frequently involved profession was social work (39%), while a small percentage were seen by nursing (9%). While not the primary worker in all cases, 42% of those referred for DSH in 2013 were seen by psychiatry at some stage in their engagement with CAMHS.

CONCLUSION

This audit indicates that self-harm referrals are a resource-heavy public health issue. This is demonstrated in the current research by the large number of emergency appointments and the number of priority waiting list allocations. Low average waiting times, and the predominant involvement of disciplines such as psychology and psychiatry which are seen as specialised services are also indicative of the high level of resources utilised for this particular cohort. This points to the importance of developing services which can cater for this specialist population in a comprehensive yet resource efficient manner.

A Baseline Study as Part of a Quality Improvement Initiative for the Long-Term Management of Self-Harm Patients by a Dublin Child and Adolescent Mental Health Service Team

Hand, A.,
Sheridan, A.,
Mulligan, A.
North Dublin Child
and Adolescent
Mental Health Service

INTRODUCTION

The primary aim of this study was to establish a baseline regarding the care pathway of a sample of patients who presented with deliberate self-harm to a Dublin Child and Adolescent Mental Health Service (CAMHS) during the calendar year 2013, benchmarked against the National Institute for Health and Clinical Excellence (NICE) guidelines for the Long-Term Management of Self-Harm.

METHODOLOGY

A mixed method approach was adopted involving a retrospective review of electronic records and charts and semi-structured interviews with senior clinical practitioners in the disciplines of Psychiatry, Psychology and Social Work, involved in the care of patients with deliberate self-harm presentations. The NICE definition of self-harm was used as the criterion for identifying cases of deliberate self-harm. To establish baseline measures of the care pathway, modified NICE clinical audit tools were employed.

RESULTS

Evidence from electronic and chart records showed partial compliance (81%) with NICE Assessment of Need Criteria. There was clear evidence of comprehensive Risk Assessment, Care Planning and Intervention as required by NICE. Discrepancies were noted regarding the requirement to create a clearly identifiable Care and Risk Management Plan. Superordinate themes identified were the need for improved interdisciplinary and interagency collaboration and communication. In relation to the assessment of need, clinician interviews highlighted the need for a broad-based multidisciplinary assessment of need that would include the areas of language, comprehension, social functioning and parent need. Clinicians also emphasised the need for a global risk assessment that includes psycho-social risks and factors which may trigger the withdrawal of a child or adolescent from treatment.

Information on a particular aspect of care was difficult to isolate as records did not differentiate separate sections of the chart for assessment of need, risk management and therapeutic intervention. Overall, findings suggest that although care provision is satisfactory, documentation of the key areas of risk and care require attention. Concerns identified by clinicians point to opportunities for worthwhile ongoing team training and development initiatives.

CONCLUSION

This baseline study provides evidence that clinicians are for the most part meeting the essential NICE requirements of risk assessment, assessment of need, care planning and intervention in the management of patients referred because of deliberate self-harm. However, improvement is needed to meet NICE recommendations regarding documenting the care pathway. Strengthening and broadening the scope of multi-disciplinary engagement in each part of the care pathway was the key recommendation of the clinicians interviewed.

An Analysis of Waiting Lists in a Child Clinical Psychology Service and the Experiences of Clinicians



Kilroe, A.
Child,
Adolescent and
Family Clinical
Psychology
Service, HSE
South, Cork

INTRODUCTION

A 24% increase was experienced in the number of children on waiting lists for mental health services in Ireland in 2014.¹ This was compounded by staffing levels previously being at 44.6% of the government recommended level.¹ It is therefore not surprising that waiting lists may form a considerable difficulty in the operation of psychology services in Ireland today. Psychology waiting lists have been associated with numerous negative clinical implications such as decreased client commitment to therapy,² lower client attendance³ and low clinician morale.³

A number of waiting lists management strategies have been devised in an attempt to tackle these difficulties which include: client prioritisation, opt-in systems, 'did not attend' (DNA) policies and cancellation policies.

OBJECTIVE

This study sought to explore the waiting lists of a Child, Family and Adolescent Psychology Service (CFAPS) and psychologists' experiences of working with these waiting lists.

METHODOLOGY

Mixed methods were used to address four research questions: what is the constitution of a sample of the waiting list in this CFAPS? What are psychologists' experiences of working with a waiting list? How does the waiting list influence the practice of psychologists? What are psychologists' perspectives on how the waiting lists influences clients? Data from two six month samples of waiting lists were analysed, and descriptive statistics were produced to create a picture of the structure of waiting lists at the CFAPS. Semi-structured interviews were conducted with four psychologists working at the CFAPS to explore their experiences of working with the waiting lists. Content analysis was conducted on transcripts of interviews to develop themes relating to the research questions.

RESULTS

Results obtained demonstrated that the waiting lists comprised a wide range of presenting problems, referral agents, client ages, durations on waiting lists, open case durations and case outcomes. Clinicians' experiences of

working with waiting lists were reported as mainly quite positive. Five main themes were identified relating to clinicians' experiences of working with a waiting list, these were: **Creative thinking for waiting list reduction, Policy flexibility, Clarity attributed to policies, Positivity** and **Reaching those in need**. Psychologists' responses to questions relating to how the waiting list influences their practice generated three main themes. These were: **Client prioritisation, Resourcefulness** and **Flexibility in practice**. Finally, psychologists' perception of how the waiting list may influence their clients created four main themes. These were: **Adversity, Deterioration, Engagement** and **Resourcefulness**.

CONCLUSIONS

All psychologists reported having mainly positive experiences with the waiting list and waiting list policies that they work with. It was expressed that policies provide clinicians with support in making decisions regarding the discharge of clients, which may prove challenging without policy backing. Furthermore, results showed that waiting lists encourage the need to exercise resourcefulness in seeking out community-based supports available to waiting clients. This would appear to oppose previous research outlining the purely negative impact of waiting lists on clinicians.⁴ However, negative implications such as clinician concerns for those awaiting a service, and the belief that time spent on a waiting list could present as a barrier to client engagement were also expressed.

This research has clinical implications in terms of service planning. Suggestions were made by participating psychologists to commence the use of a prioritisation system which may rank referrals systematically by their level of need, as well as the production of an information sheet on the DNA and cancellation policies used in this service. A limitation of this study was the small sample size used. Future research should include interviews with a greater number of psychologists, and larger waiting list samples, in order to allow for more advanced statistical analysis, and to increase the power and generalisation of the findings.

REFERENCES

Available on request.

Planning the Development of an Anxiety Management Programme Incorporating Service User Involvement

Breen, E.
East Limerick
Child and
Adolescent
Mental Health
Service

INTRODUCTION

Anxiety disorders are among the most prevalent psychological disorders among children and adolescents¹ and cognitive behavioural therapy has been recommended as the treatment of choice.²

The World Health Organisation has emphasised the necessity of involving service users in both the development and delivery of healthcare.³ However, service user involvement may be less prevalent in practice despite being a current buzzword and appearing in policy documents, mission statements and the academic literature.⁴ In mental health services there is increasing evidence of positive practice in relation to service user involvement. Just like adults, young people who are engaged in mental health services and possess mental health difficulties need to be consulted regarding their experiences of care and treatment.⁵ Service user involvement can enable the service to foresee difficulties and subsequently develop appropriate and effective service provision.⁶ Promoting greater service user involvement may result in:-

1. Better health and treatment outcomes
2. Increased satisfaction with care
3. Increased sense of dignity and self-worth
4. Empowerment of the individual leading to greater responsibility for care
5. Improvements in staff and service user relationships and increased trust
6. Reduced level of complaints and safer care

OBJECTIVE

This research study was conducted with the aim of encouraging service user involvement in intervention planning in relation to an anxiety management programme.

METHODOLOGY

A concurrent triangulation design utilising both quantitative and qualitative measures was used. An 'Anxiety Management Strategies' questionnaire explored how helpful participants would find evidence-based anxiety management strategies rated on a scale of 0-3 if included in an anxiety management group based on the input from 8 adolescent service users from East Limerick Child and Adolescent Mental Health Service.

At the same time, the expectations, concerns and aspirations of 4 of these 8 service users for an anxiety management group was explored using semi-structured interviews. Converging both quantitative and qualitative data aimed to ensure that the intervention subsequently developed would incorporate evidence-based practice in relation to treating anxiety in adolescents but also facilitated young peoples' voices being heard so that the intervention could incorporate their suggestions.

RESULTS

The 'Anxiety Management Strategies Questionnaire' illustrated that participants predominantly supported the key components and skills intended for an anxiety management group. One overarching theme was identified from the qualitative data which related to '**Concerns and Expectations.**' This theme contained a number of sub-themes including, '**Feelings about Involvement**', '**Challenges/Barriers**', '**Benefits/ Aspirations**', and '**Suggestions/What Would Help Address Their Concerns.**'

CONCLUSION

By adopting this approach to intervention development, abiding by evidence-based practice in addition to facilitating young peoples' voices being heard, an important change in the manner in which support is offered to young people with anxiety can be achieved. Ultimately it is hoped that by involving service-users in the initial planning stages and including their input that treatment outcomes will be improved. Further research might focus on other presentations and interventions offered by the service and consider the possibility of sharing more of the research process with young people and adapting services provided accordingly.

REFERENCES

Available on request.



A Study to Investigate Factors Related to the Assessment by Treating Psychiatrists and General Practitioners of Eligibility for Disability Allowances on Mental Health Grounds from the Department of Social Protection

Daly C.,
MacSuibhne S.
Department of
Psychiatry, St.
Luke's Hospital,
Kilkenny

INTRODUCTION

Disability is a multidimensional concept, which depends on diagnosis, severity of impairment and life context, and has significant affective and cultural components.

Disability assessments are among the most common non-therapeutic evaluations requested of psychiatrists. We investigated factors related to the assessment by treating psychiatrists and general practitioners of eligibility for disability allowances on mental health grounds from the Department of Social Protection.

METHODOLOGY

One issue identified following a review of the relevant literature was the concept of 'dual agency,' whereby treating clinicians can experience role conflict in disability assessment. An 18 item questionnaire was adapted from Christopher et al.¹ to apply to our target recipients in the Irish setting. This was created using the online survey programme Survey Monkey and distributed among Psychiatrists and General Practitioners using email lists.

RESULTS

Thirty seven percent of respondents reported that they had been practicing medicine for between 11 and 20 years while 47% had been practicing medicine for greater than 20 years. Seventy eight percent of those surveyed reported that their patients request them to complete disability forms. Seventy percent of respondents reported that they believed that disability allowance forms should be completed by General Practitioners rather than by Psychiatrists. A total of 78.13% of respondents agreed that the dual roles concept negatively affects the disability determination process. Just under 20% reported certifying an individual as unfit for work on mental health grounds when that was not their true judgement.

CONCLUSIONS

A majority of respondents indicated that they believed treating clinicians namely General Practitioners were best placed to complete forms for work disability purposes. The concept of dual agency negatively impacts on the disability evaluation process and on the therapeutic alliance between psychiatrist and patient. Most psychiatrists lack formal training in the evaluation of disability. We suggest that there is a need for the introduction of disability evaluation training at both an undergraduate and postgraduate level.

A Questionnaire Study to Assess Knowledge about Delirium amongst Allied Health Professionals



Parvathiah, H.,
Daly, C.,
Ní Chorcoráin, A.
Department of
Psychiatry, Cork
University Hospital

INTRODUCTION

Delirium is under-recognised in the acute hospital setting. There is a limited literature on the role of allied health professionals in recognition and detection of delirium. Educational intervention would play an important role in increasing awareness and recognition of delirium amongst allied health professionals.

METHODOLOGY

We undertook a study of the knowledge of allied health professionals of delirium and its risk factors in a large university teaching hospital. A questionnaire used in nursing research was modified and distributed to this group of allied health professionals in a large university teaching hospital.¹

RESULTS

Results were analysed using SPSS. Forty allied health professionals participated in the study, which included 10 social workers, 7 speech and language therapists, 11 dieticians and 12 occupational therapists. Thirty five were female and 5 were male. Ninety percent of the respondents knew the definition of delirium. Fifty five percent knew that CAM scale can be used to identify delirium and 97.5% knew about DRS scale. There was a general lack of awareness regarding delirium and its risk factors amongst all professionals, with occupational therapists most likely to accurately identify the features of delirium. They were also the group most likely to correctly identify screening tools for dementia and delirium with a mean of correctly answered questions in the questionnaire of 69%. Speech and language therapists were at 62%, dieticians at 55% and social workers at 46%. There were 28 questions in the questionnaire. In a previous study to test nurses' knowledge of delirium the mean of correctly answered questions was at 53%.¹ A survey amongst junior doctors self-reported knowledge of core diagnostic criteria for delirium showed 28% knew the criteria.²

CONCLUSION

Occupational therapists were the professionals most likely to recognise the features and risk factors for delirium. Given the outcome of this study there is a need for educational intervention to improve knowledge and recognition of delirium amongst allied health professionals.

REFERENCES

Available on request.

PRESENTED

As a Poster presentation at the 9th Annual Meeting of the European Delirium Association in Cremona, Italy on November 6th and 7th, 2014.

ACKNOWLEDGEMENT

The authors wish to thank Malcolm Hare, Freemantle Hospital, Australia for his permission to use and modify the questionnaire.

A Review of Electroconvulsive Therapy in University Hospital Limerick



Lulic, M.,
Ó'Riain, S.
Department of
Anaesthesia,
University Hospital
Limerick

INTRODUCTION

Electroconvulsive therapy (ECT) is a medical procedure in which a small electrical current is passed into the brain, intentionally triggering a brief seizure. It is therapeutically used in the treatment of major depressive disorder, catatonia and resistant mania.

ECT is performed under general anaesthesia and requires scheduled commitment by anaesthetists to provide this service. However the sporadic and often clustered demand for ECT requirements causes difficulty in service planning.

OBJECTIVE

We sought to review ECT and by inference anaesthesia activity in our institution's 40 bed acute psychiatric unit.

METHODOLOGY

- Data were collected in UHL over a one year period from January 1st to December 31st 2015, using the psychiatry unit's ECT register.
- The review included volume of cases, demographic data: age, gender and monthly distribution of ECT.
- 19 patients underwent a programme of ECT which involved 149 ECT sessions, (mean 7.8).
- Age of patients ranged from 32 to 77 years (mean 40), with 63% of patients under 50 years of age.
- Females constituted 79% of the patients receiving 77% of the delivered treatments.
- ECT was delivered evenly through the year with spikes of activity in April and September.

RESULTS

The demographics of increased female prevalence is in keeping with the national profile although the age at mean 40 years is well below the 60 year national mean for ECT patients.¹ The figures at 19 patients entering a programme of treatment represents a year by year increase in ECT treatment in our hospital dating back to 2011 (14 patients in 2013).¹

CONCLUSION

Consistent safe anaesthesia provision to what is an elective process in the setting of unknown yearly figures with a wide distribution of usage on a seasonal basis continues to be a logistical and manpower planning burden for departments of anaesthesia.

REFERENCES

Available on request.

A Systematic Review of the Efficacy of Harmful Behaviour Programmes for Patients in Forensic Mental Health Settings



Farrell, G.P.,¹
Ryan, R.,²
McCarthy, J.,²
Graham, M.²
National Forensic
Mental Health
Service, Central
Mental Hospital,
Dublin 14¹
Department of
Nursing and
Midwifery,
University of
Limerick²

INTRODUCTION

This systematic review guided by Wakefield's^{1,2} seven step approach aims to assess the efficacy of harmful behaviour programmes for forensic mental health patients within secure environments. Forensic mental healthcare is an emerging speciality that crosses boundaries between health and judicial systems.

OBJECTIVE

The rationale for this review was based on the growing concerns and needs of patients and service providers as the unique and individual challenges for patients have been unmet in the past. Therapeutic modalities based on cognitive, behaviour and social learning theories have application within this context for forensic mental health nursing. Such interventions include the Reasoning and Rehabilitation Programme R&R³ and Enhanced Thinking Skills (ETS)⁴ aiming to reduce the incidence of harmful behaviours.

METHODOLOGY

The data for this study was gathered through in-depth systematic searches of electronic databases, from 2005-2015, to answer the question: What is the efficacy of harmful behaviour programmes for patients in forensic mental health settings? The databases Medline, Academic Search Complete, AMED, Biomedical Reference Collection, Cinahl, PsychArticles, Social Sciences, Embase and The Cochrane Library yielded 189 articles. Limiters and examination through inclusion and exclusion, in addition to quality appraisal tool CASP identified seven studies as appropriate to meet the aim of the review.

RESULTS

Data extraction identified seven studies which were undertaken in the United Kingdom. All studies used a quantitative approach with various sample sizes ranging from 35 to 121. Three study utilised the 'R&R'; three R&R2'MHP and another ETS. Findings provide an increasing evidence base for cognitive behavioural therapeutic approaches in reducing harmful behaviours. Benefits of specific intervention programmes in reducing harmful behaviour within forensic settings were detailed. Furthermore, engagement in these programmes enhances wellbeing and impacts on symptoms. In addressing the question regarding the efficacy of harmful behaviour programmes for patients in forensic mental health settings this review demonstrates the complexity of providing a nursing service within custodial and legal constraints.

CONCLUSION

To conclude, these specific intervention programmes contribute to reducing harmful behaviour and increase wellness for patients in forensic mental health settings.

REFERENCES

Available on request.

FUNDING

This research has received funding from the Nursing and Midwifery Planning and Development Unit (NMPDU).

Stress Control Wexford - A Joint Initiative



O'Gorman, J.,
Kissane, S.
HSE Community
Mental Health
Centre, Summerhill,
Wexford

INTRODUCTION

Stress Control is a six session programme, developed by Dr. Jim White. It operates as a lecture, open to all members of the public and uses cognitive-behavioural methods to teach strategies for dealing with stress. It is the most widely used stress management programme within the HSE and the NHS. Research has found the course to perform as well, if not better, than individual therapy and to show continued improvement at two-year follow up.^{1,3}

In anticipation of Action 12 of the 'Connecting for Life: Wexford County Suicide and Self-Harm Prevention Plan 2016-2020', Stress Control Wexford was initiated in May 2015. The venture was established to fulfil Action objectives to implement Stress Control across Co. Wexford and to do so by training FDYS and GROW staff in the delivery of the programme.

METHODOLOGY

A small working group, consisting of a Principal Psychologist and 3 Facilitators from HSE Summerhill Community Mental Health Centre, GROW and FDYS was created. Facilitators were trained and programme delivery commenced.

Three Stress Control courses were run in County Wexford between September 2015 and May 2016: the first at Summerhill Community Mental Health Centre, Wexford Town; the second at a community venue in Enniscorthy; and the third at a Wexford Town community venue. A total of 154 people registered for Stress Control across the three programmes. Average attendance on the courses was: 10 (Summerhill), 45 (Enniscorthy) and 42 (Wexford Town).

Attendees were administered a post-course evaluation at the end of each course, in which they were required to rate the following items on a 5 point likert-style scale from 0 (Not at all) to 5 (Very Much): I have benefited from the course; My symptoms have improved; My life has improved; Overall satisfaction with the course; Recommend course to a friend. The measure also included questions on reasons for attending Stress Control and where participants heard about the course.

RESULTS

Of the 74 attendees who completed post-course evaluations 20 were male and 54 female, with an average age of 48 years (range=18–79 years). Mean attendance among this cohort was 5.44 sessions out of 6. Several people stated more than one reason for attending, with 68.92% stating personal symptoms, 29.73% professional development, 18.92% recommendation by a health professional and 18.92% to help a friend or family member.

A total of 90.54% of people stated that they were satisfied with the programme and 85.14% said that they would recommend it to a friend. A total of 82.42% of people felt that they had benefited from Stress Control, with 45.94% indicating that their symptoms had improved since attending. A total of 47.29% of attendees stated that they felt their life had improved since attending the course.

CONCLUSIONS

Evaluations of Stress Control Wexford are in line with previous findings of the benefits of the programme and support the use of Stress Control as an effective community intervention in County Wexford.² Stress Control Wexford aims to train additional staff in the delivery of the programme during 2016-2017 with the aim of providing the course to further numbers.

REFERENCES

Available on request.

Self-Harm and Help-Seeking in Irish School-Going Adolescents



Doyle, L.,¹
Treacy, M.P.,²
Sheridan, A.²
School of Nursing and
Midwifery, Trinity
College, Dublin¹
School of Nursing,
Midwifery and Health
Systems, University
College Dublin²

ABSTRACT

Adolescent self-harm is recognised as a serious public health problem due to the immediate and potential long-term physical harm it causes in addition to its association with psychological distress. However there is little reliable comparative data on its prevalence or characteristics or on the extent of help-seeking for self-harm. The aims of this study were to determine the prevalence and associated factors of adolescent self-harm and to investigate help-seeking behaviours for self-harm.

A total of 856 adolescents aged 15-17 years participated in a cross-sectional survey undertaken in 11 post-primary schools in Dublin. Data were gathered using the Lifestyle and Coping questionnaire, a 96-item anonymous questionnaire designed and utilised by clinicians and researchers who collaborated on the Child and Adolescent Self-Harm in Europe (CASE) study. The Lifestyle and Coping survey included a number of variables covering demographic characteristics, lifestyle factors, negative life events and measures of depression, anxiety, impulsivity and self-esteem. Self-harm was elicited by first asking if the participant had ever self-harmed and then asking for a description of their last act of self-harm which was coded according to standardised criteria adapted by all CASE studies. Surveys took approximately 30 minutes to complete and were administered in the school setting.

A lifetime history of self-harm was reported by 12% (n=103) of adolescents. Over half of those who self-harmed did so more than once (53%) and females were almost three times more likely to self-harm than males. The most commonly reported method of self-harm was cutting (63%) followed by overdose (29%). Factors independently associated with self-harm included exposure to self-harm of a friend (OR 6.6) or family member (OR 5.9), having fights with parents (OR 5.5) and having concerns about their sexual orientation (OR 4.6). Professional help-seeking was uncommon prior to (9%) and after (12%) of self-harm. Furthermore, only 6.9% of adolescents presented to hospital as a result of their last self-harm act.

These findings indicate that self-harm is common in adolescents. However, seeking professional help is not a common phenomenon and those who present to hospital represent the 'tip of the iceberg' of adolescent self-harm. Identifying the prevalence of self-harm and associated factors in young people is important to determine the appropriate preventative programmes to target 'at-risk' groups. The finding of a very low level of professional help-seeking suggests the need for mental health professionals to provide an outreach role within the school setting in a bid to improve early detection and intervention for self-harm and ultimately better outcomes for young people who self-harm.

PRESENTED

- At 'Promoting Youth Mental Health through Intervention, Engagement and Innovation in Limerick' on September 28th, 2012 by Dr. Louise Doyle.
- At the XXVII World Congress of The International Association for Suicide Prevention in Oslo, Norway on September 24th, 2013 by Dr. Louise Doyle.

SOURCE

International Journal of Mental Health Nursing. 24 (6):485-494.

Pregnant Women - Why They Continue to Smoke and What They Feel Would Help Them Quit



Orpen-Carey, M.E.
Gynaecology
Department,
Letterkenny General
Hospital, Co.
Donegal
Smoking Cessation
Department, HSE
West, Co. Donegal

INTRODUCTION

Smoking during pregnancy remains the largest preventable cause of illness and death in the unborn child. Nationally there is a lack of research in this area. Smoking cessation services are available in Ireland but lack a standardised approach and accessibility to all client groups, in particular pregnant women. A national report in 2000¹ recommended further research in this area, and the monitoring and evaluation of smoking cessation strategies aimed at this population. Smoking in pregnancy has been linked to ill health for both mother and baby including increasing risk of ectopic pregnancy; prenatal death; placenta abruption and praevia and foetal malformation.^{2,3} Studies have indicated that pregnant women who smoke have more motivation to stop.²

OBJECTIVE

The objective of this study was to understand womens' experiences of this phenomenon and to gain insight into their rationale for continuing to smoke in order to identify possible solutions to assist this client group in smoking cessation.

METHODOLOGY

A qualitative paradigm was chosen. The most suited philosophical approach is phenomenology and, considering that this research aims to understand the lived experience, the Heideggerian approach was the chosen method of phenomenological enquiry. The research was conducted in a regional teaching hospital in Ireland serving a population of 130,000. The target population were pregnant women who currently smoked and had fluency in English. Purposeful sampling was selected to recruit participants. A priori determination existed where sampling was limited in advance by certain criteria. Interviews were the chosen method of data collection. Semi-structured interviews were conducted using an interview guide. A small cohort were interviewed as saturation of data was identified to be achieved after 5 interviews. An interview guide provided the researcher with a loose road map to initiate prompts during the interview process. Giorgi's method of phenomenological analysis aimed to reveal the meaning of the phenomenon as experienced by the participants through the discovery of revelatory themes. Participants' experiences of their smoking behaviour were gathered and examined to identify emerging themes and categories. All data in the interview was recorded and transcribed verbatim. Manual coding and categorising was used in data analysis. Further analysis established revelatory themes common to all participants' experiences.

RESULTS

The findings uncovered six revelatory themes: smoking exposure; knowledge; support on offer to participants; participants' personal feelings about smoking in pregnancy; addiction and smoking consumption, and lastly, suggestions offered by the participants to tackle smoking cessation in pregnancy.

CONCLUSIONS

Potential solutions in assisting smoking cessation in pregnancy arose from conducting the study. These included an informative DVD on view in the antenatal clinic waiting area. Leaflets offered to pregnant women should include the disadvantages of smoking in pregnancy. Smoking cessation information should be included in packs received from the antenatal clinic including information on accessing smoking cessation services. All relevant healthcare professionals should enquire into a pregnant woman's smoking status at each visit and offer information to assist them quit. Those on nicotine replacement therapy should be monitored by a doctor throughout their pregnancy. All womens' progress should be checked at every clinic and appropriate referrals made where required. It is recommended that Early Pregnancy Assessment Clinics should include smoking status on their admission sheet as it is at this clinic that early referral to the smoking cessation services should be advised if appropriate. Lastly, a smoking cessation group for pregnant women was highlighted by participants in the study as a potential way forward to assist smoking cessation in pregnancy.

REFERENCES

Available on request.

How Physically Active are Employees at University of Limerick Hospitals Group?

Curran, M.,
Quinn-McDonogh, J.,
Moran, B.,
Brady, H.,
Cowan, C.,
Tobin, L.
Department of
Physiotherapy,
University Hospital
Limerick

INTRODUCTION

The benefits of an active lifestyle are extensively reported. However, research has highlighted that only a small percentage of Irish people participate in adequate levels of physical activity. A healthy work environment can prevent occupational disease and injury and promote positive health attitudes and behaviours. Additionally, the promotion of healthy lifestyles through workplace interventions is becoming more widely recognised and developed. Sedentary work, which affects up to 75% of employees in industrialised countries, coupled with increasing use of the car is resulting in a decline in physical activity among employees. Therefore, initiatives in the workplace, in line with the Healthy Ireland (HI) policy, which promote physical activity should be explored and developed.

OBJECTIVE

The purpose of this study was to determine employees' current physical activity and active transport levels, readiness to change, the barriers to exercise, and to ascertain facilities required by employees to encourage an uptake of physical activity within the UL Hospitals group.

METHODOLOGY

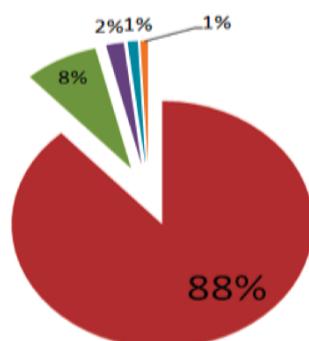
Ethical approval was obtained from the University Hospital Limerick Ethics Committee. A questionnaire was amended from the Active@work campaign by the Irish Heart Foundation and was distributed online and onsite among all staff members of the UL Hospitals Group. Efforts were made in all five sites to encourage staff to participate. Out of a workforce of 3,442, 1,006 employees responded thereby providing a response rate of 29.2%.

RESULTS

Primary findings indicate that 27.3% of employees are not currently physically active. A total of 88.3% of employees travel to work by private car whilst only 9.8% take active transport (walk/cycle). (See Figure 1).

Figure 1- Transport to work

■ Private Car ■ Walk ■ Cycle ■ Public Transport ■ Carpool



Readiness to change was reported by 95.8%. Lack of time was highlighted as the primary barrier to exercise (65.3%).

Employees identified that they would be 'extremely/fairly likely' to consider participation in physical activity should the following facilities be provided by the workplace: shower/changing facilities (87.9%), lockers/storage (88.4%), bicycle racks (57.9%) and running track around the hospital perimeter (86.3%).

CONCLUSIONS

Physical inactivity is a primary health determinant for the general population and for workforces. The relationship between poor health and inactivity has been previously investigated, with results indicating those who are most active have the lowest coronary risk score and a lower prevalence of health problems. Consideration should be given towards developing initiatives within the UL Hospitals Group that address employee physical activity levels and thereby result in promoting health and well-being, preventing disease and injury, improving productivity and promoting positive lifestyle behaviours.

PRESENTED

As a poster presentation at the UL Hospitals' Annual Research Symposium in 2015.

Mapping the Characteristics of Children who Report that they 'Don't Know' the Potential Consequences of Smoking



Perry, C.P.,
Keane, E.,
Molcho, M.,
Nic Gabhainn, S.
Health Promotion
Research Centre,
National University
of Ireland

INTRODUCTION

Approximately 8% of children in Ireland are current smokers.¹ Though this figure has decreased from 21% in 1998,² a significant proportion of young people continue to smoke. As tobacco use is often established during adolescence,³ it is essential that public health messages target all children, particularly those most at risk. A recent population level method to inform people about the health consequences of smoking includes warnings placed on cigarette packs.

OBJECTIVE

The objective of this research was to investigate whether there are socio-demographic, family, behavioural, or school patterns among Irish children who report that they 'don't know' to ten potential consequences of smoking.

METHODOLOGY

The 2014 Irish Health Behaviour in School-aged Children (HBSC) study is a nationally representative sample of children. The response rate was 59% and 84.5% at the school and student level respectively. Overall 13,611 children participated and 5,203 (38.2%) aged 14-17 years were asked information on the consequences of smoking. On a self-completion questionnaire, children responded to a 5-point likert scale as to whether they agree, disagree or don't know information on 10 statements. These 10 statements reflect warnings on cigarette packs in Ireland which are; smoking (i) causes lung cancer, (ii) increases the risk of having a heart attack, (iii) is addictive, (iv) is the leading cause of death, (v) clogs your arteries, (vi) doubles your risk of stroke, (vii) causes wrinkling and early ageing of the skin, (viii) can cause a slow and painful death, and (ix) tobacco smoke is toxic, and (x) smokers die younger. Data were also collected on socio-demographic (child gender and age), family (highest parental occupation, family affluence scale, and family structure), behaviours (having looked at warnings on cigarette packs in the last 6 months, and current smoking status) and school level factors (location and disadvantaged status). Descriptive analyses were used to investigate patterns in the data. A chi-squared test was used to test significance of differences across the socio-demographic, family factors, behavioural and school level factors, and knowledge of the consequences of smoking. Data were analysed using Stata v. 12.0.

RESULTS

The majority of children agreed with each individual statement (ranging from 65.0% to 96.7%), a smaller proportion disagreed with the individual statements (ranging from 1.0% to 13.9%) and a small but substantial proportion answered 'don't know' (ranging from 1.4% to 19.6%). Of those who answered 'don't know', the majority answered don't know to 1 or 2 statements (38.3% and 28.0% respectively) and 3.6% answered 'don't know' to between 6 and all 10 statements. Slightly more younger children i.e. 14-15 year olds (though not statistically significant), boys, children from low affluent families, current smokers, children attending urban schools, and those attending disadvantaged-status schools reported that they 'don't know' more frequently compared to their counterparts. Children from the higher social classes (1-2), from two-parent families and children who looked at cigarette packs in the past 6 months responded 'don't know' less frequently than their counterparts. Not all differences were statistically significant.

CONCLUSION

The findings suggest that there are some relevant patterns among those who 'don't know' whether smoking has potential health consequences. Those with a responsibility for health literacy and social marketing should take into consideration that certain groups are more likely to report they 'don't know' public health messages. Therefore social marketing campaigns should be aware that some children specifically boys, children from low socio-economic households and current smokers are not fully informed on the health consequences of smoking.

REFERENCES

Available on request.

FUNDING

The HBSC Ireland Study is funded by the Department of Health. Further detail on the study and its outputs is available at: www.nuigalway.ie/hbsc

Food and Beverage Cues in Childrens' Television Programmes - The Influence of Programme Genre

ABSTRACT

The link between childhood obesity and both television viewing and television advertising have previously been examined. We sought to investigate the frequency and type of food and beverage placements in children-specific television broadcasts and, in particular, differences between programme genres.

The content of five weekdays of children-specific television broadcasting on both UK (BBC) and Irish (RTÉ) television channels was summarised. Food and beverage placements were coded based on type of product, product placement, product use and characters involved. A comparison was made between different programme genres: animated, cartoon, child-specific, film, quiz, tween and young persons' programming.

A total of 1,155 (BBC=450; RTE=705) cues were recorded giving a cue every 4.2 minutes, an average of 12.3 s/cue. The genre with most cues recorded was cartoon programming (30.8%). For the majority of genres, cues related to sweet snacks (range 1.8-23.3%) and sweets/candy (range 3.6-25.8%) featured highly. Fast food (18.0%) and sugar-sweetened beverage (42.3%) cues were observed in a high proportion of tween programming. Celebratory/social motivation factors (range 10-40%) were most common across all genres while there were low proportions of cues based on reward, punishment or health-related motivating factors.

The study provides evidence for the prominence of energy-dense/nutrient-poor foods and beverages in childrens' programming. Of particular interest is the high prevalence of fast-food and sugar-sweetened beverage cues associated with tween programming. These results further emphasize the need for programme makers to provide a healthier image of foods and beverages in childrens' television.

SOURCE

Public Health Nutrition. 2016;19(4):616-624.



Scully P.,¹
Reid, O.,¹
Macken, A.,^{1,2,3}
Healy, M.,⁴
Saunders, J.,⁴
Leddin, D.,^{3,5}
Cullen, W.,³
Dunne, C.,³
O'Gorman, C.^{1,2,3,5}
The Children's Ark,
University Hospital
Limerick¹
National Children's
Research Centre,
Dublin²
Centre for
Interventions in
Infection,
Inflammation and
Immunity (4i),
Graduate Entry
Medical School,
University of
Limerick³
C-Star, University of
Limerick⁴
Dalhousie
University, Halifax,
Nova Scotia,
Canada⁵



Daly, L.,
Downes, C.,
Begley, T.,
DeVries, J.,
Sharek, D.,
Higgins, A.
School of Nursing
and Midwifery,
Trinity College
Dublin

Developing and Testing the SH-PET Tool to Measure the Impacts of the Foundation Programme in Sexual Health Promotion

ABSTRACT

The Irish Sexual Health Strategy 2015-2020 aspires that people in Ireland will experience "positive sexual health and wellbeing ... [and will have] access to high quality sexual health information, education and services throughout their lives." ¹ To meet this goal, there is a need to design, implement and evaluate programmes that demonstrate effectiveness in terms of the building of sexual health promotion capacity with demonstrable impact in practice. To this end, the Foundation Programme in Sexual Health Promotion (FPSHP) developed by the Health Service Executive in 2009 is a spaced ten day programme designed to enhance the capacity of practitioners (health, social care and education) to incorporate sexual health promotion into their work. A team of researchers from the School of Nursing and Midwifery, Trinity College, Dublin were commissioned to develop and pilot a programme-specific evaluation tool to capture the impact and outcomes of this programme.

The study aims were to:

1. Review existing evaluation tools used to evaluate education and training programmes for those engaged in sexual health promotion
2. Develop and pilot an evaluation tool to capture the immediate and long-term outcomes of the FPSHP
3. Report on the tool development and outcomes of the evaluation of the FPSHP using the tool developed

These were achieved using a pre/post/follow-up design, comparing outcomes at baseline with two subsequent time points. More specifically, the study involved the following:-

- An integrated literature review to establish the peer-reviewed evidence-base and inform tool development
- Design of the Sexual Health Promotion Education Evaluation Tool (SH-PET)
- Piloting of the tool in three sites using a pre (n=61) /post (n=57)/follow-up at 6 months (n=39) quantitative survey design (attrition rate 39% between times points 1 and 3)
- Refinement of the SH-PET using three data sources (a) feedback from programme participants, (b) results of statistical analysis and (c) feedback from the programme facilitators and research team member review)
- Development of a condensed SH-PET(c) to maximise efficiency in terms of evaluation administration and completion, and minimise data analysis time and cost

Findings in terms of the SH-PET, showed it to be internally reliable (Cronbach's alpha scores = >0.9) and sensitive to changes in key learning outcomes (knowledge, skills, comfort and confidence) across various time points. As such, it offers a means to compare and contrast

evaluation findings among and between different cohorts in different settings and potentially between different programmes nationally and internationally; in so doing, it may contribute to the existing evidence base in the field. In terms of the evaluation outcomes, there were statistically significant self-reported increases in knowledge, comfort, skills and confidence between point 1 and point 2 [t(55)=-16.48, p<0.001; t(56)=8.29, p<0.001; t(56)=-12.62, p<0.001; t(54)=11.60, p<0.001], and between point 1 and point 3 [t(37)=12.83, p<0.001; t(38)=7.50, p<0.001; t(37)=-7.57, p<0.001; t(36)=10.30, p<0.001]. The fact that the gains were still significant after 6 months, suggests a long term impact of the programme, notwithstanding a trend towards somewhat lower scores on some of the outcomes at the follow-up point compared to immediately after the training.

With the publication of The Irish Sexual Health Strategy 2015-2020 (Department of Health 2015) and work to develop an action plan for its implementation, the Government has indicated the intent to ensure that comprehensive sexual health education and access to appropriate prevention and promotion services will be available to all. As such, there is a commitment to the education and training of those with a sexual health promotion remit to meet this intent. The SH-PET developed in the course of this study offers a programme specific means to evaluate delivery of intended gains and therefore evidence on which to base future decision making around the content and delivery of the FPSHP programme, its effectiveness and to benchmark it in terms of international offerings.

PRESENTED

At the 20th Anniversary Annual Health Promotion Conference hosted at the National University of Ireland (NUI) Galway on Wednesday June 15th, 2016 by Dr. Louise Daly and Ms. Thelma Begley, Assistant Professors, School of Nursing and Midwifery, Trinity College, Dublin.

SOURCE

Higgins A; Downes C; Daly L; Begley T; DeVries J; Sharek D (2016) The Development and Piloting of the Sexual Health Promotion Education Evaluation Tool (SH-PET). Dublin: Trinity College Dublin School of Nursing and Midwifery.

ACKNOWLEDGEMENT

We would like to thank the Health Service Executive Crisis Pregnancy Programme for commissioning this study and for the support of the Foundation Programme Sexual Health Promotion facilitators throughout the project.

Audit of Unscheduled Admissions in Paediatric Day-Case Surgery at University Hospital Limerick

Yellin, S.A.,¹
Ó'Riain, S.,²
Graduate Entry
Medical School,
University of
Limerick¹
Department of
Anaesthesia,
University Hospital
Limerick²

INTRODUCTION

Many paediatric surgical cases are performed as day procedures, which affords the patients an at-home recovery, decreases susceptibility to nosocomial infections, and eases the requirement for inpatient beds.^{1,2} Performing day surgery requires the ability to cope with unscheduled admissions. Previous audits have reported rates of 1.8% and 2.2% among the paediatric population.^{3,4}

OBJECTIVE

The aim of this audit is to evaluate the rate and reasons behind unscheduled admissions at University Hospital Limerick (UHL) following paediatric day-case surgery.

METHODOLOGY

Patients ≤ 18 years undergoing day surgery from February 1, 2015 to January 31, 2016 at UHL were retrospectively identified from the Surgical Day Ward (SDW) log book.

Table 1- Caseload Including Unscheduled Admissions from 01.02.'15 to 31.01.'16

Specialty	Number of Procedures	Unscheduled Admissions	Unscheduled Admission Rate
ENT	555	6	1.1%
Dental	413	2	0.5%
Urology	209	17	8.1%
General	44	3	6.8%
Other	20	0	0.0%
Orthopaedics	19	0	0.0%
All Specialties	1,260	28	2.2%

RESULTS

A total of 1,260 procedures were performed, including 59 admissions. Thirty one cases were excluded because they did not meet UHL day surgery criteria, leaving 28 unscheduled admissions in our study cohort. This corresponds to a 2.2% unscheduled admission rate. Urology had the highest admission rate, with circumcisions accounting for the most unscheduled admissions. The most common reason for admission was post-operative nausea and vomiting.

CONCLUSIONS

The rate of unscheduled admission following day-case surgery reflects the precision of patient selection, taking into account medical, procedural and social factors. This is increasingly important as the Health Service Executive announce plans to increase day surgery rates.⁵ The unscheduled admission rate of 2.2% from the SDW at UHL compares favourably with previous audits in similar populations. Awareness of procedures and groups at higher risk for admission can increase preparatory measures and decrease admission rate.

REFERENCES

Available on request.

PRESENTED

As a poster presentation at the College of Anaesthetists of Ireland Annual Congress in Dublin on May 19th, 2016.

Communication at the Primary and Secondary Care Interface, Private versus Public Referrals



Tobin-Schnittger P.,¹
Molloy, T.²
Graduate Entry
Medical School,
University of
Limerick¹
Charleville Primary
Care Centre,
Co. Cork²

INTRODUCTION

Communication between Irish patients and doctors has changed considerably as medical paternalism has become “decidedly unfashionable.”¹ Patients are becoming increasingly knowledgeable about their health thanks to private organisations, a National Screening Service, and a public interest in fitness.^{2,3} This study aims to assess the standard of communication between primary and secondary care by identifying the referral rate of patients aged 50 and over to secondary care, the proportion of which received a response, the time it took; and the overall quality of the correspondence.

METHODOLOGY

Ethical approval was granted by the ICGP in July 2015. The study was conducted at a surgery with two full-time GPs and a team of practice nurses who cared for 19,254 patients. SOCRATES was used to access clinical records and SPSS used for statistical analysis. A list was created using all active status patients aged 50 and over with a visit between 01/09/13 and 31/08/15. In all, 100 patients were randomly sampled from the list and a standardised data set extracted from each of their records.

RESULTS

Of the 100 patients, 99 were alive with a mean age of 66, and over half were women (54.5%). There was a 40% referral rate, mostly for public patients (57.5%) who were also more likely than private patients to have multiple referrals (means of 2.48 and 1.59), and multiple comorbidities (means of 1.57 and 1.47). A positive correlation existed between the number of GP consultations and the rate of referral (r 0.486). Primary care referral letter quality was high, most contained all relevant information: date of referral (100%), a clearly addressed recipient (82.5%), patient contact details (100%), reason for referral (95%), history of presenting complaint (85%), examination findings (80%), management of the presenting problem (37.5%), patient medical history (95%), and their other medications (75%). Public response time was longer, 50% of public patients received a response in 2.5-9.5 weeks, whereas 50% of private patients had received a response in 3-7.5 weeks. Of all referrals, 72.5% received a response (88.2% privately vs. 60.9% publicly). Responses to private referrals were more likely to contain information regarding what (if any) investigations they had undergone (93% vs. 73%), their results (100% vs. 82%), and their treatment (100% vs. 75%). They were also more likely to receive a follow-up plan or recommendation (73% vs. 69%).

The “Referral Pathway” highlights the several steps in between the decision to refer and a response being received in Ireland; but streamlining this pathway and reducing the risk of human error is a challenge faced by all healthcare systems, including public and private systems.⁴ Internationally, Denmark recently introduced standardised e-referral letters, which work synergistically with an e-booking system.⁴ A follow-up study showed its advantages over paper-based systems to be “a faster referral process, a decrease in referrals getting lost in the post or being sent to the wrong service and being more cost-effective for both GPs and hospitals when widely implemented.”^{4,5}

CONCLUSIONS

Primary care referral letters consistently contain high levels of clerical and clinical information which is unmatched by secondary care responses. Public patients, despite being seen, are still likely to suffer inferior care in comparison to private patients as their referrals receive fewer responses, which arrive later, and tend to be of lower quality. The Referral Pathway is fraught with several competing steps. The Danish e-system has been proven superior to paper in terms of service and cost-effectiveness. It is a model, which Ireland, a similar-sized country, could follow.

REFERENCES

Available on request.

Inpatient Groups as a Response to Patient Feedback

Craven, F.,
Howard, M.,
Macklin, G.,
Dunne, A.,
Doyle, R.
Multidisciplinary
Stroke
Rehabilitation
Team, St.
Columcille's
Hospital,
Loughlinstown,
Co. Dublin

INTRODUCTION

The Health Information and Quality Authority advocate for using service user feedback to guide person-centred care and service development.¹ Last year St. Columcille's Hospital undertook an evaluation of patients' experiences on the stroke ward. Two key areas were identified: 1. increased opportunities for activities and social engagement at ward level; 2. increased information about stroke.

OBJECTIVE

This abstract summarises the developments implemented in response to patient feedback, specifically with the implementation of inpatient groups. It outlines that group interventions promoting social engagement can be used to provide an enhanced quality of service.

METHODOLOGY

Consultation with other hospitals highlighted a lack of inpatient groups being run in Level 3 and Level 2 hospitals. The team devised two group formats in response to patient feedback.

Groups were facilitated by two members of the Multidisciplinary Team (MDT) (PT/SLT and MSW/OT). Patients were selected based on inclusion criteria. Group numbers fluctuated from 4-8 dependent on the patient profile on the ward. Joint group goals were identified:-

1. Provide information and education related to stroke
2. Provide opportunities for social interaction and peer support
3. Encourage patients to take an active role in their rehabilitation.

In addition, the joint PT/SLT 'Let's talk, let's move' group provided functional communication and movement opportunities and consisted of supported conversation and movement to music. The joint MSW/OT 'Wellness' group discussed concepts of wellness and helped patients to identify a personalised wellness toolbox for use in their recovery.

RESULTS

Qualitative feedback was gathered from patients and staff members. Patients consistently rated the groups highly (9-10/10) and reported high value in the peer support within the group. Staff reported that it was an effective use of therapy time and expressed positivity at the opportunity for increased team collaboration.

CONCLUSION

It may be concluded that groups can be run in the context of a Level 2 hospital setting. Benefits include increased patient education, increased opportunities for functional socialisation, and increased psychosocial support through group interactions. There is growing acknowledgement of the significant impact peer support can provide in health recovery and maintenance.²

Further research in relation to outcomes should be carried out to support the use of therapy time allocated to these interventions.

REFERENCES

Available on request.

PRESENTED

As a poster presentation at the IHF 19th Annual Stroke Conference.

Attitudes to Technology in Healthcare



Stevens, L.,¹
Arthurs, J.,¹
O'Loughlin, R.,²
Daly, P.²
Oakpark Medical
Practice, Tralee. Co.
Kerry¹
Brooklands Medical
Centre,
Castleisland, Co.
Kerry²

INTRODUCTION

Technology is evolving rapidly and can aid communication between patients and their clinicians. Research has examined GPs' perspectives for some modes of technology and their perceived usefulness in primary care. There is little data available which examines patients' current levels of technology use and preferred methods of communication with their GP using technology, in an international or Irish context.

OBJECTIVES

The aim of this study was to explore patients' attitudes to the use of various modes of technology in a primary care setting and analyse these views in the context of their current personal levels of technology use.

METHODOLOGY

This is a mixed qualitative/quantitative, descriptive study utilising a non-validated questionnaire. This study was conducted at two multi-doctor General Practice surgeries. Inclusion criteria were all patients attending over a two week period aged 18 years and over. Exclusion criteria were patients with dementia and learning disabilities. Ethical approval was granted by the Cork Research and Ethics Committee (CREC).

RESULTS

The majority of patients had a background of frequent technology use with 75% of respondents using text messaging on a daily basis. Younger, female, urban dwellers with a higher level of education are more likely to use technology in relation to their health. (P value = 0.013 female users). Frequent technology users were more likely to consult a website prior to their consultation (P-value = 0.000). In all, 16-31% of patients had consulted a website about their medical issue before seeing their doctor. There was a significant age difference in those who had consulted a website (M=42.13, SD=15.33 years) and those who had not (M=48.47, SD=17.59 years); $t(296)=2.31, p=0.02$ prior to the consultation and in the past (M=43.12, SD=16.29 years) v. (M=49.41, SD=17.55 years); $t(296)=2.91, p=0.004$.

Patients find benefit in practice websites, Facebook pages and mobile phone applications with 60% of respondents reporting finding a practice mobile application to be a useful service. Patients were happy for their practice to offer a wide range of online services including prescription ordering and emailing of test results. However, a large number of patients were not agreeable to online consultations. Mobile phone use was reported as a useful service amongst our respondents particularly; appointment reminders, links to useful health information and practice notifications. Only one third of patients had utilised a mobile application with respect to their health. A total of 23% of respondents reported having concerns about the use of text messaging for the communication of results.

Discussion

This study is the first of its kind in an Irish context. It allowed us to examine patients' perspectives in the context of their demographic background and previous exposure to technology. This study had a number of limitations. There was a short study period. As the questionnaire was voluntary there may have been an element of selection bias i.e. if a patient felt the questionnaire was of little relevance to them due to a personal low level usage of technology they may have been less motivated to complete it. Although the language used was kept as simple as possible patients may also have been excluded on the basis of their literacy skills.

CONCLUSIONS

Overall, patients were very accepting and enthusiastic regarding technology use in a General Practice setting.

Cancer Survivorship - Barriers Encountered by General Practitioners in Ireland



O'Shea, M.T.,¹
Collins, C.,¹
Codd, R.,²
Laffoy, M.²
Department of
Research, Irish
College of General
Practitioners,
Dublin¹
National Cancer
Control
Programme,
Dublin²

INTRODUCTION

Cancer survivors may experience a wide range of complex health issues as a result of their cancer type and treatment. Some health issues can have a lifelong impact on patients, while others related to cancer treatment can last up to five years post-treatment. Cancer survivors have increased rates of healthcare utilisation compared to non-cancer patients. During active cancer treatment, GPs may provide care to their patients. Post-cancer treatment, patients routinely participate in follow-up care with their GPs. The transition back into the primary care setting can be difficult for both GPs and patients to navigate. The survey aimed to identify the current barriers encountered by general practitioners in Ireland in the area of cancer survivorship.

METHODOLOGY

This research consisted of a literature review and a quantitative survey of GPs for the National Cancer Control Programme in Ireland. Postal questionnaires were sent in April 2015 to 2,822 GPs in the Republic of Ireland. A total of 514 completed surveys were analysed, a response rate of 18.2%.

RESULTS

A large portion of GPs (93.5%) had never attended a survivorship course, conference or workshop. Overall, 64.7% of respondents sometimes, rarely or never share follow-up care for their patients with oncology consultants. Only 17.2% and 19.7% of GPs respectively considered that they had enough information on the 'possible long-term issues from chemotherapy' and 'possible long-term issues from radiation therapy'. Over three-quarters of GPs considered that they did not have sufficient information on 'recommended evidence-based surveillance for patients with a previous cancer.'

CONCLUSIONS

This survey provides some insight into the current situation in Ireland with regard to cancer survivorship from a GP perspective. GPs will increasingly follow up with patients who are living through cancer treatment and after cancer survivorship. Further education for GPs is clearly indicated as necessary in this area.

PRESENTED

As a poster presentation at the European General Practice Research Network Conference in Tel Aviv from May 21st to 23rd, 2016 by Marié T. O'Shea, Researcher.

FUNDING

This project received funding from the National Cancer Control Programme.



Kent, P.,
McGuire, S.
Sligo University
Hospital

Applying Mixed Method Research to Investigate the Impact of a Mindfulness (MBSR) Training Programme on Employees Working in an Acute Hospital Setting

INTRODUCTION

Healthy Ireland (HI) 2013-2025 is Ireland’s national framework for health and wellbeing (HWB) with its vision to have “a healthy Ireland, where everyone can enjoy physical and mental health.”¹ The Health Service Executive’s (HSE) National Service Plan (NSP) supports the implementation of the actions outlined in the HI Framework.² In addition the Health Service National Implementation plan 2015-2017 was launched to support the corporate vision of a “high quality health service valued by all.”

There were three strategic priorities identified one of which is staff HWB. In viewing the actions proposed in the Healthy Ireland Implementation Plan (HIIP), action number 4.9 positive mental health is directed at staff HWB.3 Action no. 4.9.2 states that there is a need to expand mindfulness and stress management training for staff.³

There is a growing concern regarding the adverse effects that work-related stress can have on an individual’s health. Research suggests that people who suffer from chronic work related stress can end up engaging in behaviours that can accelerate the development of chronic diseases such as cardiovascular disease.⁴

Stress in the workplace is linked to employee absenteeism, diminished productivity, staff turnover, medical care expenses, short and long-term disability, worker’s compensation, accidents and legal costs.⁵ Programmes for stress management in the workplace have proved to be a popular and a cost-effective way to reduce the risk of chronic illnesses associated with stress.⁶ Actions outlined in the HIIP paved the way to introduce mindfulness based stress reduction training to staff of Sligo University Hospital (SUH) in an attempt to increase mindfulness levels of staff and assist in the management of stress.³

METHODOLOGY

This study used a mixed method design to gain a better understanding of the effects of the six week mindfulness training on staff employed in a healthcare setting. A sample of 17(n=17) participated in the six week mindfulness course. Mindfulness was measured using pre- and post-Mindfulness Attention Awareness Scale (MAAS) 14(n=14). See Figure 1.

Figure 1 - Mindfulness Attention Awareness Scale (MAAS)



NAME: MOBILE:
DEPARTMENT: EMAIL:
Day-to-Day Experiences Instructions:
Below is a collection of statements about your everyday experience. Using the 1-6 scale below, please indicate how frequently or infrequently you currently have each experience. Please answer according to what really reflects your experience rather than what you think your experience should be. Please treat each item separately from every other item.

	1 Almost Always	2 Very Frequently	3 Somewhat Frequently	4 Somewhat Infrequently	5 Very Infrequently	6 Almost Never
I could be experiencing some emotion and not be conscious of it until sometime later.	1	2	3	4	5	6
I break or spill things because of carelessness, not paying attention, or thinking of something else.	1	2	3	4	5	6
I find it difficult to stay focused on what’s happening in the present.	1	2	3	4	5	6
I tend to walk quickly to get where I’m going without paying attention to what I experience along the way.	1	2	3	4	5	6
I tend not to notice feelings of physical tension or discomfort until they really grab my attention.	1	2	3	4	5	6
I forget a person’s name almost as soon as I’ve been told it for the first time.	1	2	3	4	5	6
It seems I am “running on automatic,” without much awareness of what I’m doing. I rush through activities without being really attentive to them.	1	2	3	4	5	6
I get so focused on the goal I want to achieve that I lose touch with what I’m doing right now to get there.	1	2	3	4	5	6
I do jobs or tasks automatically, without being aware of what I’m doing.	1	2	3	4	5	6
I find myself listening to someone with one ear, doing something else at the same time.	1	2	3	4	5	6
I drive places on “automatic pilot” and then wonder why I went there.	1	2	3	4	5	6
I find myself preoccupied with the future or the past.	1	2	3	4	5	6
I find myself doing things without paying attention.	1	2	3	4	5	6
I snack without being aware that I’m eating.	1	2	3	4	5	6

MAAS Scoring
To score the scale, simply compute a mean (average) of the 15 items. Higher scores reflect higher levels of dispositional mindfulness.

COMMENTS: (PLEASE ADDITIONAL COMMENT BELOW IF YOU WISH)



Attendance was recorded by the facilitator at each session. On completion of the course an evaluation form was administered to 13(n=13) of the participants. Three months post-completion of the programme 5(n=5) of the participants engaged in a focus group.

RESULTS

Using the MAAS forms a series of paired samples t-tests were run to gauge any differences pre- and post-training. Participation in the MBSR training resulted in no significant difference. However, when a paired sample t-test was carried out on each item on the scale a statistically significant increase was observed for items 8,9,10 and 13($p<0.05$). An attendance record showed that 11(n=11) out of the 17(n=17) participants achieved full attendance with only 1(n=1) drop out. An evaluation form completed by 13(n=13) participants indicated that 9(n=9) of the participants "strongly agreed" that the training was effective in enhancing stress management. From the focus group participants reported that they felt they were better able to manage stress and reflected on how mindful they have become discussing how important it is to be mindful. Participants highlighted how this programme had a positive impact on their work and home life stating that it has made them more productive. Participants stated that they would recommend the course with the overall consensus that the programme and follow-up should be introduced into the HSE calendar of staff initiatives.

CONCLUSION

The results support the hypothesis that a six week workplace mindfulness programme can have a positive impact on stress management and mindfulness levels. The findings agree with previous research conducted internationally and add to the literature that MBSR is effective among staff working in a healthcare setting. However, our search demonstrated limited research in Ireland on the impact of mindfulness programmes in a workplace setting. Future research is advisable.

REFERENCES

Available on request.

FUNDING

The funding for this initiative was from the Health Promotion and Improvement Division and the Nurse Practice Development Unit, Sligo University Hospital. Participants also contributed a nominal fee towards cost.

Occupational Demands and the Physical Wellbeing of Paramedics in the Irish National Ambulance Service - Midlands Area

ABSTRACT

The National Ambulance Service (NAS) responds to medical emergencies twenty-four hours a day, seven days a week and often find themselves in physically and mentally demanding situations. The aim of this research is to assess the physical wellbeing of Paramedics working in the NAS - Midlands Area, the extent to which occupational demands impact on the health of paramedics and whether there is a benefit in introducing minimum fitness testing for new staff entering the Paramedic training programme.

Research has never been undertaken to assess the physical wellbeing of Irish Paramedics or to measure the physical requirements necessary to be a Paramedic working in the Irish healthcare system, thus indicating a rationale to conduct research.

The research philosophy and design used throughout this study allowed flexibility to gather qualitative and quantitative data.

OBJECTIVES

The objectives of this research were to:

1. Assess the physical wellbeing of Paramedics working in the NAS - Midlands Area
2. Assess the extent to which occupational demands impact on the health of Paramedics
3. Examine the benefits of introducing a minimum fitness standard
4. Make recommendations based upon international best practice

METHODOLOGY

Following an examination of existing literature, the author chose a ground theory strategy and adopted a mixed method approach by collecting quantitative and qualitative data. This data was collected through interviews with two international ambulance experts (U.K. & Australia) and from questionnaires from Paramedics working in the NAS - Midlands Area (50% response rate). The Ambulance Service Health Promotion Group acted as a focus group. The multidisciplinary group comprised of the Occupational Health Manager who had responsibility for conducting the pre-employment medical questionnaire for new Paramedics joining the NAS, Physiotherapist, Chiropodist, Health Promotion Officer and Paramedics. They provided detail about the general level of health and fitness of Paramedics through their day-to-day contact and their opinions were vital in arriving at an unbiased result. Secondary data was obtained using the PPARS System which allows the extraction of sick leave days, and for the purpose of this research, 2004-2010 sick leave trends were analysed.

RESULTS

The research findings identified three themes, which emerged from the triangulation of all findings;-

- a) The existing recruitment and selection process appears unsuitable for an emergency service that provides pre-hospital emergency care. At no point during the selection process is a candidate physically or mentally assessed to determine suitability for the physical and mental demands of frontline emergency work. In addition, never has an ergonomic assessment been conducted to measure the physical demands of the work of an Irish Paramedic thus making it more difficult to assess the physical requirements needed to undertake the role safely and effectively.
- b) Musculoskeletal injuries are highlighted as a major concern by the survey, with a number of contributing factors such as the increase in obesity among patients and staff, the uncontrolled environment of ambulance work and the poor levels of fitness among staff.
- c) According to the expert interviews, focus group and comments from respondents, early retirements due to work related injuries could potentially become a serious problem for the NAS in the next number of years, as 16% of the respondents are over 50 years in age and a further 36% are over 40 years. This is an indication of an ageing workforce that unfortunately, due to the taxing nature of emergency work, may not reach the retirement age of 65 years.

CONCLUSION

The author has made a number of recommendations to the NAS based upon the research findings, which include;-

- Carrying out a full ergonomic assessment of the duties of a Paramedic
- Considering a revision of the job specification to reflect the skills and attributes necessary to perform the duties safely
- Discussions to take place between all relevant stakeholders on the introduction of fitness testing for new entrants specifically designed to match the ability of candidates to the physical demands of the job
- Including a training module on nutrition, weight control, physical fitness and measures to reduce work-related injury and illness in the induction programme for new entrants
- Making available a voluntary job function analysis to be offered to current Paramedics to assess ability to meet the physical demands of the job, every 5 years or earlier if new medical conditions are diagnosed
- Beginning a proactive approach within the wider health sector to establish an alternative role for a Paramedic who is no longer able to carry out duties.

Predictors of Health of Pre-Registration Nursing and Midwifery Students - Findings from a Cross-Sectional Survey

ABSTRACT

Student nurses/midwives often evidence less than exemplary lifestyle habits and poor emotional health, despite exposure to health education/promotion during their educational preparation. Knowledge of the factors that predict nursing/midwifery students' health could inform strategies to enhance their health and increase their credibility as future health promoters/educators.

All students (n=473) registered in undergraduate nursing (general, mental health and intellectual disability) and midwifery programmes at a university in Ireland were included. Participants completed the General Health Questionnaire (GHQ),¹ Lifestyle Behaviour Questionnaire and Ways of Coping Questionnaire (WOC),² to determine their self-reported emotional health, lifestyle behaviour and coping processes. Multivariate regression was performed to identify the predictors of student emotional health (dependent variable). The independent variables were demographics, coping, lifestyle behaviour and students' perceptions of determinants of their health.

The response rate was 86%. Many of the respondents (48.71%) were significantly psychologically distressed (GHQ scores of 5 or greater). Most (91.71%) reported drinking alcohol; 26% consumed alcohol three or more days per week, 27.94% reported smoking, 34.29% reported physical inactivity and 28.05% described their diet as unhealthy/unsure. Bivariate analysis indicated that females were more distressed than males ($p=0.0008$). Year of study was related to GHQ score ($p=0.0001$). Those who perceived that being a student was stressful reported more distress ($p=0.0001$) than those who perceived that being a student was not stressful. Students' lifestyle behaviours (diet, physical activity, smoking and alcohol use) were related to their GHQ score. For example those who rated their diet as "not healthy/unsure" reported higher distress ($p=0.0001$) than those who rated their diet as healthy/very healthy. Students who reported being physically inactive/unsure reported more distress ($p=0.0003$) than those who were active/very active. Students who mostly used passive (e.g. escape avoidance) as opposed to active (e.g. seeking support) coping strategies reported significantly more emotional distress (correlation coefficient = 0.32; $p=0.0001$).

Multivariate Regressions indicated that demographic indicators, lifestyle behaviour, coping strategies and students beliefs about the factors that influenced their health predicted the level of psychological distress reported (GHQ) and accounted for 33% of the variance in emotional health. GHQ score was 50% higher for females than for males. Level of distress varied by year of study, final year students were the most distressed. GHQ score was 69% higher for those who perceived that being a student was stressful and 95% higher for those who mostly used passive coping strategies. For each one-unit increase in passive strategies, there was a 72% increase in GHQ score. Students who rated their diet as "unsure" or "not healthy" reported a GHQ score 25% higher than those who rated their diet as "healthy" or "very healthy". Those who perceived that worry, stress or boredom negatively influenced their eating habits had higher GHQ scores (25%, 32% and 39%, respectively). Non-smokers and those who smoked 5 or fewer cigarettes daily had lower GHQ scores (24% and 25%, respectively) than those who smoked 6 or more cigarettes per day. In summary, many of the students studied here reported significant psychological distress, unhealthy lifestyle behaviour and passive coping.

Supporting students to critically engage with their lifestyle choices and experiences of distress is important for student health gain and for their potential commitment to the promotion of client health in the future. Educators must foster and encourage a health-promoting agenda in order to promote congruence between the lived experience of the student nurse/midwife and their future professional practice. They also need to support students to engage in proactive rather than maladaptive coping mechanisms for stress.

SOURCE

Nurse Education Today.36:427-433.

Deasy, C.,¹
Coughlan, B.,²
Pironom, J.,³
Jourdan, D.,⁴
Mannix
McNamara, P.⁵
Department of
Nursing and
Midwifery, University
of Limerick¹
Department of
Psychology, University
of Limerick²
Health Education
Research Unit,
Laboratoire ACTé, ESPE
Clermont-Auvergne,
Université Blaise Pascal,
Clermont-Auvergne^{3,4}
Department of
Education and
Professional Studies,
University of Limerick⁵

Hand Hygiene-Related Clinical Trials Reported Since 2010 - A Systematic Review



Kingston, L.,¹
O'Connell, N.H.,^{2,3}
Dunne, C.³
Department of
Nursing and
Midwifery,
University of
Limerick¹
Department of
Clinical
Microbiology,
University Hospital
Limerick²
Graduate Entry
Medical School
and Centre for
Interventions in
Infection,
Inflammation and
Immunity (4i),
University of
Limerick³

ABSTRACT

Considerable emphasis is currently placed on reducing healthcare-associated infection through improving hand hygiene compliance among healthcare professionals. There is also increasing discussion in the lay media of perceived poor hand hygiene compliance among healthcare staff.

The aim of this research was to report the outcomes of a systematic search for peer-reviewed, published studies - especially clinical trials - that focused on hand hygiene compliance among healthcare professionals.

Literature published between December 2009, after publication of the World Health Organization (WHO) hand hygiene guidelines, and February 2014, which was indexed in PubMed and CINAHL on the topic of hand hygiene compliance, was searched. Following examination of relevance and methodology of the 57 publications initially retrieved, 16 clinical trials were finally included in the review. The majority of studies were conducted in the USA and Europe.

The intensive care unit emerged as the predominant focus of studies followed by facilities for care of the elderly. The category of healthcare worker most often the focus of the research was the nurse, followed by the healthcare assistant and the doctor. The unit of analysis reported for hand hygiene compliance was 'hand hygiene opportunity'; four studies adopted the 'my five moments for hand hygiene' framework, as set out in the WHO guidelines, whereas other papers focused on unique multimodal strategies of varying design.

It was concluded that adopting a multimodal approach to hand hygiene improvement intervention strategies, whether guided by the WHO framework or by another tested multimodal framework, results in moderate improvements in hand hygiene compliance.

SOURCE

Journal of Hospital Infection.2016;92(4):309-320.

The Impact of a Sepsis Training Programme on the Knowledge and Self-Efficacy of Emergency Department Staff - A Pre-Test Post-Test Intervention

Hartnett, D.,¹
Tyrrell, M.²
Emergency
Department, Kerry
General Hospital¹
University College
Cork ²

INTRODUCTION

The incidence of sepsis can range between 5% and 11%³ while the mortality rate can be as high as 1 in 4 from severe sepsis and septic shock.⁴ The Surviving Sepsis Campaign (SSC) was initiated by Dellinger et al.⁴ and these guidelines were adopted and reformed by the National Health Service (NHS) in the United Kingdom who pioneered the Sepsis Six Treatment Bundle.⁵ The research highlights that there is a lack of awareness of sepsis detection and management⁶ but equally highlights an improved detection and adherence to sepsis protocols through educational interventions.⁷

OBJECTIVE

The authors therefore chose to determine if a sepsis education programme in an Irish hospital setting would improve the knowledge base of clinical staff. It aimed to determine if, following the programme, the confidence levels of staff would improve in terms of detecting and managing sepsis.

METHODOLOGY

- Design - A quasi-experimental pre-test post-test design. Instrument - The survey tool developed by the authors was adapted from two different tools i.e. Burney et al.⁶ and Walker et al.⁸
- Sample - Doctors and Nurses employed in the Emergency Department at the time of the study. Collectively, 62 staff were available to participate in the study. Forty-two staff completed the pre-questionnaires and 32 staff completed the post-questionnaires.
- Data Collection - Data was collected two weeks before the educational intervention and two weeks after the intervention. The questionnaire was available for staff online and as hardcopy.

RESULTS

Before the intervention the majority of respondents were unable to identify the indicators of sepsis known as the Systemic Inflammatory Response Syndrome (SIRS). Only 28% (n=12) identified tachypnoea as an early sign of sepsis. Post-intervention over 70% of respondents identified all of SIRS criteria. Only 42% (n=18) regarded oxygen as an element of the Sepsis Six Treatment Bundle but this increased to over 96% (n=31) post-intervention. A variance in levels of confidence in detecting and treating sepsis existed pre-intervention but confidence increased to over 90% (n=30) post-intervention.

CONCLUSION

The findings recognise that suboptimal knowledge and potentially suboptimal practice is present in this particular ED in the detection and management of sepsis. Consequently the confidence that can be equated to providing for an enhanced belief in one's knowledge and capability is also deficient. The results after the educational intervention suggest an improvement in the knowledge and confidence of participants in treating sepsis. Such results are on par with previous research although further extensive research regarding the concept of self-efficacy is necessary. This study clearly supports the connection between self-belief and the provision of quality evidence-based care in the clinical setting. Future research may focus on follow-up surveys to determine continued development of the knowledge base and confidence levels and also on the concept of self-efficacy.

PRESENTED

At the Kerry Area Quality and Patient Safety Awards in Kerry General Hospital on October 21st, 2015 by Deirdre Hartnett (Staff Nurse) and Joanne Evans (Clinical Nurse Manager 2).

FUNDING

This research has received funding from the Nursing and Midwifery Planning and Development Unit.

REFERENCES

Available on request.

Regulation and Registration as Drivers of Continuous Professional Competence for Irish Pre-Hospital Practitioners - A Discussion Paper



Knox, S.,^{1,2}
Dunne, S.S.,¹
Hughes, M.,²
Cheeseman, S.¹
Dunne, C.¹
Graduate Entry
Medical School and
Centre for
Interventions in
Infection,
Inflammation and
Immunity (4i),
University of
Limerick¹
Health Service
Executive, National
Ambulance Service
College, Dublin²

ABSTRACT

The regulatory body responsible for the registration of Irish pre-hospital practitioners, the Pre-Hospital Emergency Care Council (PHECC), identified the need to implement a continuing professional competence (CPC) framework. The first cycle of CPC (focused on emergency medical technicians) commenced in November 2013 creating for the first time a formal relationship between continuing competence and registration to practice.

To aim of this research was to review current literature and to describe benefits and challenges relevant to CPC, regulation, registration and their respective contributions to professionalism of pre-hospital practitioners i.e. advanced paramedics, paramedics and emergency medical technicians.

An online search was carried out of cumulative index to nursing and allied health literature (CINAHL Plus with Full Text), Allied and Complementary Medicine (AMED) and 'Pubmed' databases using: 'Continuous Professional Development'; 'emergency medical technician'; 'paramedic'; 'registration'; 'regulation'; and 'profession' for relevant articles published since 2004. Additional policy documents, discussion papers, and guidance documents were identified from bibliographies of papers found.

It is recommended that evolving professionalisation of Irish paramedics should be affirmed through behaviours and competencies that incorporate adherence to professional codes of conduct, reflective practice, and commitment to continuing professional development. While the need for ambulance practitioner CPD was identified in Ireland almost a decade ago, PHECC now has the opportunity to introduce a model of CPD for paramedics linking competence and professionalism to annual registration.

SOURCE

Irish Journal of Medical Science.2016;185(2):327-333.

A National Study of Continuous Professional Competence (CPC) amongst Pre-Hospital Practitioners

Knox, S.,^{1,2}
Cullen, W.,¹
Dunne, C.¹
Graduate Entry
Medical School
and Centre for
Interventions in
Infection,
Inflammation and
Immunity (4i),
University of
Limerick¹
Health Service
Executive,
National
Ambulance
Service College,
Dublin²

ABSTRACT

Internationally, continuing professional competence (CPC) is an increasingly important issue for all health professionals. With the introduction of the first CPC framework for Emergency Medical Technicians (EMTs) and the imminent introduction of CPC for Paramedics and Advanced Paramedics (APs) in Ireland, this study aimed to identify attitudes towards CPC and factors that might influence such a framework.

All EMTs (n=925), Paramedics and APs (n=1,816) registered in Ireland were invited by email to complete an anonymous online survey. The study instrument was designed based on continuous professional development (CPD) questionnaires used by other healthcare professions. Quantitative and qualitative analyses were performed.

The overall response rates were: EMTs 43% (n=399), Paramedics and APs 43% (n=789), with 82% of APs and 38% of Paramedics participating. The majority of participants in all groups agreed that registration was of personal importance and that evidence of CPC should be maintained; 39% of Paramedics/APs and 78% of EMTs believed that persistent failure to meet CPC requirements should mandate denial of registration. From a pre-determined list of activities, in excess of 88% of all respondents indicated practical training scenarios, cardiac re-certification, e-learning supplemented by related practice, and training with simulation manikins were most relevant to these roles. However, least relevant to them were: e-learning alone (Paramedic/AP 36%; EMT 35%); project work (Paramedic/AP 27%; EMT 48%); and appraisal of journal articles (Paramedic/AP 24%; EMT 39%).

Irish EMTs, Paramedics and Advanced Paramedics were supportive of CPC and favoured a 'mixed' model approach which includes: blended learning, practical skills, simulation, practical/team-based exercises, e-learning combined with practical skills, and evidence of patient contact. It is hoped that these insights will inform the CPC guidelines to be introduced.

SOURCE

BMC Health Services Research.2015;15(1):532.

Mental Health Consultations in a General Practice Out of Hours Service - Informing the Future Direction of Services



Collins, C.,¹
O'Shea, M.T.,¹
Finegan, P.,¹
Cunniffe, J.,²
Collier, D.,²
Curran, M.,²
Kearns, M.²
Irish College of
General
Practitioners,
Dublin¹
Caredoc,
Carlow²

INTRODUCTION

Much research into mental health has focused on psychiatry and emergency departments, with somewhat less focused on primary care. Within primary care, a further neglected service is that of out of hours. It has been shown that out of hours services are an important first stop for emergency care for people experiencing mental health difficulties. However, little is in fact known about the use of out of hours GP services by people experiencing mental health difficulties. This study describes consultations that have a primary or related mental health issue attending one large out of hours primary care service in the South East of Ireland (Caredoc) including data on whether patients attended for advised follow-up care.

METHODOLOGY

The project consisted of two phases. In Phase 1, data was collected via an anonymous extraction of retrospective data from the out of hours electronic database. Phase 2 aimed to track patients who attended the out of hours with a possible mental health issue, and following consultation with the out of hours GP, needed referral to the psychiatric services via hospital emergency departments or back to their own GP for support in dealing with their mental health issues. It consisted of phone calls to hospitals and GPs over six months to establish if patients attended for advised follow-up care.

RESULTS

Over a one-year period, there were 3,844 out of hours presentations where the patient presented with a physical complaint that had a mental health component or with a mental health issue, based on key word search. Among these consultations, depression was noted in 54.7% of consultations, anxiety in 36.8%, risk of, or threatening suicide in 34.8% and psychiatric condition in 31.7% of consultations. Overall, 9.3% were referred by the out of hours GP for follow-up to a hospital emergency department or were advised to attend their own GP. Those who were attending the out of hours with suicide attempt/ideation, self-harm or erratic/irrational behaviour were more likely than other groups to be referred for follow-up.

During Phase 2, over a six-month period, a total of 104 patients, who were advised to attend their GP or ED following their consultation with the out of hours GP, were tracked. Twenty-seven patients were referred back to their GP of which the follow-up call to the GP revealed that 44.5% did not attend. Seventy-seven patients were referred to the hospital services, of whom 37.7% did not attend.

CONCLUSIONS

An integrated approach to primary mental healthcare in Ireland may be warranted and is believed to be the most viable way of closing the treatment gap. However, it is recognised that information on the prevalence of mental health problems in primary care and the range of interventions provided in primary care is needed to effectively plan primary care services and the interface between primary care and specialist mental health services. As expounded by the WHO and WONCA, in order to be effective and efficient, care for mental health must be coordinated with services at different levels of care complemented by the broader health system.

FUNDING

This research has received funding from the National Office for Suicide Prevention.

The Impact of Irish Policy and Legislation On How Adults With Learning Disabilities Make Choices



Carey, E.,¹
Griffiths, C.²
Department of
Nursing and
Midwifery,
University of
Limerick¹
The School of
Nursing and
Midwifery,
Trinity College,
Dublin²

ABSTRACT

Having a label of intellectual disability has consequences for adults needing differing levels of support at different times in their lives, depending on the choice context and situation. For adults with intellectual disability, experiences of support can be positive or negative but ultimately impact on how choices are made. Policy makers, service providers, supporters of people with intellectual disability and this population group themselves continually grapple with how best to ensure independence and autonomy in the context of support, health and safety as choices are made. Following a consideration of 'choice' in United Kingdom and Irish policies, this paper introduces the Irish Assisted Decision-Making (Capacity) Bill (2013) making comparisons with capacity legislation in the United Kingdom.

Firstly, a review of policies which have improved choice for people with intellectual disability in the four United Kingdom Countries was undertaken. Secondly, current Irish policy and legislation was reviewed specifically to identify how 'choice' has been represented. Thirdly, of thirteen available submissions made to the Irish Government on the Assisted Decision-Making (Capacity) Bill (2013) reviewed, this paper presents a selection of three submissions for discussion.

This paper identifies proposed structures and associated concerns entrenched in the perceived impact of the Assisted Decision-Making (Capacity) Bill (2013) based on submissions from the Citizens Information Board (2013a),¹ Mental Health Reform (2014),² and Quinn (2013).³ From this selection of submissions made by interested groups to the Irish Government on the Assisted Decision-Making (Capacity) Bill (2013) issues of concern are: the use of the term 'capacity'; the person whose capacity may be questioned; the role of people who support the person to make decisions, and the monitoring of the processes and outcomes involved with regard to decision-making. Comparisons are made with capacity legislation in the UK. Furthermore, discussion ensues with regard to further choice making challenges in the context of direct payments and information sharing (accessing and sharing personal and healthcare information), which, in light of continually developing policy and legislation confront adults with intellectual disability and those who support them.

Ireland has recognised the importance of choice for people with intellectual disabilities through legislations and policies. Essentially highlighting the right of this population group to equal participation in society and personalisation of care extends from an international human rights foundation. Involving relevant others in the decision-making process, while challenging, is likely to improve the conditions of people with intellectual disabilities. So long as people with intellectual disabilities are competent to make decisions, they should be enabled

to make their own choices. And in supporting these individuals there is an onus on support persons to firstly ask "what can I do to support this person?," rather than "can this person make a decision?" In situations where an individual's capacity is questionable it is necessary to ensure that this individual is supported according to their needs. Furthermore, current legislative makers must strive to ensure that even when lacking mental capacity people with intellectual disabilities are supported to retain legal capacity at all times. Finally, by highlighting further challenges which confront adults with intellectual disability and their support persons when making choices in line with the current paradigm in policy and legislation in the context of direct payments and information sharing a forum for discussion on how such challenges can be overcome is created. Ultimately, policies and legislations have impacted positively on support networks to enable people with intellectual disability to exercise the right of choice, and this paper highlights some of the challenges which lay ahead for those seeking to successfully implement idealistic legislation in a realistic way.

REFERENCES

Available on request.

SOURCE

British Journal of Learning Disabilities.44:111-121.



news & News & Events events

Research Bulletin
Volume 7 Issue 4



Sylvester O'Halloran

25th Sylvester O'Halloran Perioperative Scientific Symposium

Thursday, 2nd March 2017

Course in Robotic Surgery
University Hospital Limerick
(Limited Places)

Friday, 3rd & Saturday 4th March 2017

University of Limerick
Friday, 3rd March 2017

Sylvester O'Halloran Lecture

Dr. Steven D. Wexner
(MD, PhD (Hon), FACS, FRCS, FRCS(Ed), is the Director of the
Digestive Disease Center and Chairman of the Department of
Colorectal Surgery, Florida Cleveland Clinic since 1993)

The Sylvester O'Halloran Debate

Saturday, 4th March 2017

Sir Thomas Myles Lecture

Professor Colette Cowan
(Chief Executive of the University of Limerick Hospital Group)

Sessions

Clinical, Plenary Prize, Nursing,
Orthopaedic, Anaesthetic, ENT & General Surgery

ASGBI/SOH Published Paper Prize & Session

The Sylvester O'Halloran Perioperative Scientific Symposium qualifies for CPD Credits
For more information: kara.leddin@hse.ie

Sylvesterohalloran2017
<http://www.ul.ie/4i/content/sylvester-ohalloran-surgical-scientific-symposium-2017>

2016 SYLVESTER O'HALLORAN PERIOPERATIVE SCIENTIFIC SYMPOSIUM LIMERICK

The 24th Sylvester O'Halloran meeting took place on Friday 4th and Saturday 5th of March in the Graduate Entry Medical School Building at the University of Limerick.

The Sylvester O'Halloran Perioperative Scientific symposium was once again organised and led by GEMS Professor of Surgery Calvin Coffey and hosted in the Graduate Entry Medical School. There were 200 presentations across general surgery, orthopaedic surgery, ENT, anaesthesia and nursing, with this year more than 400 registrants, making this one of the largest national surgical meetings.



Dr. Michael Boland, Specialist Registrar, UHL and Dr. Michael E. Kelly, Mayo General Hospital



Mr Tony Moloney, Mr Paul Burke and Mr Eamon Kavanagh, UHL



Dr. Laura Casey, Mater Misericordiae University Hospital (MMUH) and Dr. Catherine Casey, Limerick

Professor Freddie Wood, President of the Irish Medical Council, delivered the Sylvester O'Halloran Lecture. The title was **'The Pursuit of Surgical Excellence: Sylvester O'Halloran, R.C.S.I. and the Medical Council; 1760 – 2016.'**

The Sir Thomas Myles Lecture was delivered by Mr Joe Duignan. The title was **'Irish Doctors in World War I.'**



Mr Joe Duignan

The Inaugural Sylvester O'Halloran Debate took place. The teams were from Beaumont Hospital and National University Hospital Galway. The chair was Ms. Shona Tormey, Breast Surgeon, Limerick. Several national and international awards were presented throughout the course of the meeting.

The now established ASGBI published paper prize was awarded to Dr. Leon Walsh, Clinical Tutor in Surgery, University Hospital Limerick. The title was **'An appraisal of the computed axial tomographic appearance of the human mesentery based on mesenteric contiguity from the duodenojejunal flexure to the mesorectal level.'**



L. to R. Professor Calvin Coffey, organiser of meeting and lead GEMS Professor of Surgery, Dr. Miranda Kiernan, Graduate Entry Medical School, Limerick and Dr. Leon Walsh, UHL, Winner of the ASGBI Paper Prize.

Sarah McGarrigle, Department of Surgery, Trinity Centre for Health Sciences, St. James's Hospital, Dublin was successful in winning this year's Sylvester O'Halloran prize for best research presentation in the Plenary Session. The title was **'Prospective evaluation of the potential to**



reduce breast cancer risk, through lifestyle modifications in brca-mutation carriers.'

Dr. Donald Courtney, Department of Surgery, The Lambert Institute, NUI Galway won the Sylvester O'Halloran Poster Prize. The title was **'Comparative analysis of adipose derived stem cells from breast tissue and mesenchymal stem cells by immunophenotyping.'**

In recognition of the quality of Irish research, the ASGBI will now invite the previous mentioned winners to present their work at the Annual Meeting in Belfast, from the 11th to 13th of May, which represents a significant honour for Irish surgical trainees.



Dr. Donald Courtney, Galway (who won the Sylvester O'Halloran Poster Prize) and Professor Calvin Coffey, organiser of meeting and lead GEMS Professor of Surgery



Mr Simon Cross, University Hospital Waterford and Mr John Moorehead, President of ASGBI

This year we gave distinctions to Mr Mohamed Zarog, UHL, Ms. Miranda Kiernan, Crohn's Disease Collaboration Group and Ms. Jessie Elliott, Department of Surgery, Trinity Centre for Health Science, St. James's Hospital, Dublin.

Professor John Fenton organised and co-chaired a very successful and interactive Head and Neck Session of presented papers. The second co-chair was Professor Ivan Keogh from UCHG. Dr. Cathleen O'Neill, Department of Surgery, Cork University Hospital, Bon Secours Hospital Cork won the Junior Presentation Prize. Dr. Clifton Wijaya from Beaumont Hospital won the Senior Presentation Prize and The Head and Neck Poster Prize was won by Ms. Miranda Flora, Department of Otolaryngology/Head and Neck Surgery, University Hospital Limerick.

The orthopaedic sessions provided interesting debates on many of the presentations and posters. The chairs were, Mr Dermot O'Farrell, Mr Lester D'Souza, Mr T. E. Burke and Mr Brian Lenehan.



Mr Brian Lenehan and Mr Dermot O'Farrell, UHL

The prizes were awarded as follows: -

Orthopaedic 1st Prize went to Ms. Eilís Fitzgerald, GEMS, UL.

Orthopaedic 2nd Prize went to Dr. Laura Ann Lambert, Our Lady's Children's Hospital Crumlin

Orthopaedic Poster Prize was won by Mr Matthew John Lee, Department of Trauma and Orthopaedic Surgery, Limerick.

This year UHL Department of Anaesthesia, Critical Care and Pain Medicine also ran 3 sessions on Friday March 4th. The first session was chaired by Dr. Saad Mahdy and Dr. Catherine Nix. It was a lecture series focused on the topic of bedside ultrasound. A link to these lectures will shortly be available on www.pocusireland.org. Speakers included Dr. Michael Sweeney, Dr. Tony Gallagher and Dr. Julie O'Brien. This was followed by 4 small group hands-on practice ultrasound sessions for postgraduate trainees and teaching faculty included Mr Neil Kearns, Dr. Saad Mahdy, Dr. Catherine Nix, Dr. Julie O'Brien, Dr. Ger O'Connor, Ms. Michelle Rafferty and Dr. Michael Sweeney. Medical student co-ordinators of this session were Ms. Kerrie Hennigan and Ms. Felicia Paluck. The ultrasound sessions were sponsored by GE. On Friday afternoon, Dr. Siobhan Grimes ran a simulation session which was sponsored by Cardiac Medical. Dr. Rosemarie Kearsley, Dr. Audra Mundinaite and Dr. David Roche assisted with the simulated scenarios.



Dr. Peadar Waters, Galway, Dr. Michael Boland, UHL, Mr Gerry Byrnes, UHL and Ms. Catherine Cronin, St. Luke's Hospital, Kilkenny



The Anaesthesia papers were presented on Saturday and the chairs were Professor Dominic Harmon, Dr. Seosamh O'Riain and Dr. Pat Dillon. The prize winners were Dr. Aoife Lavelle, Department of Anaesthesia, Limerick who won the O'Shaughnessy Prize, and Dr. Ruth Fenton, Department of Anaesthesia and Pain Medicine, University Hospital Limerick won the Anaesthesia Poster Prize.

Importantly, this year's meeting also featured a session on perioperative nursing organised by Professor Fiona Murphy and Katherine Tierney.

Overall, the meeting was well attended and much enjoyed by over 400 participants and attendees.

STRENGTH IN NUMBERS INTERNATIONAL SYMPOSIUM



The Strength in Numbers (#T1DSINs2016) international symposium, funded by a Health Research Board (HRB) Knowledge Exchange and Dissemination Scheme (KEDS) award, took place in NUI Galway on June 23rd and 24th, 2016. This event brought together stakeholders in young adult Type 1 Diabetes management to reach a consensus on how best to move practice and research forward in this area to improve engagement, self management and ultimately outcomes for young adults living with Type 1 Diabetes.

In recent years it has been acknowledged that young adults with Type 1 Diabetes should be recognised as a different group, with different needs, facing different challenges, compared to younger and older people living with the condition. A growing amount of research shows that living with Type 1 Diabetes as a young adult is associated with more diabetes-related problems as well as poorer well-being.

The study group based across NUI Galway and the Galway University Hospitals campuses, began a research study in 2014 in response to the problems highlighted by the local diabetes team after conducting an audit of the service for 18-25 year olds with Type 1 Diabetes. The research team was awarded a Health Research Award by the HRB to establish an evidence base for developing a new intervention for young adults living with diabetes. The aim of the study was to gain a real appreciation for what it is

like for young adults to live with Type 1 Diabetes and how their needs could be better met by diabetes clinics.

There were three components to the research:

1. A systematic review of all interventions aimed at improving clinical, behavioural and psycho-social outcomes for young adults with Type 1 Diabetes. The key aims were to identify the different aspects of interventions, such as diabetes education and to measure the effectiveness of these interventions at improving outcomes like HbA1c.
2. A qualitative engagement study with key stakeholders to understand the factors that influence diabetes self-management and how services and support could be improved. This involved focus groups with young adults with Type 1 Diabetes, and interviews with parents of young adults with Type 1 Diabetes and healthcare providers, in Galway, Dublin and Belfast.
3. A Discrete Choice Experiment was conducted to explore the preference of young adults regarding features of diabetes clinics such as how frequently they would like to attend appointments and how long they are prepared to wait at appointments.

Throughout this work, a core activity has been the formation of a Young Adult Panel (YAP), consisting of 8 young people aged between 18 and 25 who are living with Type 1 Diabetes. The YAP were recruited following an open consultation evening held in Jigsaw Galway (a community-based youth mental health service who are committed to youth engagement), to work as co-researchers with the study team. We are very proud of our achievements when it comes to meaningful teamwork between young adults, researchers and diabetes service providers. YAP members have made significant contributions to all aspects of the study, in particular to developing the qualitative interview questions, the participant invitation letters, consent forms and information sheets and to sharing the findings of the research at conferences, through radio and newspaper interviews and a national science competition. YAP members were also part of the organisation committee for our international symposium.



The Strength in Numbers symposium served as a bridge between the work completed by the *D1 now* team and the proposed intervention development work. By reaching out to stakeholders in young adult diabetes management from across the island of Ireland, and from Halifax to London to



Melbourne, a diverse range of people was invited to attend what we hoped would be an innovative event. Based on the findings of the *D1 now* study to date, we believed that a new approach to working with young adults would need to be innovative, prioritise self-management support, harness the power of digital technology and social media, and engage young adults throughout the process. The conference was planned so that speakers with different perspectives on Type 1 Diabetes would present their experiences and opinions under these four themes.

For more information on the conference programme please visit www.conference.ie and find Strength in Numbers! Visit our YouTube Channel

<https://www.youtube.com/channel/UCN4Fq1Zs6hm8TOILNaS6RYA> to view recordings from the day!

A smaller group, reflecting the diversity of perspectives



present at the conference were invited to take part in two meetings the following day known as the Strength in Numbers Expert Panel and Hackathon. During these meetings ideas and strategies inspired by the conference, including ways to integrate digital solutions, were discussed in small groups before being debated amongst the wider group. The *D1 now* team took these ideas and strategies developed based on a combination of evidence, experience and creativity, and used them to propose a new way of working with young adults to provide better support and support better outcomes. The process identified three main components to facilitate improvement in these areas: (a) a key worker to introduce the young adult to the diabetes service, act as an advocate and conduct a needs and priorities assessment; (b) an online Young Adult Service Portal to facilitate stronger connections between staff and young adults and (c) an agenda setting tool to facilitate collaborative decision making and goal setting to optimise diabetes management. These three components will make up our *D1 now* intervention. A funding application was recently completed by the *D1 now* team based on this proposal to further develop and pilot test this new approach. It was submitted to the HRB on July 7 under their Definitive Intervention and Feasibility Award 2017 call.

For more information or to get involved please contact:

Mary Clare O'Hara

D1 now Project Manager

Ph: +353 91 542840

maryclare.ohara@hse.ie

Professor Sean Dinneen

D1 now Principal Investigator

Ph: +353 91 495290

sean.dinneen@nuigalway.ie

Articles are currently in preparation describing the symposium, in particular the Expert Panel process on reaching an expert consensus on how to define our *D1 now* intervention. The team aims to publish these manuscripts in a peer reviewed journal in the coming months.

To keep up to date on *D1 now* news, find us on [Facebook](#) and follow us on [Twitter](#)!



UL RESEARCH TAKING CONTROL OF DEPRESSION

Research shows that antidepressant drugs enhance feelings of control in depression. New research undertaken by academics at the University of Limerick, Harvard Medical School and the University of Oxford, provides evidence showing that antidepressants can help people take control over their lives, reducing feelings of helplessness and depression symptoms.

Researchers Dr. Rachel Msetfi, University of Limerick, Dr. Poornima Kumar, Harvard Medical School, USA, and Professors Catherine Harmer and Robin Murphy, University of Oxford, UK, carried out a study in which they administered a commonly prescribed dosage of an antidepressant drug, escitalopram, for 7 days to people who were depressed or not depressed. The drug increases levels of the neurotransmitter serotonin in the central nervous system.

Lead researcher, psychologist Dr. Rachel Msetfi said, "Although people may be concerned about taking antidepressants, we are now starting to understand how antidepressant drugs have a positive effect on psychological experience and symptoms. Our new research adds to the understanding suggesting that antidepressants affect our everyday behaviours and our learning about simple day-to-day activities, resulting over time in feelings of being more in control, less 'ruled' by the environment, and perhaps ultimately alleviating depression."

After 7 days of either taking the drug or a placebo, volunteers took part in a computer-based game designed to test learning ability. They were required to learn about how their actions could control events occurring in the game. Volunteers tested the effectiveness of their actions on numerous occasions (using keyboard presses) to check if they could control sound turning on. The researchers had ensured that, in all cases, the volunteers had no control over these events in the game.

In these situations, healthy people who are not experiencing depression tend to perceive that they are 'in control', whereas people with depression report little control or so-called helplessness. In this recent study, published in the 'Neurobiology of Learning and Memory', Dr. Msetfi and her colleagues discovered that the antidepressant drug affected how people behaved in the game, and importantly how they learned about their own control over events in relation to events randomly occurring in the environment.

People with depression who were taking the placebo (no drug) tended to interact less with the game, produce fewer actions and feel that the environment was more in control of events than themselves. After taking the drug for 7 days, depressed volunteers interacted more with the game, tested whether their actions controlled the situation on more occasions, and the environment was judged as less controlling than for participants on the placebo.

This study was funded by the P1vital CNS Experimental Medicine Consortium and the Economic and Social Research Council (ESRC, UK).

PAIN PROFILING HAS THE POTENTIAL TO IMPROVE QUALITY OF LIFE FOR OLDER PATIENTS

Research undertaken at the University of Limerick has found that pain profiling in older patients has the potential to improve quality of life, and help target resources to those most at risk of disability. The study also found that the use of new pain profiles, which took into account the impact of pain and its subjective nature, might enable better management of pain, and more accurate predictions of healthcare utilisation among older people.

Kieran O'Sullivan, Lecturer in Physiotherapy in the Department of Clinical Therapies at the University of Limerick, and one of the lead authors of the Age & Ageing paper, said: "For too long we have treated pain as an entity in itself, instead of treating the person in pain. These papers illustrate that a range of demographic, health and psychological factors influence the impact of pain on a person. By better matching pain treatment to the specific needs of each person, quality of life might be enhanced significantly while simultaneously reducing healthcare costs."

The research has been published as a two part paper in Age & Ageing, the scientific journal of The British Geriatrics Society. The data for the study was gathered from 8,171 respondents, aged 50 and over, living in a community setting. 65% reported not often being troubled by pain. Of the 2,896 respondents often troubled by pain, four pain profiles were identified using questions such as 'does the pain make it difficult for you to do your usual activities?', 'do you have a number of pain sites?' and 'are you taking medication to control the pain?'

Previous large population studies examining pain in older people have been limited to data related to frequency of pain, and/or the reported pain intensity. The study is unique in that it recognises that the impact of pain may vary considerably, and is a subjective experience. It also takes into consideration the degree to which pain affects a person's ability to participate in home or occupational activities, how widespread the pain is, as well as the use of analgesic medications. The study highlights the benefit of considering a greater range of variables in pain profiling to improve management, and reduce excessive medical investigations and treatment.

The study also finds that pain profiling can be used to predict health care utilisation by older people. Identifying people with multi-site pain, or those with single-site pain which affects daily activities and requires medication, could prove a significant independent predictor of the utilisation of GP care and hospital outpatient visits. Access to such data could prove to be of enormous benefit from a health planning perspective.



UL RESEARCH HIGHLIGHTS NEED FOR URGENT REFORM OF WHEELCHAIR AND SEATING PROVISION SERVICES

The results of a recent UL research survey of wheelchair users and their carers in Ireland was recently presented to Senator John Dolan (CEO, Disability Federation of Ireland) in Leinster House by Dr. Rosie Gowran, Department of Clinical Therapies, University of Limerick, who is calling for a national review of wheelchair and seating provision services in Ireland.

Of the 273 individuals who took the online survey, including parents of children, adults with spinal cord injury, progressive neurological conditions and other conditions such as acquired brain injury and stroke, 38% stated that their wheelchair did not meet their needs. The survey highlights a lack of uniformity in wheelchair provision across the country, with delays at each stage of the process, waiting for assessment, funding and delivery of the wheelchair, with only 17% receiving follow-up within six months of receiving their new wheelchair.

The largest group responding to the survey were people of working age with spinal cord injury. Without an appropriate wheelchair, which can be obtained, maintained and repaired in the event of an emergency, people living with spinal cord injury, for example, may miss out on opportunities to re-engage with life, access education and employment, which is of major concern, highlighted by Spinal Injuries Ireland, impacting on health and well-being. Speaking about the research results Dr. Rosie Gowran said: "These results illustrate that many children, adults and older people who require a wheelchair are in a major position of inequality to access daily life, school, work and leisure, which most take for granted. While there is evidence of some improvement in assessment processes the entire system lacks uniformity. Loss of personal mobility without an appropriate wheelchair can affect growth and development, increase the risk of pressure ulcers and impact greatly on a person's mental health."

With approximately 40,000 people using wheelchairs in the Republic of Ireland, one in one hundred; there are no specific policies or guidelines in relation to the appropriate provision of wheelchairs and special seating, unlike in other jurisdictions, despite the continual call for a national review of wheelchair services.

Following on from Dr. Gowran's address to a cross-party meeting at Leinster House in November 2014, highlighting the serious inadequacies of services for wheelchair users in Ireland, there has been very little dialogue at a HSE or government level to address issues relating to accessing services, assessment and delivery processes, follow-up, repair and emergency service and education, training and research. A policy platform needs to be established to address the short, medium and longer term issues required for sustainable wheelchair and seating provision infrastructures.

"Wheelchair provision is relevant to the whole of society, as

any one of us could become a wheelchair user, these results are stark. Irish people would like to know that if they, their child, or parent needed a wheelchair that an appropriate chair would be provided and looked after in a timely and efficient manner to ensure people can live their lives as independently as possible," said Dr. Gowran.

UL RESEARCH FINDS THAT DIALYSIS PATIENTS WHO SMOKE ARE LESS LIKELY TO GET A KIDNEY TRANSPLANT AND DIE EARLIER

"Smoking remains a major modifiable risk factor for adverse outcomes for men and women on dialysis. It shortens their lifespans and reduces their overall chances of kidney transplantation."

- Professor Austin Stack

Dialysis patients who smoke are much less likely to receive a life-saving kidney transplant and much more likely to die sooner according to researchers from the Health Research Institute (HRI) at the University of Limerick and UL's Graduate Entry Medical School (GEMS).

The findings, which are published in a study appearing online in the journal BMC Nephrology, provide compelling evidence that smoking reduces overall life expectancy of dialysis patients as well as their overall chances of receiving a kidney transplant.

Approximately 2 million patients in the world are treated with dialysis every year. Kidney transplantation is by far the best option for most patients who develop kidney failure as it is associated with the best survival and quality of life.

Patients with kidney failure who are on dialysis have life spans that can be one-fifth that of the general population according to Professor Austin Stack MD, Lead author and Consultant Nephrologist at UL Hospitals and Director of UL Health Research Institute (HRI). It is hugely important that we identify those factors that affect overall patient survival and quality of life, especially factors that can potentially be modified to improve patient lives. Although previous studies have clearly shown that smoking is a major risk factor for death in the general population, few studies have evaluated the impact of smoking among patients who develop kidney failure.

In our study funded by the Health Research Board (HRB) and the Irish Heart Foundation (IHF), we assessed the impact of smoking among new dialysis patients and evaluated the extent to which it affected overall mortality rates and rates of kidney transplantation. Using data from the US Renal Registry, we followed 1,220,000 patients, who began dialysis in the United States from 1995 to 2010, for an average for 2 years.

Among the major findings we found that:-

- Smokers were significantly more likely to die than non-smokers and this adverse risk was equally present for both men and women



- Smoking had a far greater negative impact on the lifespan of younger men and women than among older patients
- Smoking was associated with higher death rates for all patients but the adverse impact was far greater for those with pre-existing cardiovascular conditions including coronary disease, stroke and peripheral vascular disease
- Smokers were significantly less likely to receive a kidney transplant than non-smokers and this adverse risk was equally present for both men and women
- Smokers with pre-existing cardiovascular conditions had the lowest risk of receiving a kidney transplant

The relationship of smoking with higher death rates and lower kidney transplantation rates was not explained by concurrent illness, socioeconomic status, or differences in care provided to patients prior to or after initiating dialysis. "Dialysis patients have extremely high premature death rates that are between 10- and 100-fold higher than in the general population, and smoking contributes substantially to lower patient survival," said Professor Stack, senior author of the study, Consultant Nephrologist at University Hospital Limerick and Director of UL's Health Research Institute. "Smoking is a well-known risk factor for death and disability for patients in the general population. Our study, one of the largest ever conducted; found that smokers have alarmingly high rates of premature death. Quite strikingly, the risks of death were far greater in younger men and younger women than in older patients. Equally concerning, dialysis patients who smoked experienced lower rates of kidney transplantation and thus the opportunity to extend survival and quality of life. These risks were considerable in that smokers were between 26% and 50% less likely to receive a kidney transplant taking all other factors into consideration.

"Smoking is a major risk amplifier for all patients on dialysis," said Dr. Stack. Consequently, we believe that kidney specialists and all healthcare providers should engage with their patients to pursue smoking cessation strategies at each and every opportunity."

The study '**Differential Impact of Smoking on Mortality and Kidney Transplantation among Adult Men and Women Undergoing Dialysis**' is available online at <http://www.biomedcentral.com/1471-2369/17/95> on 26th July, 2016 and authored by Austin G. Stack, Darya Yermak, David G. Roche, John P. Ferguson, Mohamed Elsayed, Waleed Mohammed, Liam F. Casserly, Stewart R. Walsh, Cornelius J. Cronin.

LARGEST COHORT OF MEDICAL STUDENTS GRADUATE FROM UNIVERSITY OF LIMERICK

In June, University of Limerick celebrated the graduation of 189 future healthcare leaders from the UL Graduate Entry Medical School (GEMS) and Clinical Therapies Department.

Among the graduates, 130 newly qualified doctors were conferred with their medical degrees as they became the

sixth and largest graduating class of GEMS to date. More than 50 Clinical Therapies graduands received their awards - 27 from the MSc in Occupational Therapy and 24 from the BSc in Physiotherapy.



Speaking at the conferring ceremony Professor Don Barry, UL President, said, "The University of Limerick provides the largest graduate entry programme for medicine in the country and over the last nine years or so has proven its ability to graduate doctors who understand the scientific basis of medicine, recognise the wider social and environmental contexts in which health and illness exist and are strongly committed to public service. This is the first graduating cohort to have spent their first two years of study in our state-of-the-art medical school building on the Clare side of our campus, which has won both Irish and British architectural awards."

Established in 2007, the GEMS programme at UL is open to graduates from any discipline and employs practical and interactive approaches to learning. GEMS has achieved its sixth continuous year of 100% employment of its EU graduates in the Irish and UK PGY1 Internship systems, as well as the highest North American matching success rate of all 6 Irish medical schools exceeding 90% first year medical employment for its Canadian graduates sustained over the last five years since non-EU students began to graduate. The programme is also the only medical education programme in the country founded on the pedagogical principles of Problem Based Learning (PBL). PBL encourages team-working and self-directed enquiry, both skills being vital for their future careers in the fast moving world of medicine.



"Increasingly, health systems are addressing peoples' needs at home and in primary care settings, to reduce the need for costly hospital-based services. Building on this trend, our Masters programme is unique as it attracts mature students to the profession of Occupational Therapy. Clinical Therapies graduates from UL are equipped to evaluate their practice, extend or refine their skills and knowledge to meet new and emerging challenges in healthcare provision," Professor Barry added.

The four-year Bachelor of Science in Physiotherapy is the only academic physiotherapy programme in Ireland outside of Dublin. The programme is accredited by the Irish Society of Chartered Physiotherapists and this year celebrates the 11th year of Physiotherapy Graduates.

The Master of Science in Occupational Therapy is the only graduate-entry Occupational Therapy course in the country and is accredited by both the Association of Occupational Therapists of Ireland and by CORU, Ireland's multi-professional health regulator.

UL GOES FOR GOLD FOR CHILDHOOD CANCER AWARENESS

Childhood Cancer Foundation launched its fourth annual Light It Up Gold campaign in early September to highlight Childhood Cancer Awareness Month.

As part of this campaign originating in the USA, buildings across the world were bathed in gold lighting during September to shine a light on the bravery of children dealing with cancer.

In Ireland, University of Limerick's Plassey House and the Schuman Building Fountain were lit in gold as part of the campaign as well as Bank of Ireland College Green in Dublin, the Dunbrody Famine Ship and Shannon Airport. International landmarks such as the Niagara Falls, Times Square New York and Harbour Bridge in Texas were also part of the campaign.



Mary Claire Rennick of Childhood Cancer Foundation said the campaign was "getting a great response from buildings across Ireland. The campaign is spreading every year with buildings across Ireland and the UK joining international landmarks. Increased awareness will improve early detection and increase understanding among policy makers and communities which will hopefully reduce the isolation of families going through childhood cancer treatment and side effects. Awareness will also lead to improved funding for supports and services for families and funding for research into childhood cancer. We are very grateful to the University of Limerick for its marvellous support of our campaign."



More than 200 children are diagnosed with cancer each year in Ireland. It is the biggest cause of death by disease in children in Ireland. Childhood Cancer Foundation raises public awareness of the issues surrounding childhood cancer, develops early diagnosis programmes amongst healthcare professionals, advocates for improved services for children affected by cancer and assists to fund vital services for children and families affected by this disease. "Awareness is crucial to ensure the whole community



recognises the immediate devastating effect of childhood cancer on children and families and also the long term effects of cancer and harsh treatments. We need awareness to guarantee these survivors get full access to health and education supports to ensure a long and happy life after cancer," Mary Claire Rennick concluded.

UL MALNUTRITION EXPERT HEADS UP IRISH RESEARCH TEAM

A UL expert will co-ordinate and lead the Irish contribution to a newly-established European knowledge hub on malnutrition in elderly people.

Following a call from the European Joint Action 'Healthy Diet for a Healthy Life' last year, the 'MaNuEL' - Malnutrition in the Elderly Knowledge Hub was established, bringing together 21 researchers from groups spanning seven countries who will work together to deliver key initiatives set out by members over the coming two years. The initiative will see these experts work together to build a better understanding of the determinants of nutritional deficiencies in older populations across Europe and build research capacity in this crucial area.

"It is important that we are at the forefront of knowledge regarding the many causes of malnutrition in the elderly," said Dr. Eibhlís O'Connor, Department of Life Sciences, who will co-ordinate and lead the Irish contribution to the knowledge hub with partners in University College Cork and University College Dublin.

"Given the huge economic burden malnutrition causes our elderly citizens and healthcare systems we need to ensure both Ireland and Europe can provide insight and guidance to healthcare professionals and industry regarding the most efficient methods of determining malnutrition early so preventative strategies can be implemented to reduce the burden of elderly malnutrition both from a national and international perspective," Dr. O'Connor added.

Researchers from Austria, France, Germany, Ireland, the Netherlands, New Zealand and Spain will contribute to the knowledge hub with financial support from respective national funding agencies providing a budget of about €1 million.

The Irish partners (at UL, UCC and UCD) will be supported by the Irish Department of Agriculture, Food and the Marine (DAFM) and the Health Research Board (HRB). MaNuEL will create a network of dedicated scientists to contribute to a shared understanding of malnutrition, the prevalence of malnutrition in older persons, preferred screening tools, and effective interventions for malnutrition in older persons from different healthcare settings. Focused systematic literature reviews will be conducted to complete the picture on malnutrition and to identify potential knowledge gaps.

MaNuEL will also bring together and harmonize transnational datasets from nutritional intervention trials and observational studies to perform secondary analyses

and build a research infrastructure for future research questions. It will provide insight into current clinical practice, policies, and health professionals' education on malnutrition and will identify best practice examples and recommendations for improvement.

SEMINAR SHINES LIGHT ON AUTISM SPECTRUM DISORDER

International autism experts gathered at the University of Limerick (UL) in July for the inaugural i-TEACH (Teaching for Inclusion) research seminar.

The seminar on New Foundations: Perspectives in Supporting the Emotional Wellbeing of Students with Autism Spectrum Disorder (ASD) was held at the newly-built Analog Devices Building at the University.

More than 50 delegates from across Ireland attended the seminar marking the launch of the i-TEACH network, a network of educators and allied professionals who support students with additional and complex learning needs.

The event fostered dialogue and exchange of knowledge in order to contribute to the search for solutions to challenges confronting educators in best supporting students with ASD who are at high risk of developing serious social emotional issues, particularly in adolescence.

The seminar was funded by the Irish Research Council and led by Dr. Jennifer McMahon, lecturer in Psychology and Special Education and director of the i-TEACH lab.

"We wanted to shine a light on this hugely important issue. School is not just about academic success but also about ensuring that students have the social emotional skills to navigate the complex and often daunting social world that will impact all areas of their development. Evidence-informed practice advice is critical for improving the effectiveness of support offered to students with ASD in our schools," Dr. McMahon noted.

Dr. Rachel Msetfi, Assistant Dean of Research at UL, opened proceedings noting the importance of bringing together all the key stakeholders responsible for supporting students with ASD. The papers presented at the seminar were prepared by international experts drawn from Sweden and the United Kingdom.

Dr. Tatja Hirvikoski, Associate Professor at The Karolinska Institute in Sweden, presented on the high risk of suicide in people with ASD.

Professor Hirvikoski's research was nominated as one of the top 10 Autism research papers of 2015 by Autism Speaks, the most influential autism advocacy organisation in the world.

Dr. Judith Hebron, research fellow at the University of Manchester, presented on the experience of students with ASD on the transition from primary school to secondary school.



Professor Richard Hastings, University of Warwick, gave a presentation on the mental health of young children with ASD and the impact on the wellbeing of family members such as mothers and siblings. Richard Hastings is a Professor of Education and Psychology as well as the Cerebra Chair of Family Research in the Centre for Educational Development, Appraisal and Research (CEDAR).

In addition he is advisor and research partner to Ambitious about Autism and SIBS, a charity for brothers and sisters of people with a disability.

Discussion sessions during the seminar were moderated by a panel of experts comprising academics, policy makers as well as representatives of organisations that share a passion for the support of students with ASD and have unique perspectives on how it can be achieved.

This complemented the diverse mix of expertise of delegates attending the research day and discussions arising from it will provide a basis for formulating a blueprint for supporting students with ASD in relation to their emotional wellbeing in schools.

IRISH RESEARCHERS BEGIN WORK ON SOFT EXOSKELETON TO AID MOBILITY

Researchers working on a wearable-robotics project, aimed at improving movement for people with reduced mobility, plan to build the first fully-functional prototype of XoSoft 'intelligent' trousers by 2019.

The soft, biometric exoskeleton would allow older people or people with disabilities to move their legs by detecting movement intention.

A group from University of Limerick is part of the European team of researchers, led by the Italian Institute of Technology, which has begun work on the wearable soft-robotics intelligent-clothing system.

The Design Factors Research Group based in UL's School of Design is part of the ground-breaking health-robotics project to develop the soft, modular, lower-limb exoskeleton.

This group is led by Senior lecturer in Design Ergonomics at UL and Health Research Institute (HRI) member, Dr. Leonard O'Sullivan and head of UL's School of Design, Dr. Adam de Eyto. According to Dr. O'Sullivan, this technology could be life changing for older people and people with disabilities.

"There are 3.2 million wheelchair users in Europe and another 40 million who cannot walk without an aid. People with limitation in independent movement of their legs can rely on a variety of assistive devices. Yet the available assistive aids are usually bulky, fairly inflexible and can therefore only partially support the process of movement. Neither do they encourage or support the activation of legs, which is essential to prevent further atrophy. This is where XoSoft comes in," Dr O'Sullivan added.

In the XoSoft project, state-of-the-art advanced textiles and smart materials will be used to create sensing and variable-stiffness joints. Built-in sensors will communicate the user's motion and intention to the controlling unit for analysis to determine and provide, the appropriate level of assistance. Depending on the user's need at a given moment, the device will provide support, release or freedom of movement.

The UL group will use their expertise in user-centred design and medical-device innovation to lead this aspect of the design of XoSoft.

"This user-centred design will ensure that the needs of real users drive the technical innovations within the project, creating an effective and user-friendly device," Dr O'Sullivan outlined.

"We are delighted to have been invited to participate in this project, which sees the fields of wearable sensors and robotics and user-centred design come together to innovate novel devices to solve real needs of the ageing population and others with mobility impairments. This project is an exciting addition to our already strong track record in EU funding in the area of medical device assistive technologies," he continued.

According to HRI Director, Professor Austin Stack, "The development of innovative technologies to enhance health and wellbeing is a key goal of the Health Research Institute (HRI) and the success of Dr. Leonard O'Sullivan and the Design Factors Research Group is a fantastic achievement for the HRI and the University of Limerick. This is an excellent example of how interdisciplinary research can deliver real impact for our ageing population and those with disabilities."

The project secured €5.4 million funding under the European Union's Horizon 2020 Research and Innovation Programme. The nine organisations involved in this public-private partnership started the research and development project in February 2016 with the aim to develop the first fully-functional prototype by 2019.

Besides five research groups from the disciplines of robotics, bioengineering, ambient intelligence and design, the team also includes four companies and clinical partners with expertise in rehabilitation technologies, geriatrics and prosthetic applications. The total value of the XoSoft project to University of Limerick is €550,000, over three years.

UL LAUNCHES THE BERNAL INSTITUTE - AN €86 MILLION SCIENCE AND ENGINEERING RESEARCH INSTITUTE

An Taoiseach Enda Kenny launched the Bernal Institute at the University of Limerick, an €86 million science and engineering research institute comprised of 20,000m² of high quality, multi-purpose research space in the new Science and Engineering Zone at UL on Monday, November 21st, 2016.



The Bernal Institute incorporates UL's Materials and Surface Sciences Institute, the Stokes Research Institute and the Bernal Project into one unified flagship research Institute to showcase and build on the University's significant strengths in research in Science and Engineering. A key aspect of the Institute is the recruitment of world leading researchers as Bernal Professors, with seven of a total of ten new professorial chairs filled. The Institute houses over 260 researchers who work in and across research themes in advanced materials, manufacturing and processing engineering and fluid dynamics.

Examples of research work include:

- Pharmaceutical manufacturing research, focusing on the production and processing of pharmaceutical materials that support the pharmaceutical sector in Ireland (exports of €50 billion per annum)
- New materials for rechargeable batteries which extend battery life. This research will have significant implications for mobile computing and telecoms but also for the emerging electric vehicle market allowing for smaller and lighter batteries that can hold more charge for longer and maintain performance over the lifetime of the product
- The development of a new metallic alloy, nickel titanium, in partnership with Cook Medical for use in minimally invasive medical devices such as guidewires for stents and catheters which are used when a patient is under x-ray
- The use of engineering expertise in composite materials to diagnose equipment failure in a powder manufacturing facility that resulted in savings of €10 million
- The development of high-throughput droplet-based technologies for drug discovery, cell culturing and genetic analysis has led to the creation and evolution of very successful spin-out enterprises (Stokes Bio and GenCell Biosystems)



Speaking from the launch event An Taoiseach, Enda Kenny, TD said: "Ireland has a proud history of scientific achievement that has helped shape the modern world we live in. The opening of the Bernal Institute at UL will ensure that Ireland stays at the cutting edge of research and innovation. Advances in pharmaceuticals, medicines and materials at the Bernal Institute will help tackle the great challenges facing society today. The Government is proud to support scientific endeavour, and the development of the Bernal Institute is an excellent example of collaboration between Government, higher education, philanthropy, and industry. Through our Action Plan for Jobs we will continue to support and promote science as a way to improve the lives of people in Ireland and around the world."

Research Impact is at the core of the vision for the new Institute. UL President Professor Don Barry said "Bernal is a shining example of industry, government and philanthropy working together to create a game-changer in terms of impact. And by 'impact' I mean impact in the real world that generates real benefits for real people and helps to build the future for us all. This new Bernal Institute will enable UL to enhance key disciplines in the Faculty of Science and Engineering and to advance the University's reputation for Research Excellence, while continuously developing research that has a real impact on industry, society and the local, national and international communities we serve."

UL has partnered with Science Foundation Ireland (SFI) and Enterprise Ireland (EI) in relation to the establishment of numerous technology centres as well as centres of excellence hosted at the Bernal Institute. Four major national centres - the Synthesis and Solid State Pharmaceutical Centre supported by SFI, the Pharmaceutical Manufacturing Technology Centre and the Irish Centre for Composites Research grant-aided by EI and more recently the Dairy Processing Technology Centre—are hosted by the Institute and currently the Institute has research partnerships with over 70 companies. The recruitment of two of the Bernal Chairs, Mike Zaworotko, Professor of Crystal Engineering, and Paul Weaver, Professor of Composite Materials, has been supported by SFI through their Research Professors Programme with each receiving awards of €5 million.

The Institute has been awarded substantial infrastructural funding by the Higher Education Authority's Programme for Research in Third Level Institutions (Cycles 1, 4 and 5).

The new Institute is named for John Desmond Bernal, one of the most influential scientists of the 20th Century who was born in Nenagh, County Tipperary. The Science and Engineering Zone at UL comprises the Lonsdale Building completed in 1996, the MSSI building completed in 2002 and the recently-completed Phase Two of that building and the new Analog Devices Building, so named following a major gift by the company to the UL Foundation.

NEW CYSTIC FIBROSIS DEVICE TO REDUCE ANTIBIOTIC USAGE

A medical device for Cystic Fibrosis (CF) sufferers which lessens their exposure to infections resulting in fewer doctors' visits, reduced antibiotic usage and shorter hospital stays, is expected to be market ready within two years.

University of Limerick (UL) inventors recently secured funding for the new percussion device that helps remove mucus from the airways and will, they hope, greatly improve the quality of life for cystic fibrosis patients.

Ireland has the highest incidence of CF in the world and CF is the most common, fatal hereditary disease in the United States.

Professor Colum Dunne, who is Foundation Chair and Director of Research at UL's Graduate Entry Medical School



(GEMS), explained the background to the development of the product.

“Patients with respiratory diseases use various devices, which help the removal of mucus from the airways and the improvement of pulmonary or lung function. One example that we have focused on here is the CF patient airway, which is defective in ciliary function; resulting, due to ineffective removal, in a mucus-rich environment favouring growth of bacteria. These bacteria include potential pathogens, associated with chronic infection, decreased lung function and accelerated respiratory disease”.

Currently, there are percussion-based chest physiotherapy devices on the market, but according to Professor Dunne, these “can sometimes become reservoirs for the bacteria that cause infections in Cystic Fibrosis patients”. Because the new device, SoloPep, is disposable, it poses no threat of reinfection.

“In our research, we have observed that compliance with hygiene practices for reusable devices, by patient, is potentially poor. As such, despite even excellent compliance with prescribed antimicrobial regimens, the devices may become colonised with problematic or opportunistic pathogenic microbes,” Professor Dunne outlined.

“The devices may, therefore, function as a reservoir that does not come into contact with the antimicrobial agents. Subsequently, re-infection may occur post-antimicrobial cessation by microbes present in the reservoir. Therefore, there is a need to develop novel inexpensive, single-use devices,” he added.

“Ireland has the highest per capita incidence of Cystic Fibrosis globally. Because of this, it is reasonable to expect treatment innovations generated by Irish researchers and carers. In this case, our studies included patient involvement from the outset and allowed us to develop something that is truly technologically disruptive. The design of this new positive expiratory pressure (PEP) device is clever and focused on the end user from the beginning. It removes significant risk for patients by improving their microbiology hygiene and safety,” Professor Dunne added. Dr. Leonard O’Sullivan from UL’s School of Design is co-principal investigator for this device.

“SoloPEP is a good example of user-centred design and it will have a dramatic impact on the quality of life of cystic fibrosis patients in a sector with significant commercial opportunity,” he said.

The Limerick-based team, which recently secured €500,000 in Enterprise Ireland funding for the development of the product, involves microbiologists, product designers and medical doctors who specialise in treating both paediatric and adult respiratory illness. The team includes Professor Deirdre McGrath (UL GEMS and Respiratory Consultant at Barrington’s Hospital) and Dr. Barry Linnane (Senior Clinical Lecturer and Paediatric Consultant University Hospital Limerick).



L to R. Professor Deirdre McGrath of University of Limerick’s Graduate Entry Medical School and Respiratory Consultant at Barrington’s Hospital, Professor Colum Dunne, Foundation Chair and Director of Research at UL GEMS and Dr. Leonard O’Sullivan, Senior Lecturer in Design Ergonomics at UL and Health Research Institute (HRI) member are part of a team who recently received Enterprise Ireland funding to bring to market a new medical device for Cystic Fibrosis sufferers.

“This product has the potential to improve the lives of Cystic Fibrosis and other patients. But for that to happen the product must actually be available to them,” Professor Dunne concluded.

UNIVERSITY HOSPITAL LIMERICK PIONEERS COLORECTAL, RENAL AND ADRENAL ROBOTIC SURGERY IN IRELAND

University Hospital Limerick (UHL) is the first hospital in Ireland to perform Colorectal, Renal and Adrenal surgical procedures using a state of the art robot, it was revealed at the launch of the hospital’s robotic programme on November 29th, 2016.

The pioneering surgeons involved are, for the colorectal procedures, Professor J. Calvin Coffey, Foundation Chair of Surgery at the Graduate Entry Medical School, University of Limerick (UL) and general and colorectal surgeon, UHL and for renal, Mr Subhasis Giri, who is a urological surgeon at UHL. The robotic surgery was performed using the Da Vinci Xi Dual Console Robot, the only one of its kind in a public hospital in Ireland.





The Da Vinci Xi robotic programme, now underway at UL Hospitals Group cost €2.8 million in total. UL Hospitals acknowledges and thanks the Mid-Western Hospitals Development Trust, the JP McManus Benevolent Fund, UL and the University of Limerick Graduate Entry Medical School for their generous support in this fantastic collaborative project of which UL Hospitals Group is very proud. Valued at approximately €2.6m, the Da Vinci Xi robot and equipment was donated by the Mid-Western Hospitals Development Trust and funded with the generous support of the JP McManus Benevolent Fund.

Mid-Western Hospitals Trust Chairman Jim Canny commented: "This is a great collaborative project and the Board of the Mid-Western Hospitals Development Trust are delighted to support it. It means that all patients in the Mid-West requiring surgery such as colorectal or urological, now have access to this state of the art robotic technology which means that they will have better outcomes overall. We look forward to working with the Hospital and UL on projects of a similar nature in future."

Robotic surgery represents the highest international standard of surgery worldwide and is the most advanced form of keyhole surgery available to patients.

Preliminary data from UL Hospitals Group demonstrates that post-operative recovery is twice as fast with robotic surgery than with standard keyhole surgery, with an average post-operative hospital stay of approximately 4 days. "Very early discharge is the exception rather than the rule in keyhole intestinal surgery. It seems to be the rule rather than the exception in robotic assisted surgery," Professor Coffey commented. There is also minimal blood loss and a reduction in post-operative pain with robotic surgery.

Mr Michael Hanrahan, a retired Aer Rianta employee from Ennis in Co. Clare, had a tumour removed from his kidney in June this year. This was the first robotic operation of its kind carried out in Ireland and was performed by Mr Subhasis Giri at UHL. Mr. Giri has conducted 20 robotic complex Kidney Cancer procedures at UHL, in most of them he was able to preserve or save the kidney while removing the tumour only, thereby potentially avoiding the requirement of Dialysis later in life.

Said Michael, "The first thing that struck me was the state-of-the-art nature of the theatres and post-operative recovery area I was in afterwards. I thought is this new? I certainly wasn't aware of it. I remember seeing the robot and thinking how is that going to operate on me? The incision was so small it was remarkable. I was delighted with my recovery, I was back playing golf in a matter of weeks."

"Mr Giri has a gift, he talks to you not at you, it was so reassuring and his staff all had the same bedside manner, they were tremendous."

The Da Vinci Xi technology has particular advancements not available with standard keyhole surgery. 3D-HD visualisation provides surgeons with a highly magnified view, virtually extending their eyes and hands into the patient, almost as if the surgeon were 'standing inside the abdomen and reaching out to the organs.' The robot is secured or 'docked' to the patient and has 4 working arms (each requiring only an 8mm skin incision) to which operating instruments are attached. Once docked, the robotic arms and instruments are controlled by the surgeon, or surgeons, who are seated at the consoles nearby. The instruments are extremely precise, with no tremor, and they can in fact achieve activities not possible with the human hand, though they would never replace the human hand, they are completely controlled by the surgeon.

Professor Coffey said, "Up to now, robotic surgery has been embedded in the private sector, apart from gynaecologic surgery. Now, for the first time, it is available to public patients in the Mid-West for colorectal and renal or urologic cases. The dual console will allow not one, but two surgeons to operate simultaneously ensuring optimal decision making and precision for each individual patient, the expertise is doubled. It also allows for dedicated training for the surgeons of tomorrow, which to date is not available anywhere else in Ireland, this is approaching the level of control that we see with pilots and co-pilots. We have conducted 29 cases to date in UHL predominantly for colon, rectal and kidney cases, with hugely encouraging results and a high level of patient satisfaction. We are delighted to have the Da Vinci here in Limerick."

UHL also has the ability to broadcast live surgery within the hospital right now to its junior doctors on a small scale and will be able to broadcast live to the University of Limerick in the coming months. This provides an unrivalled educational program for medical staff, nursing staff and students alike.

UL, Academic Partner to UL Hospitals Group, donated €135,000 to the project for Audio Visual and training equipment. Consultant Surgeon Professor Mike Larvin, Head of the Graduate Entry Medical School (GEMS) at University of Limerick commented: "UL is thrilled to support the launch of the Da Vinci Xi surgical robot with our main teaching hospital partner, UHL. This makes a new form of 'precision surgery' available to patients requiring operations for cancer and other serious diseases, and Limerick can be proud that this is the first such device to be installed in a



public hospital in Ireland. It will also provide a marvellous teaching tool for our students, allowing them to observe complex operations 'live' alongside our top surgeons using the dual teaching console which is the only one of its kind in the country. Hopefully this will inspire the next generation of high-tech surgeons. We are especially proud that Professor J Calvin Coffey, a joint appointment between the hospital and the GEMS, led the drive to bring this leading technology to the region and will be leading its scientific evaluation along with Professor Aoife Lowery and colleagues in the surgical and theatre teams at UHL."

Professor Niall O'Higgins, Chairman of UL Hospitals Group Board said, "The successful development of Robotic Surgery at the UL Hospitals Group deserves widespread attention and celebration. It is a national achievement. This programme is the first and only Robotic Surgery facility for general surgery in the public service. It has been put in place with unsurpassed attention to every detail of technicality, technique, training and teamwork. The skill and attention provided for each patient demonstrate the high quality of medicine that is possible in Ireland. Philanthropic funding from the Mid-Western Hospitals Development Trust, academic support from UL and administrative backing from the UL Hospitals Group have provided the platform upon which this advance has been based. Professor Coffey and his co-workers, all models of professional enthusiasm, should be thanked and congratulated for this significant achievement in Irish medicine."

Colette Cowan, CEO of UL Hospitals Group commented, "The aim of the robotic programme is simply to improve outcomes for our patients in a caring, confident and compassionate manner. On average three robotic cases are now conducted weekly in UHL and all patients in the Mid-West can have equal access to this surgery if referred to us by their GP. Led by Professor Coffey and his team, a huge amount of work has gone into this project since the arrival and installation of the robot in May from training through to accreditation and the first case in June.

"Since the programme commenced, we have begun to substitute keyhole surgery with robotic surgery where it's possible and in doing so we can realise significant cost savings for our hospital. Through reduced hospital stay and other savings associated with robotic surgery, the programme will in fact be cost neutral to the end of 2016, which is a fantastic achievement. Our plan is that this will continue into 2017. We are also helping to enhance patient flow within the hospital all of which benefits our patients."

The Da Vinci Xi program is already expanding under the guidance of Ms Suzanne Dunne, Head of Strategy UL Hospitals Group and Project Manager for the Robotic Surgery Programme. Mr Colin Peirce is a colorectal surgeon recently back from training in the Cleveland clinic. His joining the robotic team has vastly expanded the repertoire of types of surgery provided by this programme.

The programme is also scheduled to expand to include gynaecological, endocrine and pelvic floor diseases.

Sporting legends support opening of Cancer Clinical Trials Unit at UHL

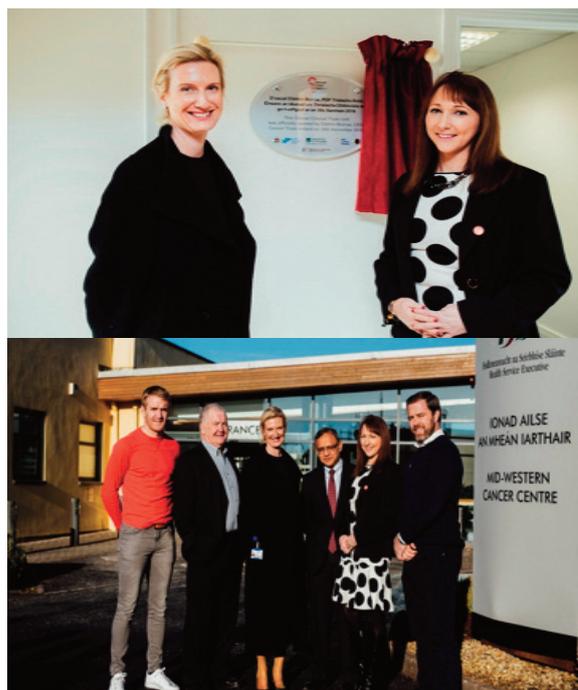
- All-Ireland winners Noel McGrath and Richie Bennis encourage patients to consider trials
- Patron Anthony Foley remembered at opening of renovated Trials Unit

THE newly renovated Cancer Clinical Trials Unit at University Hospital Limerick has been officially opened recently by Eibhlin Mulroe, CEO, Cancer Trials Ireland.

Coming at the end of November – a month devoted to awareness of men's health issues and men's cancers in particular - the event was supported by All-Ireland winning hurlers Noel McGrath (Tipperary) and Richie Bennis (Limerick), both of whom have had cancer treatment at UHL. Legendary Clare hurling manager Ger Loughnane, a fellow cancer survivor, also supported the opening.

Another in attendance was Grand Slam and European Cup winning rugby hero Marcus Horan. Marcus was representing his close friend and former Shannon, Munster and Ireland teammate, the late Anthony Foley. Anthony's parents, Brendan and Sheila, also attended the opening.

Anthony was a member of the board of the Mid-Western Cancer Foundation and was keenly aware of the importance of cancer trials. He was at the Limerick unit only last May to celebrate International Clinical Trials Day and had been looking forward to attending this week's opening. Pictured at the opening of the new Cancer Clinical



Trials Unit at University Hospital Limerick were All-Ireland winners Noel McGrath and Richie Bennis; Dr Linda Coate; Consultant Medical Oncologist, UL Hospitals Group; Professor Rajnish Gupta, Regional Director of Cancer Services for the Mid-West; Eibhlin Mulroe, CEO, Cancer Trials Ireland and Marcus Horan.



Pictured at the opening of the new Cancer Clinical Trials Unit at University Hospital Limerick were Maureen O'Grady, Clinical Nurse Manager; Sheila and Brendan Foley; Dr. Linda Coate; Consultant Medical Oncologist, UL Hospitals Group and Professor Rajnish Gupta, Regional Director of Cancer Services for the Mid-West

UHL is one of 14 hospital-based cancer trials research centres in Ireland and the only one in the Mid-West region.

Ms. Mulroe, CEO, of Cancer Trials Ireland, which coordinates hundreds of cancer trials around Ireland every year, commented: "Patients who take part in trials make a profound community contribution. What they do is really important. They are making a unique contribution to answering the really important cancer research questions which might help others in the future.

"In return we hope participation will help them and enable them get access to treatments and drugs not available through any other avenue.

"I want to sincerely thank the people who have made that decision to go on a trial and are helping highly committed research teams around the country find the answers to cancer. If you would like to find out what cancer trials are available please just ask your doctor - your oncologist or indeed your GP. That's our appeal - Just Ask. You can also go on www.cancertrials.ie and find out what trials are open at the moment," she said.

Marcus Horan said Anthony Foley had been a great supporter of cancer services in the Mid-West.

"When the nurses got on to me to see if I could step in for Axel, I just jumped at it. His involvement here was something he was very proud of and he would have loved to have been able to see it through to the opening. It is a great honour to be here today, especially with his parents Brendan and Sheila," said Marcus.

Noel McGrath, who was named Tipperary Person of the Year 2016 by the Tipperary Association Dublin for his cancer awareness work, stressed the importance of patients taking part in trials. Noel rebounded from being treated for cancer last year to winning a second All-Ireland medal in September.

"I was very well looked after here; had treatment and a positive outcome at the end. For people that have not had

as good an outcome as me, it is about trying to prevent as many of those cases as possible and to help as many people as we can. Initiatives like this, especially here in Limerick where the oncology unit is very good, any steps we can take to make it even better is a very positive thing," said Noel.

Richie Bennis, an All-Ireland winner with Limerick in 1973, was treated for cancer in UHL in 2009.

"Trials are very important," said Richie, "and anything in the line of cancer that either encourages people to first of all get check-ups and then get treatment, I am delighted to support. Trials save lives and if something saves lives, everybody should do it."

The new unit at UHL has been renovated with the help of charitable donations and is located in a space previously occupied by breast cancer services prior to their move to the Leben Building earlier this year. Two new research nurse positions and a number of administrative posts have also been approved by UL Hospitals Group to support the Clinical Trials Unit and make more trials available to patients in the Mid-West.

Maureen O'Grady, Clinical Nurse Manager, Clinical Trials Unit, Cancer Services, UHL commented: "New and more effective approaches cannot be developed without cancer trials. All cancer treatments used today were once tested through a cancer trial. Cancer trials allow access to new drugs and treatments and help us increase our knowledge on the best way to deliver these treatments. By taking part in a cancer trial patients help to test new ways to treat cancer. Patients gain access to drugs otherwise unavailable to them," she added.

And Dr. Linda Coate, Consultant Medical Oncologist and Director of the Clinical Trials Unit, Cancer Services, added, "Currently in Cancer Services, UHL, we have 290 patients under our care participating in 35 trials. We act as an Irish referral site for a number of exciting therapeutic trials."

Dr. Coate was recently elected Vice Clinical Lead by the Clinical Executive of Cancer Trials Ireland, and this was a ringing endorsement of her work and that of all the team in UHL, according to UL Hospitals Group CEO Colette Cowan.

"I want to congratulate Dr. Coate on her election, which is a real coup for all of us at UL Hospitals Group. We are delighted to see the Cancer Clinical Trials Unit move into their new home and that they now have extra research nurses and administrative staff to assist in their important work. The incidence of cancer in Ireland will increase significantly in the coming years. And while treatments and survival rates are improving, there is still so much we don't understand about this disease. I am delighted that UHL is playing and will continue to play its part in the international effort to understand it better," said Ms Cowan.



National Institute of Health Sciences

St. Camillus' Hospital, Shelbourne Road, Limerick

T: 061-483975 W: www.hse.ie/go/nihis