



Research
Bulletin



Volume 1
Issue 4



ISSN: 1649-0681

2002 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 2002

Published by Designers Ink, Limerick

If you wish to contribute to future editions of the National Institute of Health Sciences Research Bulletin, please contact:



National Institute of Health Sciences

St. Camillus' Hospital

Shelbourne Road

Limerick

Tel: 061-483975

Fax: 061-483974

e-mail: info@nihs.ie

web: www.nihs.ie

Foreword vi

Editorial vii

Medical

Testicular Microlithiasis: Experience in the Mid-West Region 1

Sundram, F., Kiely, P.

Diagnostic criteria used to assess ADHD / hyperkinetic disorder in Ireland 3

Houghton, F., Kelleher, K.

Orthostatic tolerance in older patients with vitamin B12 deficiency before and after vitamin B12 replacement 4

Watts, M., Moore, A., Ryan, J., Pillay, I., Clinch, D., Lyons, D.

Surgical

Chronic Sclerosing Oseteomyelitis - The importance of clinical, radiographic and pathological correlation 6

Coyle, M., Barry, C., O'Regan, E., Toner, M., Kearns, G.

Lasers in Ear, Nose and Throat / Head and Neck Surgery 7

Fenton, J.E., Ahmed, I., Ullah, I.

The Role of the Case Report in Ear, Nose, Throat, Head and Neck Surgery 8

Khoo, S.G., Ahmed, I., Ullah, I., Shaikh, M., Fenton, J.E.

A Review of Ankle Injuries in Mid-Western Health Board over a five year period. 9

Ali, S.M., Burke, T.

Nursing

Guidelines for the use of cot sides 10

O'Brien, M., Ryan, N., Ryan, C.

Student Nurses' experience of caring for infectious patients in source isolation 12

Cassidy, I.

Public Health

The Exposure Fallacy: Mobility & Ecological Analysis of Health Status in Ireland 13

Houghton, F., Kelleher, K.

Residence coding in the Hospital In-Patient Enquiry (HIPE) system: worse than anticipated 14

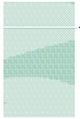
Houghton, F., Kelleher, K.

The use of the Child Health Questionnaire (CHQ-CF87) in rural Ireland 15

Houghton, F., Gleeson, M., Kelleher, K.

The use of primary / national school absenteeism as a proxy retrospective child health status measure 16

Houghton, F., Gleeson, M., Kelleher, K.

**The Askeaton Investigation and the failure of Irish Health Information Systems**17*Houghton, F., Gleeson, M., Kelleher, K.***Smallpox in Ireland: A historical note with possible relevance for the future**18*Houghton, F., Kelleher, K.*

Mental Health

Examining the effectiveness of the introduction of a screening questionnaire and training for domestic violence into an adult mental health service19*McInerney, S., Dunne, B., Kilcommins, M.*

Clinical

Oral fluid resuscitation at the scene of an accident22*Ali, S.M., Selvaraj, Kelly, P., Healy, J.B., Burke, T.***Use of Receiver Operating Characteristic (R.O.C.) in summarising the overall accuracy of a Violent Risk Assessment Guide (V.R.A.G.)**23*Clancy, M.*

Personal and Social Services

Rural transport difficulties: How do elderly patients get to out-patients?25*Farrelly, C., Mughal, R., O'Malley, C.***Using the PPS Number for the Irish Cervical Screening Programme**26*Waldmann, G.*

Dental Services

An economic evaluation of the use of dental hygienists in the fissure sealant programmes of the Mid-Western Health Board: A pilot study31*O'Connor, D.*

Health Research Policy

A Research and Development Strategy for Hillingdon Primary Care Trust (PCT) in North West London33*Townsend, J., Dowie, R., Healy, C.*

Health Promotion

The perception of and compliance to healthy eating strategies by adolescent girls37*Roe, C.***An investigation into the attitudes of young Irish women towards their smoking**40*Kennedy, M.***A study of the perceived attitudes of staff with regard to the appointment of a HPH co-ordinator (HPHC)**41*Gibbons, M.*



Complementary Medicine

An investigation into what motivates women to use alternative or complementary medicine within the context of the conventional health model

42

Dwyer-Costello, A.

Research in Progress

The components of variance and the critical difference in specific markers of bone turnover in healthy adult males and postmenopausal women

44

Carroll, P., Hunter, A., Barry, D., Barrett, E., Loughnane, M., Donnelly, R., Murphy, N., Jakeman, P.M.

An exploration of Aggression and Violence experienced by Nurses in Mental Health Care Practice in Ireland

46

Ryan, D.

Extracorporeal shock wave therapy for treatment of Plantar fasciitis

47

Dastgir, N., Healy, C., Mordan, D., Burke, T.E., D'Sauza, L.

Foreword

This edition of the National Institute of Health Sciences Research Bulletin is a further indicator of the commitment of healthcare professionals in the Mid-West Region to participation in both the creation and expansion of the Health Sciences knowledge base.

I gratefully acknowledge the ready response and assistance of all contributors to this edition of the National Institute of Health Sciences Research Bulletin. Your contribution to the knowledge base for healthcare in the Mid-West region deserves much recognition and commendation. I also wish to thank our editorial team, Professor Pierce Grace, Mr John Fenton, Mr Pat Brosnan and Mr Aidan Hickey for the significant contribution they have made to this publication.

Stiofán de Búrca,

Príomh Oifigeach Feidhmeacháin

This publication of the research bulletin coincides with the imminent formal declaration of partnership and collaboration between the Mid-Western Health Board and University of Limerick. This partnership will manifest itself through the National Institute of Health Sciences.

This is a significant development for the Mid-West region and brings together two knowledge-based, learning organisations with the primary objective of developing an explicit common agenda in which educational endeavours, research strategies, information resource services and clinical practice are effectively linked to ultimately improve patient care.

It is well recognised that divergent objectives of the academic and clinical practice arenas have traditionally led to the de-coupling of research and practice. Recognising unity of purpose, coupled with facilitating the crossing of organisational boundaries, will serve to develop an effective and mutually beneficial partnership.

In recent years, University of Limerick has been developing its activities in the field of Health Sciences. This progress received considerable impetus earlier this year with the awarding by the Department of Education of both undergraduate and postgraduate Clinical Therapy programs to the University. This achievement subsequently led to the more recent creation of a School of Health Sciences at University of Limerick. The School of Health Sciences is currently focusing on the delivery of undergraduate programs in Physiotherapy and Nursing, and postgraduate programs in Speech & Language Therapy and Occupational Therapy.

The imminent partnership will also lead to the involvement of University of Limerick in future publications of the research bulletin, both at a contributor and editorial level. I look forward to working closely with colleagues at the University as we endeavour to broaden the scope and strengthen the recognition of the bulletin.

Aidan J. Hickey

Director

National Institute of Health Sciences

Title

Testicular Microlithiasis: Experience in the Mid-Western Region

Authors

*Sundram, F., Kiely, P.
Departments of Medical Oncology and Radiology, Mid-Western Regional Hospital, Limerick*

Introduction

There is a reported strong association between testicular germ cell neoplasia and testicular microlithiasis. In addition, patients with contralateral testicular microlithiasis at diagnosis have an increased risk of developing a second or subsequent germ cell tumour.¹ Identification of contralateral testicular microlithiasis in patients with testicular germ cell tumours at presentation and surveillance of this patient group aids early diagnosis of a second testicular malignancy.

Objective

The aim of this study is to determine the incidence of testicular microlithiasis in patients who presented over a five year period to our institution with unilateral testicular germ cell tumour, and to identify patients at risk of a second or subsequent testicular germ cell tumour.

Methodology

Patients with a diagnosis of testicular germ cell tumour (GCT) presenting at our institution over a five year period were retrospectively identified using the hospital inpatient enquiry (HIPE) system. Testicular ultrasounds at presentation were reviewed, and the presence of contralateral testicular microlithiasis (TM) noted. The number of patients on surveillance was noted and the incidence of second / subsequent germ cell tumour was evaluated.

Results

Of 30 patients presenting with testicular germ cell tumours, 22 ultrasound examinations were available for review. 4 (18.2%) had contralateral testicular microlithiasis. 2 of these 4 patients (9.1%) developed a second (contralateral) testicular tumour within two years of initial diagnosis.

Conclusion

Results emphasise the important association between testicular germ cell neoplasia and testicular microlithiasis. In particular, patients with GCT and contralateral testicular microlithiasis at diagnosis have an increased risk of developing a second or subsequent germ cell tumour. Biopsy of the contralateral testis at presentation or close clinical, ultrasound (US) and serum tumour marker follow-up is recommended in these patients.

Introduction

Testicular microlithiasis is a relatively rare entity, reported to be present on approximately 0.6% of testicular US examinations.² However in another series of approximately 528 patients the incidence was found to be 9%.³ Microliths appear as tiny punctate echogenic foci with US, which typically do not shadow. Histologically, they represent scattered laminated calcium deposits in the lumina of the seminiferous tubules. TM is associated with intratubular germ cell neoplasia (IGCN) formerly known as carcinoma in situ. The prevalence of primary GCT in patients with TM can be as high as 40%. The reported high association between TM and testicular GCT raises the possibility that patients with TM are at a greater risk of developing a second or subsequent contralateral testicular GCT. Given this risk, most centres recommend that patients with TM undergo regular follow-up with a physical examination, US and serum tumour marker testing at least annually.⁴ Other authorities believe that biopsy of the contralateral testis with TM at presentation is appropriate. Moreover, as TM is readily identifiable on US examination it can be easily followed for surveillance.

Methodology

A retrospective search of patients with a diagnosis of testicular GCT over the 5 years from 1997 to 2002 in the Mid-Western Region was undertaken using the hospital inpatient enquiry (HIPE) system. Thirty patients were identified, of whom 28 had orchidectomies of the relevant testis, 2 patients had testicular maldescent, in whom abdominal biopsy proved the diagnosis. 22 available US examinations were reviewed to confirm the findings of TM.

Results

22 patients had a testicular US examination at the Mid-Western Regional Hospital, 6 had ultrasound exams at other centres. The 22 ultrasound exams were reviewed to confirm findings of TM. 4 of 22 available ultrasound exams demonstrated TM in the contralateral testis. 2 of these 4 patients developed a contralateral GCT.

Discussion

Patients with TM can be assigned to three groups.⁵ The first group includes patients who initially undergo US (usually for a palpable mass) and who are found to have a testicular tumour and incidentally detected TM in the ipsilateral testis. The presence of ipsilateral TM has no effect on their care as they usually undergo a radical orchidectomy. The second group includes those who have evidence of a unilateral testicular tumour and TM in the contralateral testis at initial US examination. These patients are at an increased risk for developing tumours in the contralateral testis. There appears to be a link between IGCN and TM and IGCN progresses to invasive testicular tumours at a rate of 50% within five years.⁶ Therefore, it is reasonable to follow up these patients with regular physical examination, US and serum tumour markers. The third group of patients are those who undergo US and are found to have TM in one or both testis but no evidence of a testicular tumour. There is also a high risk of these patients developing testicular tumours but not as high as compared to the second group of patients. These patients are usually followed up with six monthly US examinations.

Other conditions that have been associated with TM include testicular atrophy, Klinefelter syndrome, infertility, testicular maldescent and pseudohermaphroditism. However, patients with testicular maldescent, infertility and atrophy⁷ also have an increased risk for testicular GCT independent of their association with TM.

Controversy still exists over the management of patients with TM and of those with high risk of developing GCT. A high incidence of IGCN (35%) is found in young patients (less than 30 years of age) where the contralateral testis is atrophic (less than 16 ml in volume) and these patients constitute a high risk group whom it is appropriate to recommend biopsy at initial presentation.⁸ Other authorities recommend annual US follow up with careful regular self examination and annual physical examination by a physician plus serum tumour marker testing.

References

1. Patel MD, Olcott EW, Kerschmann RL et al. Sonographically detected testicular microlithiasis and testicular carcinoma. *J Clin Ultrasound* 1993 ; 21 : 447-452
2. Hobarth K, Sustain M, Szabo N et al. Incidence of testicular microlithiasis. *Uroradiology* 1992 ; 40 : 464-467
3. Bach AM, Hann LE, Hadar O et al. Testicular microlithiasis. What is its association with testicular cancer? *Radiology* 2001 ; 220(1) :70-75
4. McEniff N, Katz J, Foster SC et al. Optimal assessment and follow-up of patients with testicular microlithiasis (abstr). Presented at the 95th Annual Meeting of the American Roentgen Ray Society, Washington DC, April 30-May 5, 1995
5. Bennett HF, Middleton WD, Bullock AD et al. Testicular microlithiasis : US follow-up. *Radiology* 2001 ; 218 : 359-363
6. von der Maase H, Rorth M, Walbom-Jorgensen S et al. Carcinoma in situ of contralateral testis in patients with testicular germ cell cancer : study of 27 cases in 500 patients. *Br Med J (Clin Res Ed)* 1986 ; 293 : 1398-1401
7. Skakkebaek NE, Berthelsen JG, Mueller J. Carcinoma in situ of the undescended testis. *Urol Clin North Am* 1982; 9: 377-385
8. The Royal College of Radiologists' Clinical Oncology Information Network in partnership with Scottish Intercollegiate Guidelines Network. Guidelines on the management of adult testicular germ cell tumours. 2001

Diagnostic criteria used to assess ADHD / hyperkinetic disorder in Ireland

*Houghton, F., Kelleher, K.
Department of Public Health, Mid-Western Health Board, Limerick*

Introduction and Rationale

The diagnosis of ADD / ADHD, or Hyperkinetic Disorder remains extremely controversial among health professionals, parents, the media, and the public at large. The diagnostic criteria used to assess this disorder remain crucial as the two dominant diagnostic criteria yield substantially different prevalence rates which may influence access to treatment.

Methodology

Using a list of all non-retired Consultant Psychiatrists in-post obtained from the Department of Health & Children, a short questionnaire, covering letter and SAE was posted to each Consultant Psychiatrist. Three postal reminders (and a duplicate questionnaire) were also sent. The survey response rate was 70 percent (n=26).

In response to a question asking what criteria respondents used to diagnose this disorder, 42 percent of respondents mentioned using both the ICD and the DSM classification schemas. A further 27 percent of respondents mentioned the ICD classification scheme, but did not mention the DSM schema. 23 percent of respondents mentioned DSM criteria, without mentioning the ICD schema. 8 percent of respondents mentioned neither the DSM nor ICD schedules. A substantial number of respondents also mentioned using clinical histories / interviews, as well as diagnostic schemas.

Results

The results indicate that substantial differences of opinion exist among Consultant Psychiatrists concerning the diagnostic schema used to assess ADHD / Hyperkinetic Disorder.

Conclusion

It is probable that such diagnostic differences influence access to both behavioural interventions and pharmaceutical treatments. Such differences would appear to raise important questions about equal access to diagnosis and treatment across the patient population.

Published

As "Diagnostic criteria used to assess ADHD / hyperkinetic disorder" in *Irish Journal of Psychological Medicine*, 18(4): 142-3, 2001.

Orthostatic tolerance in older patients with vitamin B12 deficiency before and after vitamin B12 replacement

Watts, M., Moore, A., Ryan, J., Pillay, I., Clinch, D., Lyons, D.
Clinical Age Assessment Unit, Mid-Western Regional Hospital, Limerick

Introduction and Rationale

Orthostatic hypotension is a common disorder in older patients. There are several recognized causes. Recently several case series have reported an association between vitamin B12 deficiency and orthostatic hypotension. In addition, a recent case control study indicated that patients with vitamin B12 deficiency had responses to head up tilt consistent with autonomic dysfunction. The effect of replacing vitamin B12 on autonomic dysfunction in these patients has not been studied.

Objective

The aim of this study was to determine if vitamin B12 deficiency is a reversible cause of orthostatic hypotension in older patients.

Methodology

We therefore prospectively studied responses to head up tilt in patients over 70 years with established vitamin B12 deficiency (intervention group) and compared their responses after replacement with a matched control group. Blood pressure, heart rate and systemic vascular resistance changes during orthostatic stress were evaluated using digital artery photoplethysmography. 8 patients and 8 controls were studied. Head up tilt on a hydraulic tilt table was used to provide orthostatic stress.

Initial head up tilt produced a mean blood pressure (BP) decrease of 44/29mmHg (s.e.m. 4/4mmHg) in the intervention group and 33/12mmHg (s.e.m. 3/2mmHg) in the control group. Repeat head up tilt after vitamin B12 replacement produced a mean BP decrease of 15/9mmHg (s.e.m. 5/2mmHg) in the intervention group. The mean decrease in the control group was 30/12mmHg (s.e.m. 2/2mmHg). The difference in SBP decreases between the intervention and control groups was statistically significant (ANOVA p value).

Mean systemic vascular resistance (SVR) in the intervention group decreased by 658 dynes/cm⁵/sec (s.e.m. 74 dynes/cm⁵/sec) during initial head up tilt. Mean SVR during repeat head up tilt decreased by 79 dynes/cm⁵/sec (s.e.m. 12 dynes/cm⁵/sec). Mean SVR in the control group decreased by 158 dynes/cm⁵/sec (s.e.m. 10 dynes/cm⁵/sec) during initial head up tilt and by 258 dynes/cm⁵/sec (s.e.m. 31 dynes/cm⁵/sec). This result was statistically significant (ANOVA p value).

Conclusion

We conclude that vitamin B12 repletion in deficient older patients is associated with improved orthostatic tolerance to head up tilt and that vitamin B12 deficiency should be screened for in older patients with orthostatic hypotension.

Table 1: Baseline Haematological Parameters.

| | Intervention Group | Control Group |
|-----------------------|---------------------------|----------------------|
| Mean Haemoglobin | 12.1 | 13.2 |
| Concentration (g/dl) | 95% CI 10.4, 13.6 | 95% CI 10.8, 15.6 |
| Mean MCV (fl) | 93 | 89 |
| | 95% CI 83,103 | 95% CI 85, 93 |
| Mean Vitamin B12 | 114 | 326 |
| Concentration (pg/ml) | 95% CI 76, 162 | 95% CI 243, 409 |

Fig 1. Mean Delta SBP

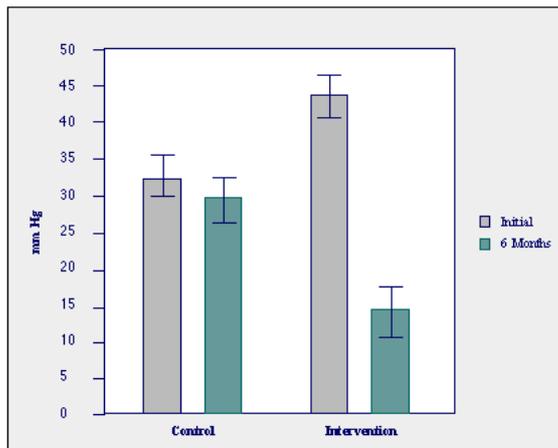


Fig 2. Mean Delta DBP

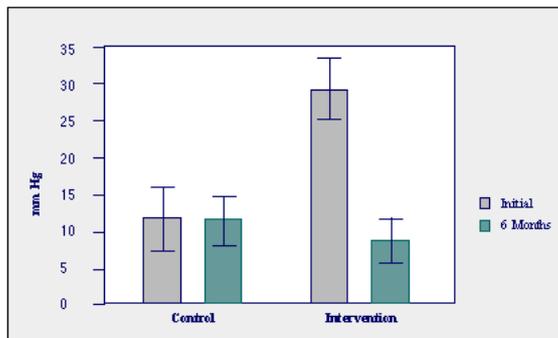
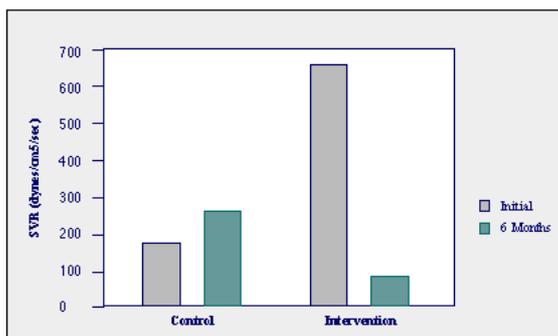


Fig 3. Mean Delta SVR



Chronic Sclerosing Osteomyelitis - the importance of clinical, radiographic and pathological correlation

Coyle, M.,¹ Barry, C.,¹ O'Regan, E.,² Toner, M.,² Kearns, G.¹.
Department of Oral and Maxillofacial Surgery, Mid-Western Regional Hospital, Limerick¹
Central Histopathology Laboratory, St. James' Hospital, Dublin²

Introduction

Chronic Sclerosing Osteomyelitis (CSO) is a rare low-grade inflammatory condition of bone and bone marrow which may affect the jaws. The condition has clinical, radiographic and histological features in common with other fibro-osseous diseases and may be difficult to distinguish from these conditions. CSO shows a predilection for younger females. Patients present with intermittent mandibular pain, facial swelling and occasional parasthesia. Radiographic appearances are of diffuse, ill defined mixed radiolucent / opaque lesions. Microscopically, CSO exhibits areas of both osteoblastic and osteoclastic activity along with bony trabeculae, marrow fibrosis and scanty foci of chronic inflammatory cells. This appearance is very similar to other fibro-osseous lesions; however bacterial cultures may be isolated from CSO specimens.

Methodology

We report three female patients with CSO. The mean age was 10.6 years (range 10-12 years). All patients presented with spontaneous intermittent facial swelling, pain and erythema. Plain radiographic and CT scan examination confirmed areas of mixed radiodensity. Histology confirmed the presence of chronic inflammatory cells, osteoblastic activity and marrow fibrosis. Microbiology cultures were negative for two patients and bacteroides species were cultured from the third. Patients experienced resolution of symptoms following administration of a combination of a broad spectrum and anaerobic antimicrobial agents. The symptoms however were recurrent requiring multiple courses of treatment. The diagnosis of CSO was made based on a clinical pathological correlation and on the successful management with antimicrobials.

Conclusions

The diagnosis of CSO is difficult requiring clinical pathological correlation and close follow up with repeated biopsy and culture as necessary.

Presented

At the British Society Oral and Maxillofacial Pathology Poster Presentation in Dublin during September 2002 by Maragaret Coyle.

Lasers in Ear Nose and Throat / Head and Neck Surgery*Fenton, J.E., Ahmed, I., Ullah, I.**Departments of Ear, Nose and Throat and Head and Neck Surgery, Mid-Western Regional Hospital, Limerick*

Introduction and Rationale

There is an extensive and ever-increasing use of lasers in a number of clinical disciplines. The issues surrounding safe and effective use of lasers are complex. Best practice in laser safety in a hospital environment dictates that medical, nursing and relevant paramedical staff should attend regular updates on the use of lasers in surgery.

Objective

The aim of this paper was to present an appropriate overview of laser surgery in ENT / HNS to an applicable audience.

Methodology

Literature Review

Results

The use of lasers has benefited ENT / HNS primarily because of the improved surgical precision, gentle tissue interaction and coagulative properties that are proffered in operating fields that are often confined, remote and precarious. All forms of laser can be utilised in our specialty and the choice of laser is dependent on the desired properties in individual cases including; the appropriate wavelength, tissue interaction, optimum delivery system, aim accuracy, surgical precision, safe tissue penetration, vessel size and availability. Complications of laser surgery are not rare and are classified as patient or operating theatre staff-related and the risk of injury does not diminish with increased experience.

Conclusion

The literature indicates that despite the increased use of lasers in surgery that basic and adequate laser safety practice is not being adhered to and that there is a compelling requirement for formal laser safety training for all hospital staff involved in this form of surgery.

Presented

At "Laser in Surgery Safety" course at the Mid-Western Regional Hospital, Dooradoyle, Limerick in February 2002.

The role of the case report in ear, nose, throat, head and neck surgery

Khoo, S.G., Ahmed, I., Ullah, I., Shaikh, M., Fenton, J.E.
Departments of Otolaryngology and Head and Neck Surgery, Mid-Western Regional Hospital, Limerick
and National Institute of Health Sciences, Limerick

Introduction

Although it is well accepted that the case report is a valuable research and educational resource it has been described as one of the most misunderstood forms of medical communication. Abuse of this form of publication has resulted in the elimination or downgrading of this method of composition in the majority of medical journals. The objective of this study was to present an appraisal of the case report in the ear, nose, throat, head and neck surgical literature.

Methodology

All articles containing reports on a single patient in the Journal of Laryngology and Otology during 2000 were identified and assessed. Data on authorship numbers and origin, pertinence of the associated abstract, length of article, subject matter and uniqueness or relevance of the report to clinical practice, and bibliographic extent were recorded.

Results

One hundred and fifteen papers from 12 different countries were realized. The authorship numbers ranged from 1-11 and the range of article length was from 1- 4 pages. 115 articles had associated abstracts of which 39 were considered to be appropriate summaries of the relevant paper. There were 32 publications involving the unique occurrence and 13% of articles were deemed to be of sufficient consequence to impact on patient management and therefore to warrant publication. The range of references was 2-28 citations.

Conclusions

Case reports in ear, nose, throat, head and neck surgical literature have a considerable number of associated authors, require more attention to the relevant abstract and in general afford an influential contribution on clinical practice.

Presented

Irish Otolaryngological Society, Newcastle, Co Down during October 2002 by S.G. Khoo

A Review of Ankle Injuries in Mid-Western Health Board over a five year period.

Ali, S.M., Burke, T.
Mid-Western Regional Orthopaedic Hospital, Croom, Co. Limerick

Objective

The objective of this review is to examine the increased workload in an orthopaedic trauma unit due to the occurrence of ankle injuries.

Introduction

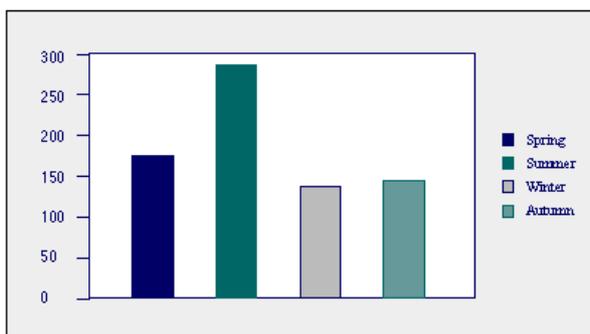
A review over a five-year period shows that 8.5 % of all orthopaedic trauma admissions were as a result of ankle injuries. The majority of these injuries occurred over the summer months.

Methodology

A review of ankle injuries admitted to the Mid-Western Health Board was performed from 1997-2001. We compared the male and female patients, ages, seasonal occurrence of injury, type of injuries, average days spent in hospital and demographic distribution of injuries in the population of the Mid Western Health Board.

Analysis and Results

745 patients were admitted with ankle injuries. 217 patients (30%) were from County Clare, 204 (27%) from County Limerick, 189 (25%) from Limerick City and 72 (12%) from elsewhere. 432 (58%) were male and 313 (42%) were female. The average age of the patient was 39 years and average hospital stay was 3.3 days. 16 injuries (2%) were open while 729 (98%) were closed. Open reduction and internal fixation was performed on 527 patients (77%) while 148 (20%) required closed reduction. 14 patients (2%) required external fixator. Most injuries occurred during the summer (n=288, 38%) and at Easter (n=124, 17%).



Conclusion

This review shows that the ankle injuries are very common, accounting for 8.5% of all admissions to the orthopaedic trauma unit in last five years. 77% of the patients were treated with open reduction and internal fixation. 38% of injuries occurred in summer time and 17% at Easter. Average length of stay in hospital was 3.3 days.

Guidelines for the use of cot sides

O'Brien, M., Ryan, N., Ryan, C.
Mid-Western Health Board, St. Camillus' Hospital, Limerick

Introduction

The purpose of this study was to establish guidelines for the use of cot sides within a hospital setting. In order to do this the Nurses were asked their opinion of the use of cot sides / bed tables and plastic chair trays as restraints. For patients who had cot sides *in situ*, the reasons for the use of same was assessed. The study was also to create an awareness of the use of cot sides and to address whether there is a need for same.

A Physical Restraint may be defined as any manual, physical or mechanical device that restricts freedom of movement or normal access to one's body, material or equipment and cannot be easily removed. The device may be intended for other primary purposes, but when used for its restraining effect, serves as a restraint. Examples of these devices include geriatric chairs, side rails and supportive devices.

Methodology

The research is both quantitative and qualitative. It consisted of two questionnaires, one for the Nurses and one for the Patients.

The Nurses were asked to answer three questions as follows:

- (1) Their opinion about the use of cot sides / bed tables and plastic chair trays as restraints.
- (2) The tools used to assess Patients need for cot sides.
- (3) Their opinion about whether it is necessary to obtain consent from the patient or their family or either party.

The number of nurses who participated in the study were those who worked on day or night duty over a three week period.

The Patients' questionnaire consisted of yes or no in answer to the following questions:

- History of falls
- History of stroke
- Agitated
- Cognitive impairment
- On sedation.

Total number of patients = 71 (44 female and 27 male).

The use of bed tables and any other form of restraint was included in the survey.

Results

The survey was carried out on 71 Patients at random from all wards in St Camillus' Hospital. (44 Female and 27 Male)

- | | |
|-----------------------------|----|
| • Cot sides <i>in situ</i> | 55 |
| • Hx of Falls | 46 |
| • Hx of Stroke | 26 |
| • Hx of Agitation | 37 |
| • Cognitively impaired | 42 |
| • On sedation | 46 |
| • 1 Cot side <i>in situ</i> | 2 |
| • Ebba chair straps | 6 |

- Cot sides because patient visually impaired 2
- Own request that cot sides be used 13
- 2 bed tables at end of bed 1

Respite: 6 had cot sides *in situ* during hospital stay.

Of the above 6, 1 had double beds at home, 1 had cot sides at home.

Feedback from the nurses in St Camillus' Hospital

One should take into account the following:

- (1) Reason for the use of cot sides
- (2) Change of environment
- (3) Higher bed / single bed
- (4) Pressure relieving mattress
- (5) Patients request - "FEEL SAFE"
 - Assessment - cognitive impairment / MTS
 - Insight / safety awareness
 - Ability to recognise hazards or potential hazards
 - Higher dependency levels of patients in relation to staffing levels should be taken into account.
 - Liaise with patient and family re-use of cot sides.
 - Professional judgment.
 - Medication / sedation should be taken into account.
 - Consent form - mixed reaction whether verbal or written consent was necessary.

Recommendations

- (1) Assessment of the patient on admission to each ward:-
 - Tools used:-
 - Clinical observations.
 - Roper, Logan, Tierney-Activities of daily Living.
 - M.M.S.E. / MTS.
 - Bartel / Frase.
 - Clifton Assessment Scale for the Elderly (Old Age Psychiatry).
 - Collateral history from family.
 - Medication.
- (2) Documentation:- Nursing Care Plan / Medical / Psychiatric notes.
- (3) Consent Form to be signed if cot sides necessary:-
 - By (a) Patient if *compus mentis*.
 - (b) If not: - signed by next of kin + Nurse + Doctor.
- (4) Nurse to assess patient every 24 hrs.
- (5) Patient safety, rights and dignity should be taken account.
- (6) Assessments and reassessments.
- (7) Documentation re reason for restraint and type i.e. cot sides.
- (8) Patient Plan of Care.
- (9) Patient / Family education re risk of injury / Falls.

Conclusion

Research from America, Ireland and England suggests that over use of cot sides has led to unnecessary injuries and warrants the need for continuous assessment and written consent, education of family members, a discussion with members of the multidisciplinary team and most importantly documentation of the above in each patient's care plan. (Mitchell, Herman et al 1999).

Student Nurses' experience of caring for infectious patients in source isolation.

Cassidy, I.
School of Nursing, Mid-Western Regional Hospital, Limerick

Introduction

Caring for infectious patients in isolation poses not only opportunities for learning but also many challenges for nursing practice and the nurse patient relationship. To contribute to the preparation of student nurses for caring roles and ultimately registration as a general nurse, it is important to illuminate the issues central to their experiences of caring for isolated patients within the general hospital environment.

Objectives

Through methods grounded in the hermeneutic phenomenological approach the purpose of this study is to illuminate second year student nurses' experience of caring for infectious patients in source isolation within the general hospital setting. "Caring" in this research may relate to the physical, psychological, social and / or spiritual aspects of caring from the lived experience of the student nurse.

Methodology

Eight student nurses in their second year of the undergraduate programme in general nursing were interviewed using an un-structured, open-ended and face-to-face interview approach to data collection. The thematic data analysis framework used within this research, allowed the researcher to become a co-participant within analysis and facilitated the process of understanding student nurses' experience of caring for infectious patients in source isolation.

Results

Four themes emerged from the study.

These included:

- The Organisation: Caring in Context
- The Barriers and Breaking the Barriers
- Theory & Practice
- Only a Student.

Findings from this study provided insight into student nurses' experiences of caring for infectious patients. Caring for infectious patients in source isolation is influenced by the context within which such caring is provided. The caring experience and the student nurse-patient relationship are dramatically altered by virtue of the uniqueness of the imposed physical, psychological, social and emotional barriers of isolation. Students were conscious of the "barriers" of isolation and the significance of "breaking the barriers" within their nursing care.

Conclusion

Balancing the care of isolated patients to meet their individual needs, while preventing the spread of infection has significant meaning for students and explicates the challenges of integrating the art and science of nursing. Finally, the application of theory to practice is vital for the personal and professional development of the student nurse and needs to be recognised and nurtured within the clinical area.

The Exposure Fallacy: Migration, Mobility & Ecological Analysis of Health Status in Ireland*Houghton, F.,¹ Kelleher, K.²**Department of Geography, NUI, Maynooth & Department of Public Health, Mid-Western Health Board, Limerick ¹**Department of Public Health, Mid-Western Health Board, Limerick ²*

Rationale

The problem of differential rates of exposure within areas resulting from spatially inconsistent rates of migration and mobility is largely ignored in ecological health analysis. This error may be termed the “exposure fallacy”.

Objectives

This paper quantifies population mobility and migration in Ireland using a variety of Census measures.

Results

The results indicate that there is not only substantial residential mobility in Ireland, but that the nature and extent of this mobility differs significantly across areas. For example in 1996 more 250,000 people were not living in the same residence they had occupied 12 months previously. The viability of ecological analysis is therefore questioned. As anticipated the most mobile groups are young adults aged 20-35 years, and most residential moves were of a local nature. The error associated with the exposure fallacy may be partially reduced if analysis is conducted at County level and if young adults are excluded. The development of an area based mobility index for Ireland is also proposed for use in weighted least squares regression analysis. However significant problems remain despite these precautions.

Conclusion

The adoption of a Finnish style centralised population and housing register is proposed, as is the introduction of a unique identifier for all individuals within the State.

Residence coding in the Hospital In-Patient Enquiry (HIPE) system: worse than anticipated*Houghton, F.,¹ Kelleher, K.²**Department of Geography, NUI, Maynooth & Department of Public Health, Mid-Western Health Board, Limerick ¹**Department of Public Health, Mid-Western Health Board, Limerick ²*

Introduction and Methodology

Analysis was conducted of the patient residence geocoding of all E-code (external cause) discharges on the Hospital In-Patient Enquiry system for the calendar year 1996 from Limerick's two acute hospitals (one public, one private).

Results

The results indicate a substantial level of error, even at County and County Borough level. 21% of the 1383 patients attributed to Limerick County Borough were wrongly assigned to this area. Only marginal differences were reported between the public and private hospitals, with the private hospital managing a slightly higher accuracy rate.

Conclusion

The implications of this finding are significant for any analysis of spatial patterns of health care use. Particular care needs to be taken in relation to HIPE patient residence coding relating to any of the County Boroughs in Ireland. A software geocoding engine urgently needs to be introduced into the HIPE system capable of geocoding patient addresses at least to District Electoral Division (DED) / Ward level, and ideally to point location.

Published

As "Residence coding in the Hospital In-Patient Enquiry (HIPE) system: significantly worse than anticipated" *in Irish Geography*, 35(1): 95-98, 2002.

The use of the Child Health Questionnaire (CHQ-CF87) in a rural Irish context

Houghton, F.¹, Gleeson, M.², Kelleher, K.¹
Department of Public Health, Mid-Western Health Board, Limerick ¹
Tipperary Institute ²

Introduction

Re-analysis of 815 Child Health Questionnaires (CHQ-CF87) originally collected from secondary school children in the Mid-Western Health Board as part of an environmental pollution investigation has produced normative data for this questionnaire in a rural Irish context.

Conclusion

Analysis supports the use of the CHQ-CF87 in an Irish population. Given significant differences detected between the Irish sample examined here and reports from two other developed Western Countries, it is recommended that Irish norms be used for comparison purposes in future research. As noted elsewhere in the literature, subscale results generally showed a significant decrease with age. In addition results for females were generally lower than those for males.

To Be Published

As “The use of the Child Health Questionnaire (CHQ-CF87) in a rural Irish context” in the *Irish Journal of Psychology*, (Pre-print available).

Title

The use of primary / national school absenteeism as a proxy retrospective child health status measure in an environmental pollution investigation

Authors

*Houghton, F., Gleeson, M., Kelleher, K.
Department of Public Health, Mid-Western Health Board, Limerick*

Introduction and Rationale

As a result of community concerns over animal and human ill-health centred around a rural town in the Republic of Ireland, a series of epidemiological studies were conducted. The absence of adequate health information systems forced researchers to investigate alternative methods of assessing child health in the "at risk" area.

Methodology

This study aimed to examine primary / national school yearly attendance data over a ten-year period as a proxy health status measure. Data from six geographical areas was analysed, one of which was designated the "high-risk" area on the basis of reports of animal ill-health.

Results

Significantly higher absenteeism rates were noted in the "high risk" in nine of the ten years examined.

Conclusion

Although caution is urged in the interpretation of these results, this study demonstrates that primary / national school absenteeism data can act as a useful, albeit crude, proxy measure of health status.

Title

The Askeaton Investigation and the failure of Irish health information systems

Authors

*Houghton, F., Gleeson, M., Kelleher, K.
Department of Public Health, Mid-Western Health Board, Limerick*

Introduction and Rationale

A recent pollution investigation carried out by the Mid-Western Health Board (MWHB) in the Askeaton area of County Limerick highlighted the almost total failure of Irish health information systems to respond to any form of in-depth analysis of population health status. This failure proved costly both financially and in terms of the delay that ensued. The inability of the health board to respond to initial concerns over possible negative pollution effects on health allowed fear and concern to spread. As alarm escalated the number of conditions residents felt should be investigated increased.

Methodology

This resulted in the MWHB having to attempt a total of 14 separate studies. Several of these proved unfeasible given the limitations of the computerised health information systems in place. Other studies had to be slowly and painstakingly completed by hand or interview.

Conclusion

The geographical coding of all health information below county level, at least to DED level and ideally to point location is the most basic reform necessary for population health surveillance and investigation.

Smallpox in Ireland: a historical note with possible relevance for the future*Houghton, F.,¹ Kelleher, K.²**Department of Geography, NUI, Maynooth & Department of Public Health, Mid-Western Health Board, Limerick¹**Department of Public Health, Mid-Western Health Board, Limerick²*

Introduction and Rationale

Recent events including the September 11th attacks in the USA and subsequent attacks using anthrax have firmly focused attention on the threat of biological warfare internationally. Ireland has been no exception to this global phenomenon and has already dealt with over 100 “anthrax” scares. However concern about other, more virulent biological threats continues to grow. Smallpox in particular has been highlighted as a potential biological warfare threat, given its high case fatality rate and its highly infectious nature.

Methodology and Conclusion

In this context it is useful to closely examine the Annual Reports of the Registrar General for Ireland from almost a century ago to gain an insight into some of the issues that can be expected to emerge if the smallpox threat ever became real, or in the event of a Government campaign to vaccinate the population.

Published

As “Smallpox in Ireland: an historical note with possible (and unwelcome) relevance for the future” in *Irish Geography*, 35(1): 90-94, 2002.

Examining the Effectiveness of the Introduction of a Screening Questionnaire and Training for Domestic Violence into an Adult Mental Health Service

Mc Inerney, S., Dunne, B., Kilcommins, M.
Clare Mental Health Services, Mid-Western Health Board, Ennis, Co. Clare

Rationale

In recent years, contact between The Clare Mental Health Psychology and Social Work staff, Clare Haven Services, Cork Domestic Violence Project and others highlighted the importance of looking at the needs of women victims of domestic violence presenting to the Mental Health Services. The Irish Task Force Document on Violence Against Women (1997) highlights the need for interagency cooperation and protocol development in the area of domestic violence. In particular, international research notes that standard modes of assessment and treatment in mental health settings fail to detect a history of domestic violence in presenting women. It was agreed that it would be valuable to undertake research and associated training on this aspect in the Clare Mental Health Services. Initially, a pilot project on domestic violence was conducted and it is anticipated that further research in the area will continue.

Objectives

- 1 To increase awareness about domestic violence through training and the introduction of the Screening Questionnaire.
- 2 To investigate whether there is an increase in detection of domestic violence between a six-month pre-training period and a six-month post-training period.
- 3 To examine the usefulness of the Screening Questionnaire for Domestic Violence as part of the assessment process.
- 4 To examine the influence of the training and Screening Questionnaire on factoring in domestic violence information into the diagnosis and care packages.

Introduction

Recent research has highlighted the need for extensive investigation into the area of domestic violence. Bradley et al. (2002) reported in a study of women attending general practitioners that 39% of them had experienced violent behaviour by a partner. There appears to be a doubt over the success of the standard modes of assessment, not only in general practice and casualty departments but also in mental health settings to detect a history of domestic violence in a substantial number of women presenting with various psychological symptoms. To date there appears to have been no research carried out on the effects of introducing standard protocols for screening domestic violence into a mental health setting. There is a concern that patients are being diagnosed with depression, anxiety or substance abuse, for example, while the underlying reason for their presentation to the services is domestic violence. If domestic violence is not part of the diagnosis then in a court case for custody of children, an alternative diagnosis like depression could rule against the mother in such a situation when in fact the court should rule in her favour. When the diagnosis does not reflect the true problem then the treatment given is inadequate and may be inappropriate. Information relating to domestic violence needs to be acknowledged, included as part of the case formulation and then documented as the diagnosis or at least a part of the diagnosis. This research hypothesises that the introduction of training and standardised screening protocols will significantly increase detection of domestic violence in an adult mental health service.

Methodology

This research project had a between group pre-training and post-training design where data was collected from files of patients either admitted to the hospital or patients seen in out-patient clinics during the specified time period. The pre-training period comprised of a six-month period from 1st January 2001 to 30th June 2001 and the post-training period was from the six-month period 20th August 2001 to 20th February 2002. The training days were conducted on the 1st and 2nd August 2001 and time was allowed for the Screening Questionnaires to be placed into files and for staff at the

different day hospitals to familiarise themselves with the questions. The same medical staff were involved with the pre and post training patients so this would not be a confounding variable.

A Research Form was devised so that details of the patients' interview on admission to hospital or to out-patients could be recorded. The Research Form took account of demographic information like marital status, employment status and nationality as well as information like the number of admissions a patient had and diagnosis. Domestic Violence information from case notes was also recorded as one of four options;

- No domestic violence information.
- Domestic violence information but not used in case formulation.
- Domestic violence information and used in case formulation.
- Domestic violence information used in case formulation and followed up.

Training Days

There were two training days organised for staff of the Clare Mental Health Services and they were asked to attend either of the two days.

The aims and objectives of the training were:

- To review participants' perceptions of the issues surrounding domestic violence.
- To explore barriers to disclosure from the patients and clinicians perspective.
- To enhance participant awareness as to the dynamics and effects of domestic violence on victims.
- To set the issue of domestic violence in a power and control context.
- To introduce the proposed research and Screening Questionnaire and the rationale behind them.
- To allow participants to explore and practice skills needed to implement the questionnaire.
- To make participants aware of the ethical issues involved in dealing with disclosure.
- To disseminate relevant and practical information in the form of a resource pack.

Results

Using χ^2 test there was found to be no significant difference between pre-training and post-training detection of domestic violence. In total 20% of pre-training patients (N=128) experienced domestic violence compared to 16% of post-training patients (N=113). This result shows that there were more patients with domestic violence incidence in the pre-training than the post-training periods, though it is not statistically significant.

In the pre-training period 65% of cases had domestic violence information where the information was used as part of case formulation or followed up. In the post-training this figure rose to 83% of cases. This was interpreted as there being an increase in awareness of how to process domestic violence information in the assessment form. Of the pre-training patients who were separated, 50% experienced domestic violence compared to 33% of post-training patients who were separated. These figures are consistent with Clare Haven research which shows that separated women are at increased risk for domestic violence.

Recommendations

- There is a need for screening questions to be included in the Mental Health Assessment Form completed by doctors at time of patient admission. If the assessment is not completed at admission then it should be followed up by the team as part of the on-going assessment procedure.
- There is a necessity for domestic violence information gathered from a patient's history by the admitting doctor to be included in the Case Formulation and followed up on by referring onto another member of the team or to other services if appropriate.
- It is equally important that the history of domestic violence be included in the discharge summary as otherwise the detection of domestic violence may be overlooked or ignored.
- Clear guidelines need to be put in place so that staff can feel confident and comfortable about asking questions and then dealing with information relating to domestic violence.
- There is a need for a policy document on domestic violence to be issued by the health board.
- The important point for staff to remember is that these questions need to be asked and then once information is in the file, other team members may be in a position to deal with the information.

Conclusion

What this study shows is that the issue of domestic violence is a very real and prevalent phenomenon in the Clare Mental Health Services given that up to 20% of female patients in the service have domestic violence issues. This research has highlighted the issue even though the Screening Questionnaire was not as successful as it was anticipated. We do feel however, having consulted with staff that there was an increased awareness about domestic violence and that questions about domestic violence were asked as part of the patient assessment and included in case formulation and followed up.

References

Bradley, F., Smith, M., Long, J., O'Dowd, T. (2002) Reported frequency of domestic violence: cross sectional survey of women attending general practice. British Medical Journal, 324, 271-274.

Other references used available on request.

Presented

To Clare Mental Health Services staff during September 2002 in the Conference Room at St. Joseph's Hospital, Ennis by Brian Dunne, Clinical Psychologist, Martina Kilcommins, Social Worker and Shane Mc Inerney, Research Psychologist.

Title

Oral Fluid Resuscitation at The Scene of an Accident

Authors

*Ali, S.M., Selvaraj, Kelly, P., Healy, J.B., Burke, T.
Mid-Western Regional Orthopaedic Hospital, Croom, Co. Limerick*

Introduction

Pulmonary aspiration of gastric content during anaesthesia is a potential life threatening complication for the trauma patient who is not fasting (approximately 4-6 hours) before undergoing surgery.

Methodology

We carried out a prospective study of 100 patients admitted to trauma orthopaedic unit following different types of musculoskeletal injuries. All patients were evaluated by an assessment form on admission.

Factors evaluated were:

- (1) The time of the last drink or meal before injury.
- (2) Whether they were fasting after injury,
- (3) Data pertaining to their intake of food following injury.

All patients were asked about their awareness of the need to fast prior to anaesthesia and what they understood by the term “fasting”.

Results

The study group was composed of 58 males and 42 females with an average age of 41 years (range 6-86 yrs). At the time of admission 56% of the patients were fasting and 44% were not.

Out of 44 patients that were not fasting 29 (65.9%) ate or drank at the scene of the accident, 8 (18%) in A&E, 3 (6.8%) during transport, and 4 (9%) at home. 32 (73%) drank liquid and 12 (27%) had both solids and liquid.

Conclusion

The tradition of immediate “oral fluid resuscitation” at the scene of an accident still occurs in 32% of accident victims with a further 8% receiving fluids in the A&E department. Both patients and staff need education regarding the importance of fasting following any injury until the need for surgery has been determined as this is the major cause of delay in surgical practice.

Presented

At the 5th Atlantic Orthopaedic Meeting at the National University of Ireland in Galway by Dr. Syed Mohsin Ali on November 9th, 2002.

Title

Use of Receiver Operating Characteristic (R.O.C.) in summarising the overall accuracy of a Violent Risk Assessment Guide. (V.R.A.G.)

Authors

*Clancy, M.
Department of Acute Psychiatry, Ennis General Hospital, Mid-Western Health Board, Ennis, Co. Clare*

Objective

This article describes the accuracy of a Violent Risk Assessment Guide (V.R.A.G.) by computing receiver operating characteristic (R.O.C.) curves for this actuarial instrument.

Introduction and Methodology

In the present study the accuracy of a V.R.A.G. was outlined by computing the R.O.C. Traditional measures of predictive accuracy were derived from such indices as false positives and false negatives. R.O.C. describes accuracy with indices of performances that are less dependent on the base rate of the variable studied.

The Population

The sample was the total population (n=52) of patients hospitalised during a one-month period, in a locked, rural, short-term psychiatric unit. Subjects included both male and female, sixteen years and older from consecutive admissions, both voluntary and involuntary admitted over the study period.

Background to the Violent Risk Assessment Guide (V.R.A.G)

Webster et al. (1994) provided a data-backed scheme for predicting violent behaviour in high-risk men over the long term. The authors' study employed data gathered over many years.

Webster et al. (1994) indicated the need to apply the V.R.A.G. to other populations without prior violence, or at least, without the extent of seriousness that the data for the scale was determined. The population studied in this research are such a population. The main data on which the V.R.A.G. was based came from criminal offenders with a past violent history. The authors also acknowledge that the instrument has not been tested among females.

The selected variables numbers 50 and reflected existing support either in the prediction of violence or criminal behaviour generally. Variables were also related to rehospitalization. Finally, variables were also included which were considered important e.g. expression of remorse. The list of variables reflected the following categories: sociodemographic information (e.g. socio-economic status, age, marital status, educational level, employment history); childhood problems (e.g. D.S.M. - 111 conduct disorder items, whether the offenders biological family remained together until he was 16, criminal history of his parents and brothers and sisters, national school maladjustment and childhood aggression); adult adjustment (psychiatric history, criminal record, living situation, alcohol use, social support and rating of adult aggressiveness); characteristics of the present offence (e.g. relationship to the victim, injury, weapon use, sex of the victim, motive); and psychological assessment obtained (e.g. I.Q. D.S.M. - 111 diagnosis coded from clinical records, and PCL - R score, also coded from clinical records).

Many of the variables used in the construction of the V.R.A.G. reflected the existing state of science on the prediction of violence. The goal was to construct an actuarial instrument to predict which offenders would commit at least one further act of violence given the opportunity to do so.

Receiver Operating Characteristic (R.O.C.) Analysis

Receiver operating characteristic (R.O.C.) analysis, originated from signal detection theory, sensory psychology and radiology such as medical diagnosis (Metz, 1978 and Zweig and Campbell, 1993). R.O.C. have only been recently reported in the area of risk assessment (Mossman, 1994). R.O.C. appear to be the preferred method recent literature reviewed on the predictive accuracy of actuarial instruments quotes ROC-AUC parameters. They are recommended in

the area of violence risk assessment because they have been reported, to be less dependent on the base rate or the variable studied (in this research, violence) than the traditional measures such as false positives and false negatives.

The term “receiver operating characteristic” took its name because it describes the detection, or prediction, “characteristic” of the test, and the “receiver” of the data can “operate” at any given point on the curve (Metz, 1978). R.O.C.’s take the form of a curve with the sensitivity (true positive rate T.P.R. of the predictor plotted as a function of the false positive rate (F.P.R.) (1-specificity) (Mossman, 1994). Each point on the curve (which corresponds to a cut-off on the predictor) represents a different trade-off between sensitivity and specificity.

The area under the curve (A.U.C.) of the R.O.C. represents an index for interpreting the accuracy of the V.R.A.G. Areas range from 0 (perfect negative prediction), to .50 (chance prediction) to 1.0 (perfect positive prediction). A given area represents the probability, that a randomly chosen individual who scores positive on the V.R.A.G., (engages in violence) will score above the cut-off and a non-violent individual will score below the cut-off (Mossman and Somoza, 1991)

The estimated R.O.C. using R O C F I T (I B M version 1.2) in my study was .72

Common Language Effect Size (C.L.E.S.) was .77. This was calculated using a special R O C F I T program.

The R.O.C. area of .72 obtained in this research is considered statistically significant (i.e. statistically different from .50) A cut-off of .72 means that there is a 72% chance that an individual who engages in violence would score above the cut-off and a non-violent person would score below the cut-off.

Conclusion

This article describes the use of R.O.C. in summarising the overall accuracy of an actuarial instrument in violence prediction. The question of how well each variable of the V.R.A.G. performed is ongoing. R.O.C. permits one to calculate the accuracy of a test. The area under the curve is unaffected by differences in selection area and base rate. The R.O.C. of .72 as reported here is statistically significant in describing the overall accuracy of the V.R.A.G.

References

Available on request.

Title

Rural Transport Difficulties: How do Elderly Patients get To Out-Patients?

Authors

*Farrelly, C., Mughal, R., O'Malley, C.
Nenagh General Hospital, Mid-Western Health Board, Nenagh, Co.Tipperary*

Introduction

Out-patient department (OPD) clinics provide important medical services. However consideration is rarely given to the difficulty experienced by elderly patients and their families in getting to OPD. We aimed to understand some of the difficulties involved.

Methodology

A survey was carried out of patients aged 70 years and over attending 4 geriatric and 3 urology OPD clinics in a County Hospital.

Results

38 patients aged between 70 and 92 years were surveyed.

19 (50%) patients travelled more than 20 miles to OPD, not including distances travelled by relatives. 21 patients needed no help to mobilise. The others needed a stick, frame, wheelchair, help from a person or a combination. None of the patients used public transport. 4 came by ambulance. 34 travelled by car. 5 drove themselves; 1 each were driven by taxi and volunteer; 1 borrowed a neighbour's car; 1 hitched a lift; 1 earned a lift from a neighbour by loading cattle. 25 (66%) were accompanied by family members either living in the same house (11) or a different house (14). In 12 cases relatives had to make special arrangements such as taking a day off work or organising child care. In general cost was not an issue apart from petrol money (2 cases) and for the taxi fare (35 Euro). Subjectively 20 (53%) had at least some difficulty getting to OPD.

Conclusion

Elderly patients and their relatives living in a rural area experience difficulties getting to OPD. This has important implications for provision of health services. Transport issues and the patients support network are factors to consider when booking OPD appointments for the elderly. Transport is a public health issue.

Using the PPS Number for the Irish Cervical Screening Programme

Waldmann, G.
Irish Cervical Screening Programme, Mid-Western Health Board, Limerick

Abstract

A cervical screening programme is designed to reduce the incidence of and mortality from cervical cancer through early detection and treatment. Screening programmes have been established on a regional basis in many developed countries. Ireland is at the forefront in developing a centralised programme on a national basis that is designed to link cytology, colposcopy and histology outcomes into one electronic client record. The Irish Cervical Screening Programme (ICSP) began with the first phase in the Mid-Western Health Board area. Preparatory work for a national roll out was carried out by a National Task Force that reported in June 2002. It is proposed that a national roll out process could take place in co-operation with each of the other health boards from 2003 onwards.

This paper identifies the practical problems encountered so far in the recording and matching of client health data that originates from a variety of Irish health service organisations. Staff working in different organisations may have very different information management practices and different information needs. This is compared to the centralised and standardised approach that the ICSP has developed to support a national cervical screening programme.

From the first phase a number of valuable lessons have been learned such as the need to enhance the ICSP automated matching process and the increasing importance of having a client's unique personal identifier (UPI) in support of this objective. A UPI may be used by doctors and nurses in general practice and by all other participating health staff. A UPI may also be included in the IT systems in the cytology laboratory, colposcopy clinic and histology laboratory as well as on all of the associated paperwork.

Some practical problems encountered in using the Public Personal Services Number (PPS Number) as a unique patient identifier (UPI) are examined. The paper concludes with a look at the contribution of the work being done by the ICSP towards the establishment of an electronic health record.

Introduction

In 1997 the Department of Health & Children approved the setting up of a cervical screening programme pilot at the Mid-Western Health Board. The Mid-Western Health Board is headquartered in Limerick city and provides a public health service to people living in the counties of Limerick, Clare and North Tipperary. The cervical screening programme aims to provide free cervical screening for women aged 25 years to 60 years inclusive based on a five yearly screening cycle. It was estimated on basis of the 1996 census that circa 76,000 female clients would be eligible for this free screening programme. As the concept of public health screening was fairly new it was expected that the programme would identify the inter-organisational issues entailed in establishing co-operative working between the different health organisations involved and that these issues would present a major challenge.

Methodology

In 1998 through contacts established with staff in other public health organisations a number of visits were made to investigate cervical screening programmes running in other countries. One such visit was made to the Cancer Council located in New South Wales, Australia. This visit was very useful because the IT application in use facilitated the automatic matching of a smear to a client and also facilitated the build up of a client register. Following on from this visit the Mid-Western Health Board purchased the Australian "Pap Register" application and have developed this into the "Cervical Screening Register" application so as to meet the requirements of the ICSP.

Problems with Client Demographic Data

Providers of Smear Samples

In October 2000 the ICSP commenced operational running of the cervical screening programme for clients in the Mid-Western Health Board region. A cervical smear sample may be taken from a client by a doctor or by a nurse who has registered with the ICSP. Currently some 400 smear providers (doctors, nurses, consultants) are registered with the ICSP for this purpose.

Some of the practical problems encountered at this stage were the opportunities for errors to be made by the doctor or nurse or receptionist when recording client demographic data as follows -

1. On the smear cytology form -
 - by the doctor or nurse before the smear sample is taken.
 - by the receptionist filling out details after the smear sample was taken.
2. A mistake may be made in identifying the client's medical record so that the record for another client having the same name and similar address is used. This is a very rare event.
3. The client's address may be just a townland, town and county without a post-code, for example, Shantraud, Killaloe, Co. Tipperary.
4. Infrequently the client's address may be omitted from the smear form.
5. Sometimes the address given may be for the GP practice.

At the ICSP some matching problems have arisen due to these types of problems with the data provided.

Data Capture at the Cytology Laboratory

The sample of cervical cells is fixed onto a slide and along with the smear form is posted to a cytology laboratory where the sample is examined by specially trained laboratory technicians. At present cytology laboratories are nominated by the ICSP to provide an agreed screening service. After the smear sample has been examined a result is recorded in the form of a P code and an R code. These codes - the cytology Pattern code and the Management Recommendation code were developed and finalised in co-operation with the cytology labs especially for the operation of the ICSP.

At the cytology laboratory further opportunities exist for errors when recording client demographic data from the hand written smear form as follows;

- (1) Clerical staff may be employed on a temporary short term contract so there may be a higher than expected turnover in relatively inexperienced staff.
- (2) Clerical staff may receive minimal training in "data input" understanding.
- (3) Smear provider handwriting may be difficult to read leading to mistakes.
- (4) Sometimes errors in keying in data into the IT system can happen.
- (5) Data input standards at the lab may not be fully developed.
- (6) Data input standards differ from lab to lab. For example the client may be assigned a unique number at one lab but another lab may not have this practice.
- (7) The cytology IT system may impose constraints allowing four or less lines for address recording. The ICSP standard is five lines for address.
- (8) The client may already exist on the cytology IT system under her maiden name and so fail to be manually matched to a subsequent smear should the latest smear form have her married name.

At the ICSP some matching problems have arisen due to the above.

Matching a Smear to a Client at the ICSP Office

Special matching software is used to automate as far as possible the matching of an electronic smear notification to a client. If the client does not already exist at the ICSP then a new client record may automatically be created. Over time some problems have arisen with this approach as follows;

Variation in spelling of client's name; Mgrt. or Margaret.

Variation in spelling of address; 50 Donohue Avenue, 5 O'Donohue Avenue.

Variation in the Date of Birth; 05/08/1960 becomes 08/08/1960
 03/05/1952 becomes 03/03/1952
 17/03/1944 becomes 17/03/1943

For a number of reasons the DOB may change due to data input error or possible mix up with GP paper records. Over the years it can be expected that clients will get married, divorced and perhaps remarry. It can also be expected that clients will move house and this has been found to be very common in the urban rental sector for the ICSP client group aged 25 to 60 years. Several lessons have been learnt by the ICSP in managing such client information as part of the screening programme.

The *first lesson* that the ICSP has learnt in managing records on behalf of clients is that the client demographic data coming in from the cytology lab or from the client herself when she herself registers with the ICSP cannot be relied on as being unique or static due to data capture errors and also because this data may change over time.

Improving Data Quality & Standards

These practical problems have led to the development of requirements to bring data capture and standards more into line with those in use at the ICSP office and steps have been taken to do this in co-operation with the cytology labs. It is recognised that this should help improve the quality of the demographic data and thereby improve matching but this would not overcome the fact that client demographics are dynamic and not static and will continue to change over time. One approach to overcome the dynamic nature of demographic data has been to utilise the Personal Public Services Number or PPS Number. To better inform ourselves a survey of the use made of a unique identifier (UPI) for cervical screening in other countries was carried out.

Survey of UPI for Cervical Screening in Other Countries

| Country | Unique Identifier | Origin of Identifier |
|----------------------|--------------------------|---------------------------------|
| UK | 10 digit | National Health Care Number |
| Denmark | DOB+number | National Number |
| Stockholm, Sweden | DOB+number | National Number |
| Norway | numeric | National Number |
| Finland | unclear | National Health number |
| New Zealand | alphanumeric | National Health number |
| Saskatchewan, Canada | Numeric | Regional Health number |
| Manitoba, Canada | Numeric | Regional Health number |
| South Africa | 13 digit | National Number |
| NSW, Australia | Planning stage | <i>National & Regional?</i> |

The above demonstrates a consensus or “best practice” in making use of a unique identifier in cervical screening programmes. The origin of the unique identifier may well have arisen through wider health service provision and administration needs.

The *second lesson* is that a UPI is widely used in cervical screening programmes. The Cancer Council in NSW, Australia expect to use a UPI in the near future.

The Department of Health & Children has recently commissioned a report “Value For Money Audit of the Irish Health System” and the authors Deloitte & Touche have concluded that a unique identifier should be introduced as a means of aiding information integration issues in the health service. They state that “The implementation of a UPI system has the potential to significantly address current integration issues.”^[1]

The Evolving Role of the PPS Number

The Personal Public Services Number (PPS Number) has evolved from the RSI Number which was originally assigned by the Revenue Commissioners for tax gathering purposes in Ireland. Some people may have had more than one number assigned.

A woman who has not worked outside the home may not yet have a PPS Number assigned. To put this in context around 98.5% of the population should have at least one PPS Number. It has also become apparent that some married women have been assigned the PPS Number of their husband. The letter W was added to his PPS Number. In 2001 it was

estimated that there were around 200,000 such cases. In these cases a new PPS Number is being assigned to replace the original PPS Number.

Recent government schemes whether for enquiry or for application purposes require the citizen to have a PPS Number and for the citizen to provide their PPS Number to avail of such schemes. At the present time there are many issues around this such as identification, authentication and privacy concerns.

The Irish government has introduced two schemes which require the citizen to provide a PPS Number. One was the Drug Repayment Scheme whereby every household member had to provide a PPS Number - including children and students belonging to that household. The other was the Special Savings Investment scheme and a valid PPS Number had to be provided before the citizen could open a savings account.

The Department of Social, Community & Family Affairs are responsible for issuing the PPS Number and for addressing any problems so that each PPS Number is unique.

The Irish government has other plans underway for a citizen to be able to access public services on-line known as the REACH initiative and use of the PPS Number has a central role in this ^[2].

It is hoped that the work being done by the Department of Social, Community & Family Affairs will lead to each citizen having one and only one PPS Number. For some clients the ICSP has had to record two PPS Numbers. At the ICSP these are known as the Primary PPS Number and the Secondary PPS Number.

In relation to the use of the PPS Number two further lessons have been learnt.

The *third lesson* is that a very small number of clients may not yet have a PPS Number issued to them.

The *fourth lesson* is that some clients may have two PPS Numbers - one old, one new which could cause some confusion.

Therefore the role of the PPS Number as a UPI has some complications and is not entirely as user friendly as at first appeared. It is hoped that this may improve over time.

A Unique Identifier for ICSP Purposes

In 2001 it was decided that the use of a unique identifier such as the PPS Number should be pursued by the ICSP in order to overcome weakness in the client's demographic data and to promote the matching and integration of client health information from cytology, colposcopy and histology. The Department of Social Community & Family Affairs has confirmed that the PPS Number may be used by the ICSP for the transfer of clinical information to and from cytology and histology laboratories and colposcopy clinics.

Under the Health (Provision of Information) Act 1997^[3] there is provision for personal information such as demographics being provided for the purpose of participating in a cancer screening programme. In addition under the Social Welfare Act 1998^[4] there is further provision for a specified body such as a health board to use the PPS Number in public service administration. It could be very beneficial for the ICSP and its clients who avail of this free health screening service if the PPS Number became a requirement for registering and that each client had only one PPS Number to remember.

The format of the PPS Number is seven digits and then one or two letters. Examples are 1234567A or 1234567AW. The ICSP has in conjunction with the smear providers and the cytology labs made efforts to capture and utilise the PPS Number as part of the client demographics. An examination of the PPS Numbers recorded found the following -

- 77,451 clients were registered with the ICSP
- 768 (1%) did not have a PPS Number recorded due to a number of reasons.
- 3,460 (about 3%) have a primary and a secondary PPS Number.
- 10 clients had two records where the PPS Number was different in each record.

The *fifth lesson* is that the PPS Number can best fulfill the role of a UPI if it is made a requirement on joining the screening programme and that it remains unchanged.

The client database was assembled at first from several sources (various hospital patient administration system records of varied vintage, other agencies, from the client registering and from the Department of Social, Community & Family Affairs) and so duplication of some client records was found to be inevitable in this situation.

The *sixth lesson* the ICSP learnt was to minimise the sources for capturing, validating and updating the client demographics including the PPS Number. Accordingly the ICSP has a monthly import file from the Department of

Social, Community & Family Affairs for all female clients aged 25 to 60 years inclusive. This provides the following benefits;

1. New clients and their PPS Number.
2. For existing clients who do not have a PPS Number the assignment of a PPS Number.
3. For existing clients replacement of their old “W” PPS Number with a new one.
4. For an existing client who has died the confirmation of death.

Conclusions

At the ICSP a number of valuable lessons have been learnt.

- Firstly, client demographics are unreliable due to the process of collection and recording and in any case these may well change over time. Therefore, the value of client demographics for the integration of health information is greatly reduced and could contribute to duplication and some errors being made.
- Secondly, that well established cervical screening programmes make use of a UPI.

In Ireland the PPS Number may be used by the ICSP with some caution as a UPI.

- Thirdly, a very small number of clients may not as yet have a PPS Number issued.
- Fourthly, some clients may have two PPS Numbers that have to be recorded.
- Fifthly, for the PPS Number to be of maximum benefit for the integration of health information it should be provided by the client when they avail of this free service.
- Sixthly, that it was found to be less confusing for staff to have only one other source for client demographics and the PPS Number in particular - apart from the client herself.

In relation to the contribution to the establishment of an electronic health record (EHR) the ICSP model may sit somewhere between the low level two and level three of the EHR evolution model shown below. However, the work done at the ICSP in using the PPS Number as a UPI may be of assistance to other health organisations faced with integrating electronic health information from a coalition of different partners who share a common health service purpose.

EHR Evolution Model

| | |
|---------|---|
| Level 1 | Patient Administration System with separate departmental or lab systems |
| Level 2 | Patient Administration System linked to departmental or lab systems |
| Level 3 | Plus electronic clinical orders and test or lab results returned |
| Level 4 | Links into clinical expertise and “best practice” |
| Level 5 | Paperwork, digital image, video clip all recorded |
| Level 6 | Telemedicine to overcome physical distance |

It is interesting to note that one of the targets of the UK “National Information for Health” is to include the unique patient identifier the “NHS Number” in all electronic health communications by March 2003.^[5] Perhaps the ICSP in co-operation with the other participating health organisations may consider making the PPS Number mandatory in all electronic information exchanges from a future date.

References

- (1) *Deloitte & Touche, page 40, Value For Money Audit of the Irish Health System, Volume 1, Executive Summary, 2001.*
- (2) *REACH website, page <http://www.reach.ie/about/ppsn.htm>.*
- (3) *Health (Provision of Information) Act 1997, page 3, 1(b).*
- (4) *Social Welfare Act 1998, pages 12, 14.*
- (5) *Dr Christine Macleod, Nick Friend, John Clayton, Dr Tony Jewell, The Cambridgeshire Approach to Implementing Local Information Strategies as the NHS Restructures, page 29, British journal of Healthcare Computing & Information Management, March 2002, Vol 19, No 2.*

An economic evaluation of the use of dental hygienists in the fissure sealant programmes of the Mid-Western Health Board: A pilot study

O'Connor, D.
Dental Clinic, Health Centre, Mid-Western Health Board, Bindon Street, Ennis, Co. Clare.

Introduction

Since their introduction in Ireland in 1990, dental hygienists have been deployed in all health board areas to carry out the range of duties allowed under the Dentists' Act (1985), including the application of pit and fissure sealants. However, since that time, there has been no economic evaluation of the impact that their deployment is having on the efficiency of the service provided.

Rationale

As the incidence of dental caries declines and becomes concentrated in pits and fissures, sealant programmes have an even greater role to play in sustaining further improvements in dental health. However, the overall decline means that additional reductions become progressively less cost-effective to achieve. This has policy implications not just for which patients should receive sealants but also for which dental personnel should place them.

Objectives

The main aim of this study was to evaluate changes in efficiency that were created by adjusting the dentist-hygienist skill-mix ratios used in the sealant programmes of the Mid-Western Health Board.

Methodology

The efficiency of the current sealant programme's skill-mix regime, in which dentists place some sealants and delegate others to hygienists, was compared to that of a comparator programme, in which hygienists place all sealants. A literature review was carried out to assess the relative effectiveness of sealants placed by different types of dental operator. A clinical timings inquiry was conducted to collect data on the times required to place sealants. Multiple regression analysis was then used to predict treatment time while adjusting for other factors. Programme cost-effectiveness was analysed using health board data on Whole-Time Equivalents employed, levels of sealant provision within the Board's area and salary differential between the grades.

Results

The literature provided no evidence of any difference between the effectiveness of sealants placed by dentists and auxiliaries. Regression analysis of the timings inquiry data indicated that 84.4% of the time required was explained by variations in operator (though not operator type), number of sealants placed and patient age. Adjusting for differences in these, there was no statistically significant difference between the times taken by dentists and hygienists to place sealants. Incremental cost-effectiveness analysis showed the current programme to be dominated by the comparator programme, under which labour costs were 57% less. Sensitivity analysis demonstrated that programme costs were sensitive to variations in the cost of each operator type's clinical time but not to variations in the characteristics of the average patient being treated.

Conclusion

Economic evaluation should form a routine component of public dental programme planning. Research on a larger scale is warranted to assess the impact that adjustments to skill-mix have on the efficiency of community sealant programmes. An effort should be made to provide dental managers with evidence-based guidelines that include guidelines on which operators should provide sealants. Sealant re-examination and reapplication should play a necessary part in quality

assurance. Sealants can be re-examined competently and efficiently by hygienists without requiring changes to current legislative provisions. Increasing the proportions of hygienists used in the public dental workforce provides a means of improving both the technical and economic efficiency of the service.

A Research and Development Strategy for Hillingdon Primary Care Trust (PCT) in North West London

Townsend, J.,¹ Dowie, R.,² Healy, C.³
 Health Policy Research Unit, London School of Hygiene and Tropical Medicine ¹
 Health Economics Research Group, Brunel University, West London ²
 Public Health Directorate, Mid-Western Health Board, Limerick (formerly of the Health Economics Research Group, Brunel University, West London) ³

Rationale

There were three notable milestones for health research in England during the 1990s. The NHS R&D programme was established and it prioritised research on themes such as the primary-secondary care interface and initiated regional R&D programmes. The Culyer Report led to the first comprehensive strategy for funding research within the NHS, while the Mant strategic review of research in primary care stimulated the setting up of primary care research networks. However, by the time the three waves of primary care trusts were introduced in 2000-02, 303 in all, opportunities for obtaining NHS funding for promoting R&D in primary care were much more restricted, especially from regional sources.

Objective

Hillingdon Primary Care Trust (PCT), as a first wave Trust, located in West London foresaw the problems that so many PCTs would soon be facing and, with support from North Thames Region's R&D Directorate, commissioned an R&D strategy.

Introduction

During the months leading up to the research project, significant national policy developments were announced. The timetable was set out for implementing the research governance framework that will ensure that all R&D carried out in the NHS meets expected standards (for example, Trusts' local implementation plans were required to be formulated by July 2002). National initiatives to promote R&D in primary care were announced: the designation of teaching PCTs in areas of disadvantage, the identification of 30 or more PCTs to act as "hosts" for research management and government (RM&G) on behalf of other PCTs and networks, and a scheme to subsidise fees for GP practices obtaining accreditation by the Royal College of General Practitioners (RCGP). Further clarification of the modernisation of the NHS R&D funding support was issued. In future there will be two systems, Support for Science (SfS) covering NHS costs of individual studies including NHS staff time, and Priorities and Needs Funding (PNF) which will address principal health issues and priorities. The essence of the PNF is "collaboration" between NHS organisations and academic research groupings with a subject, for example, cancer, being the unifying factor.

There are five research networks of relevance to Hillingdon PCT. WeLReN is the best known. It covers the eight PCTs in west London and all individuals (NHS, academic) involved in primary care can join. It offers research training and mentoring, with project grants of about £10,000 being awarded to multidisciplinary teams. Three networks that general practices may join are organised by the Medical Research Council, Medicines Control Agency and Royal College of General Practitioners (RCGP); the first two rely on practices contributing routine data on patient contracts. The West London Cancer Research Network was set up in 2001 to provide an infrastructure for trials of cancer treatment and it is now recognised that primary care-based trials, e.g. palliative care, are needed. The London Health Observatory could assist with public health investigations and there is a national R&D network, C.H.A.I.N., linking research active professionals.

Hillingdon PCT is an example of the rapid and extensive remodelling of primary care structures and services currently underway in the NHS. The PCT now incorporates a wide range of services previously located in the acute and community sectors, thus making it an ideal setting for multidisciplinary research. It has close working relations with Hillingdon Local Authority and Hillingdon Hospital, which provides over 90% of secondary care for local residents. A "snapshot" survey of PCT staff in mid-2000 revealed a kernel of research interest and experience that could be nurtured. The National Research Register contains very few ongoing Hillingdon primary care projects (two sponsored by

WeLReN). The PCT, in common with most PCTs in London, does not receive support from the NHS R&D Levy.

Methodology

Over four months between February and May 2002 researchers from Brunel University in West London interviewed 20 representatives of “stakeholder” groups within the PCT and the wider Health Economy. They contacted academic departments focusing on health research, the West London Research Network (WeLReN) and the pharmaceutical industry, and held an “emerging findings” workshop..

Findings

Areas of research interest

The stakeholder interviews identified numerous areas of research interest. The clinical areas were in line with the national service framework priorities of cancer, coronary heart disease and mental health, as well as other chronic disorders causing high patient demand, for example, diabetes and asthma. Organisational issues, such as nurses as care managers, multi-disciplinary team working, and commissioning policies, were mentioned. Integrated care pathways, involving research across the interface between acute and primary sectors, was another important area [and highlighted in the CHI report (June 2002) on the Hillingdon Hospital NHS Trust].

Partnerships / Collaborations

The importance of forming external alliances with collaborators was stressed in many interviews. Academic partners were identified as well as Hillingdon Social Services and the voluntary sector, WeLReN research network and pharmaceutical companies. The latter could, with PCT investment, assist with funding the R&D infrastructure as well as providing resources for clinical studies.

Developing a research capacity

A need was felt to develop a primary care research capacity and to promote an evaluative culture for all primary care professionals. As research training was considered to be ad hoc various approaches were suggested: enhancing skills for audit; approving GP practices as research practices; offering training and career development to research active GPs; and creating a culture for nurses where research becomes part of everyday activities. Some felt that all the workforce should be research aware and have skills to understand research findings to inform practice. Opinion was mixed about providing protected time for clinical researchers. Some thought it would divert commitment from pressurised services, while others thought it could act as an inducement when recruiting, and retaining staff in a very competitive labour market. WeLReN provided most of the training courses. These included methodology workshops and master classes on research topics and themes. WeLReN was very supportive and the networking opportunities were helpful. Timetabling of courses along with clinical duties was a concern.

Information services

The PCT is served by library services based in Hillingdon and Mount Vernon Hospitals and the library staff provide literature searches on request and training for searching databases. Staff in GP practices can access the electronic information systems remotely from their offices, but community nurses and health visitors based in community clinics do not have the same access as yet. This is a manifestation of a general problem over the IT system serving the community services; the community and therapy services databases are not as potentially useful as research resources as is the EMIS system in GP practices. A new EMIS community system is currently being trialled and it is hoped that it will overcome the existing problems. Whilst concern was expressed about the limitation of the EMIS databases for longitudinal research, and generally about the reliability of clinical coding, interviewees acknowledged that audit facilitators were successfully interrogating the databases, and that disease registers were potentially very useful as a research resource. (Many Hillingdon GP practices do not yet have a CHD or diabetes disease register). However significant work would have to be done to improve the accuracy and comprehensiveness of clinical data entry to achieve the potential of the EMIS system.

Funding for research

Opinion was mixed over policies for funding research in the PCT but it rather depended upon the perspective adopted.

Immediate financial and resource constraints were recognised as potentially impeding longer-term strategic development of research and development capability. An indirect approach was suggested by one person - opportunities for personal development and training should be written into job descriptions. Most thought that any significant research programme with which the PCT was involved should be part of a wider programme with other PCTs. Some welcomed the idea of pharmaceutical funding initially to build up the infrastructure, but others were cautious in case market interests drove the research agenda.

Perspectives on developing an R&D strategy

On balance, the interviewees considered that the PCT should become involved in research, though not necessarily aspiring to become recognised as a “research” PCT. But the PCT needed to decide whether to develop its research capacity in-house or via collaboration with expert partners. Almost all considered some kind of collaboration with academic partners was desirable. In the longer term the PCT needs to create a nurturing culture whereby research becomes part of the everyday work of clinicians, administrative and other support staff, and encourages workforce retention; research governance would become as much a part of primary care as clinical governance, and all the workforce would become research aware. Researchers themselves need academic support and protected time to deliver on research outputs.

At present the PCT does not have a formal structure in place to undertake the management functions of research governance. Options were identified: the PCT could develop its own structure by appointing a manager to co-ordinate an R&D office. This could be a joint appointment with an academic institution. Alternatively, the PCT could contract out services to the Hillingdon Hospital’s or Mount Vernon Hospital’s R&D Office. Other options are the local “host” PCT, when it is identified, and Imperial College. A preference was expressed, however, for the service to be sited in Hillingdon and in a primary care setting if possible as this would facilitate development of an R&D capability within the local Health Economy.

Hillingdon is fortunate in having three health research academic institutions in close proximity - Brunel University, Buckinghamshire Chilterns University College and Imperial College. Senior academics in all three expressed their enthusiasm for forming research partnerships with the PCT. At Brunel, the Department of Health studies and Social Studies already has a number of links with local trusts, including Hillingdon PCT, particularly in nursing, occupational therapy and social work. Research training workshops are held, and research collaborations are being formed. Buckinghamshire Chilterns has a Research Centre for Health Studies, which is involved in research with nearby PCTs. It also has research and tutoring links with Hillingdon Hospital. Within Imperial College, the Department for Primary Health Care and General Practice at Charing Cross Hospital is closely associated with WeLReN and fosters a multi-disciplinary approach to research. It offers training modules in research methodologies.

Conclusions

Optimal research strategies

The report presents three alternative research strategies for Hillingdon PCT based on the policy background and resources available, as well as the opinions of those interviewed. The PCTBoard would need to weigh up the advantages of doing, or not doing research taking account of the curtailment of innovative opportunities in the health economy, the need for developing research awareness within the PCT, recruitment and retention of staff, and the impact that non-participation could have on Hillingdon Hospital’s R&D strategy. Regardless of the strategy of choice, the PCT needs to arrange the management of its research governance, since at least a minimal amount of research activity will continue to be undertaken for academic dissertations and as a requirement for clinical posts. These options are not mutually exclusive and some approaches could follow sequentially or in parallel as part of a long-term strategy.

Hillingdon as a research led PCT

Dedicated staff would be required to lead research in collaboration with other groups, as well as dedicated clinicians, including nurses, and accommodation. Seed funding would be needed from the PCT. Although the Trust has some research active staff, none has experience of large-scale leadership of research so such a strategy would need to be medium or long term, developed in partnership with academic collaborators.

Hillingdon as a research friendly PCT

This could include any of three elements. Firstly, Hillingdon PCT being a contributor to non-commercial externally led research. In this strategy, the PCT could participate in research of interest to the PCT, led possibly by an academic department, by another PCT or an acute Trust, but without the same level of local R&D resources and leadership. It could also be a contributor to commercial pharmaceutical research. Pharmaceutical research must have a sponsor that undertakes the research governance responsibilities, while companies accept responsibility for indemnity for non-negligent harm. Pharmaceutical companies favour primary care settings that are well organised for research preferably with a dedicated nurse and accommodation and good relationships with secondary care and local ethics committees. Thirdly, Hillingdon PCT could commission research, relying on academic departments of local universities or other organisations and agencies.

Hillingdon PCT as being non-active in research

Such a strategy would deprive the PCT of a local evidence base, make it difficult for staffing groups to become involved in research, could affect morale and, in turn, affect recruitment and retention. The PCT would also lose the opportunities for forming research partnerships and taking up initiatives currently available.

Recommendations

This is a watershed time for primary care research. Partnerships and collaborations are being formed or reinforced between academic centres and PCTs. The general level of primary care research and plans for developing research capacity will be expanded and developed and there will be clear advantages in forming alliances and making commitments now if a research portfolio is desired in the future. For the time being, Hillingdon PCT is unlikely to take on the responsibility of a research lead or host PCT, but we feel it would be ideal if the PCT appointed an R&D manager, developed a small unit to facilitate research, and explored possibilities of working with local networks and partners. Three-year timetables are outlined in the full report as this abstract was taken from the Executive Summary.

Presented

This abstract was the Executive Summary presented for discussion by Dr Robin Dowie at the Hillingdon Primary Care Trust R&D Committee Meeting in North West London on 26th July 2002. Professor Joy Townsend later submitted the final report for consideration by the Trust on 29th August 2002.

The perception of and compliance to healthy eating strategies by adolescent girls

Roe, C.
 Health Promotion Department, Mid-Western Health Board, Limerick

Introduction

Adolescence represents a time of change to adult behaviour (Thomas 1994). It is marked by changes in lifestyle and the formation of new eating habits (Cardamore-Cusatis & Shannon 1996) and therefore represents an important time for health and nutrition education. The combined influence of attitudes, beliefs (Shatenstein & Ghadirian 1998), concern with weight (Andersen et al. 1994), sociodemographic factors, eating away from home, and other risk behaviours, such as dieting, are associated with the development of the variation in eating patterns and specific food habits (Felts et al. 1996).

Objective

To investigate the perceptions, knowledge and attitudes of adolescent girls towards healthy nutritional strategies. In addition, this study endeavours to examine to what extent this recognition influences dietary intake.

Methodology

A sample of 35 adolescent females (mean age 15 ± 1 year) were randomly selected for this study. A questionnaire was administered in order to ascertain information such as self-reported height and weight, attitudes, knowledge and perceptions of healthy dietary strategies. Food intake data was collected using 3-Day Food & Drink Diaries and analysed using the computer package, Diet 5 for Windows. Paired t-tests were performed to assess any significant changes in dietary intakes.

Results

The present data suggests a general lack of interest in the adoption of healthy dietary strategies by adolescent girls. Although the sample group appeared to be well informed on many nutritional aspects, many overestimated how healthy their diet really is (Figure 1 & 2).

Figure 1: Perceived benefits of following a healthy diet

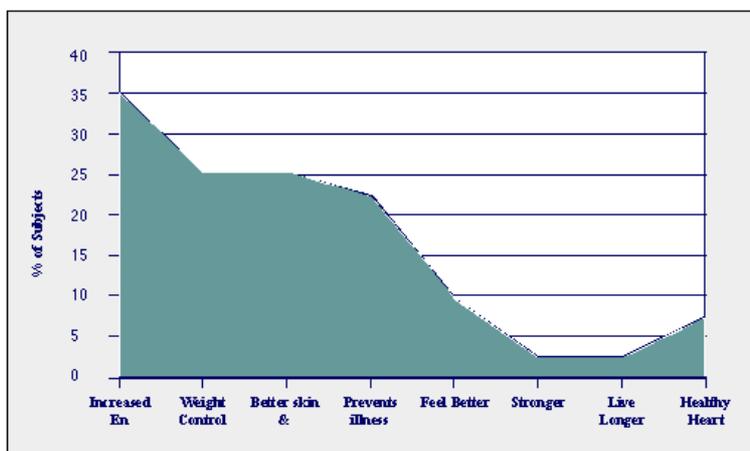
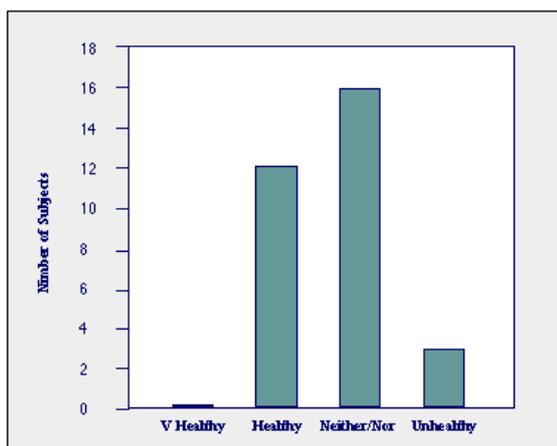
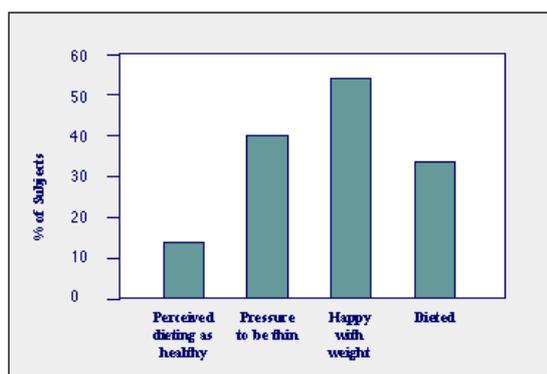


Figure 2: Perception of diet by Sample Group



Dissatisfaction with body weight coupled with dieting behaviour was pervasive (54.3 %), even though mean Body Mass Index (BMI) scores fell within the acceptable range (22.5 ± 2.04) (Figure 3).

Figure 3: Dieting and Attitudes towards it



When compared to the Dietary Reference Values (DRV) of each nutrient, as proposed by the Department of Health (1991), the sample group displayed adequate mean dietary intakes of fat, protein, calcium, folate and vitamin C. However, the mean dietary intakes of energy, carbohydrate, iron and vitamin A, i.e. nutrients which have particular significance in adolescence fell considerably short of the recommendations (Table 1).

Table 1: Mean intakes of the macronutrients

| Macronutrient | Mean Intake (g) | Recommended Intake (g) | Mean % Intake | Recommended % intake |
|--------------------|-----------------|------------------------|---------------|----------------------|
| Carbohydrate SD | 123.7 48.4 | 281.3 | 40.4 6.9 | 50 |
| Protein SD | 57.8 20.2 | 45 | 19.3 3.3 | 15 |
| Fat SD | 82.2 33.8 | 82.1 | 40.3 7.04 | 35 |

The nutritional status of the sample group indicated that their diets were not sufficient to maintain a well-balanced and optimal diet for the increased demand imposed by rapid growth and physical development throughout adolescence.

Conclusion

Health promotion priorities need to focus on both the physical and psychological constraints to healthy eating as opposed to attempting to improve knowledge as a whole (Povey et al. 1998). The most important aspect of health promotion is to provide the individual with an ability to translate information regarding nutrition received from numerous sources into practical information about which foods to choose in order to ensure both a balanced and healthy diet (Buttriss 1997). School-based interventions to foster healthy eating in adolescents need to be responsive to their life-world as well as building on behaviours perceived to be positive (Nichter et al. 1995).

References

On request

Presented

As a poster presentation at the national conference “Health Promoting Hospitals: Public Perspective and Participation” in Donegal during October 2002.

An investigation into the attitudes of Young Irish Women towards their smoking

Kennedy, M.
Health Promotion Department, Mid-Western Health Board, Limerick

Introduction and Rationale

The purpose of this study was to investigate the attitude of young Irish women around the issues of smoking. The exploration of this is situated in their perception of the barriers that prevent attempts at smoking cessation.

Methodology

The research involved two consecutive phases using both quantitative and qualitative approaches. Phase one involved the distribution of surveys. The young women initially completed the surveys and then had the option to participate further in the study. Phase two involved interviews with selected participants. The data collected from this multi-method approach served to illuminate the research question.

Results

The research findings indicate that there is a high level of dissatisfaction amongst these young women in relation to their smoking. Factors such as alcohol consumption, stress, nicotine addiction, and weight control influence their continuing smoking. While many young women want to achieve smoking cessation, their perception of the barriers, prevent them from attempting cessation. This study found that the majority of young women who had attempted cessation had done so without seeking assistance from smoking cessation support services.

Despite strong emotional expressions of dissatisfaction toward their smoking and a high level of awareness of the adverse health effects of smoking, young Irish women continue to smoke. Drinking alcohol was identified by the respondents as being a major barrier to attempted smoking cessation and a primary reason for recidivism. Although these young women express a desire to stop smoking, the factors that affect their smoking are more powerful than the desire to stop.

Conclusion

Greater awareness of the problem of young Irish women smokers needs to be highlighted and addressed. Health promotion in every workplace needs to be established with effective smoking cessation support aiming to espouse the philosophy of “making the healthier choice the easier choice”.

A study of the perceived attitudes of staff with regard to the appointment of a HPH co-ordinator (HPHC)

Gibbons, M.
St. Munchin's Regional Maternity Hospital, Mid-Western Health Board, Limerick

Introduction

This study examines the perceived attitudes among staff with regard to the appointment of a HPH co-ordinator (HPHC).

Methodology

The research design is a mixed method approach incorporating both quantitative and qualitative aspects within an action research paradigm. Data collection was initially via survey prior to the appointment of the co-ordinator and via focus group three months after the appointment.

Objectives

The Objectives of the study were to examine:

- What are the perceptions among staff with regard to how the appointment of a HPH co-ordinator will impact on their cultural norms (if at all)
- In what way does it positively impact on physical and mental well-being?
- In what way does the facilitating of a health promotion concept contribute to the sense among staff of being valued as professionals?

Results

The findings indicate different perceptions of the workplace as health promoting, which are evident from both data collection sources. There is evidence from the data of staff feeling under valued and taken for granted. The appointment of a co-ordinator is seen as both leader and change agent for improving the quality of work life. There are many references to dissatisfaction with the prevailing organisational culture, the idea of a 'them and us' situation is strongly evident along with indications that staff do not feel valued. Only 27% of the staff take regular exercise. 60% of total staff, (55% of midwives), avail of regular check-ups. 50% indicated that a healthy diet was available at work. Staff perceive the hospital environment as stressful.

Conclusions

Main Conclusions arising from the study.

- There is general dissatisfaction with organisational culture and quality of work life.
- There are positive feelings with regard to the appointment of a HPHC.
- There is a sense among staff of not feeling valued and as a result their personal value systems are affected.
- There is a willingness to change among staff, to improve practices and therefore quality of work life.

An investigation into what motivates women to use alternative or complementary medicine within the context of the conventional health model

*Dwyer-Costello, A.
Heart Health Team, Mid-Western Health Board, Carnegie Centre, Newcastlewest, Co. Limerick*

Introduction

The increase in the use of alternative and complementary medicine has been well documented in the western world (Sharma 1995). The purpose of this study was to explore and gain insight into the underlying motivating factors for women's decisions to use alternative or complementary medicine in the context of the existing health service. Is this decision based purely on the belief that one form of medicine is more effective than another, or do they perceive other benefits to the use of alternative medicine?

Methodology

The study was conducted in two phases, using both quantitative and qualitative methods of research. A survey was conducted with 112 female users of alternative 'health products' using a self-administered questionnaire. This provided information on the types of alternative and complementary medicine used and the health conditions which they were used for, thereby aiding the development of a current profile of female users of alternative and complementary medicine in the area.

The study progressed by accessing a sample from the survey respondents for the second phase. Through the process of semi-structured interviews the reasons for women's decision to use alternative medicine were explored in more depth. SPSS was used to analyse the quantitative data and the emerging themes were used to develop the topic guide for the semi-structured interviews.

Results

The research findings suggest that whilst the women interviewed value the existing conventional health service they feel it does not meet their health needs in a comprehensive way. They have strong health beliefs regarding 'naturalness', holism, and the body's ability to heal itself. Just as importantly, they feel their health status is very dependant upon their involvement or participation in the healing process. The 96% majority of respondents rated the importance of involvement with their own health care as very important. This they believe is denied them in the existing health system. When asked about their intention to continue using alternative medicine, 74% indicated a definite intention to continue to use alternative or complementary products or therapies. With regard to disclosure of participant's use of alternative medicine, 61% of respondents reported that they would not disclose their use of alternative medicine to their conventional medical practitioner, 33% felt that their General Practitioner would not be interested, and a further 17% felt that their General Practitioner would not agree. When seeking advice regarding the use of alternative medicine 43% of respondents looked to the Health Food Shop and 17% sought advice from their alternative health practitioner. Making the decision left many women feeling unsupported "it was a tough call to make, you always wonder if you have made the right choice". The existing patient/practitioner relationship and the lack of accessible health information are two issues central to their decision to use alternative medicine and therapies.

Recommendations

If the trend for increased use of alternative medicine is to continue it is necessary for 'alternative' medicine to be brought in from the cold. It is no longer a 'fringe' activity and the users of it need the practitioners from both models to form liaisons and develop a common understanding of their patient's needs through further research and information services. The development of inclusive health forums where women can discuss their health issues in a more holistic manner would enable this process.

Conclusion

Research is required regarding the safety and efficacy issues involved in alternative health medicine and practices. However, this needs to be mindful of the subjective aspects of health and healing which include the therapeutic relationship. Women's desire to participate and the value they place on self-care as a means of empowerment should not be underestimated.

Health promotion is defined as “the process of enabling people to increase control over, and to improve, their health”. (WHO et al. 1987).

In 1986 the Ottawa charter identified the strengthening of personal skills, along with the creation of supportive environments and the re-orientation of health services as key principles of health promotion. The women in this study appear to have already taken this process to heart.

Presented

At the University of Limerick by Anne Dwyer-Costello in October 2001

The components of variance and the critical difference in specific markers of bone turnover in healthy adult males & postmenopausal women

Carroll, P.,¹ Hunter, A.,¹ Barry, D.,² Barrett, E.,³ Loughnane, M.,⁴ Donnelly, R.,⁴ Murphy, N.,⁴ Jakeman, P.M.¹
 Human Science Research Centre, University of Limerick ¹
 Department of Mathematics and Statistics, University of Limerick ²
 Clinical Biochemistry Department, Mid-Western Regional Hospital, Limerick ³
 Human Behaviour Research Centre, Waterford Institute of Technology⁴

Introduction

The study outlined here is part of an overall project, which aims to identify the optimum marker of bone resorption for both healthy young males and post-menopausal, non-osteoporotic women, and is as yet ongoing¹. The purpose of this investigation was to quantify the components of variance in specific biochemical markers of bone turnover in healthy males and post-menopausal women i.e. total (CV_S), analytical (CV_A), within-subject biological (CV_I) and between-subject (CV_G) variances. Using CV_A and CV_I for each individual, the individual critical difference (CD_I) or least significant change ($P < 0.05$) was calculated as previously described². This value represents the minimal difference between two measurements of a biochemical marker that indicates a medically significant alteration of homeostasis (and is not due to normal biological and/or analytical variability alone). Given the CD of these markers the viability of using them in the assessment and/or monitoring of bone metabolism will be considered.

Methodology

With ethical approval and informed consent, 17 healthy males (28.2 ± 1.0 years) and 13 healthy post-menopausal women (55.1 ± 1.2 years) who were not on HRT participated in this study. Subjects did not suffer from a known clinical disorder of bone or calcium metabolism. All subjects were inactive, non-smokers and had not experienced a fracture or period of immobilisation in the six-month period prior to participation. Normal calcium intake was regulated by a prior 5 consecutive day dietary intake record (800mg/day for males and 1200mg/day) and alcohol consumption was not permitted for 3 days prior to and for the duration of the study. Blood (venepuncture, 8am-9am) samples were collected following an overnight fast (22h00) for 5 consecutive mornings. Serum was analysed for N-MID Osteocalcin (OC; ng/ml) and CrossLaps (ng/ml) as measured by electrochemiluminescence (ECL; Roche Diagnostics). Following the first morning void (FMV) sample, 24h urine and a spot mid-flow FMV sample were collected for 5 consecutive mornings. All samples were analysed for total dPyr by ELISA and creatinine by HPLC.

Table 1 Summary of the components of variance and critical difference for serum and urinary markers of bone formation and resorption in healthy males (n=17) and post-menopausal females (n=13). Data is represented as mean \pm SD.

| Biochemical Marker | CV _s (%) | CV _A (%) | CV _i (%) | CD _i (%) | CV _G (%) |
|----------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Males (n = 17) | | | | | |
| OC (mg / ml) | 4.4 \pm 1.6 | 1.6 \pm 0.8 | 4.3 \pm 1.7 | 9.5 \pm 3.5 | 4.9 |
| CrossLaps™ (ng/ml) | 8.8 \pm 3.8 | 2.2 \pm 1.0 | 8.6 \pm 3.8 | 19.0 \pm 7.9 | 9.8 |
| 24h dPyr (nmol/d) | 29.3 \pm 10.9 | 6.0 \pm 2.3 | 28.9 \pm 11.1 | 63.0 \pm 23.5 | 32.1 |
| FMV dPyr (nmol/d) | 33.9 \pm 15.5 | 5.9 \pm 2.6 | 33.6 \pm 15.5 | 72.8 \pm 33.3 | 39.7 |
| Creatinine (nmol/L) | 32.9 \pm 19.9 | 1.2 \pm 0.5 | 37.3 \pm 19.9 | 70.7 \pm 42.7 | 37.1 |
| Females (n=13) | | | | | |
| OC (mg/ml) | 5.7 \pm 4.6 | 1.0 \pm 0.4 | 5.6 \pm 4.6 | 12.3 \pm 9.8 | 7.1 |
| CrossLaps™ (ng/ml) | 9.4 \pm 3.9 | 2.8 \pm 1.7 | 9.2 \pm 3.9 | 20.3 \pm 8.3 | 3.1 |
| 24h dPyr (nmol/d) | 23.0 \pm 9.5 | 5.8 \pm 2.4 | 22.6 \pm 9.6 | 49.4 \pm 20.5 | 26.6 |
| FMV dPyr (nmol/d) | 27.0 \pm 8.3 | 5.4 \pm 1.9 | 26.7 \pm 8.3 | 57.9 \pm 17.9 | 27.6 |
| Creatinine (nmol/L) | 27.9 \pm 20.0 | 1.1 \pm 0.7 | 27.9 \pm 20.0 | 56.0 \pm 42.8 | 36.5 |

Conclusions

The CD_i of a biochemical marker is an objective index of the ability of that marker to detect a change in bone turnover and given that biochemical markers of bone turnover are generally used in monitoring intervention strategies, it would appear that the marker with the best potential to detect change would be preferred.

- (1) As CV_A is common between subjects, CD_i is predominantly influenced by CV_i, which can vary greatly between subjects as evidenced by large SD values in Table 1.
- (2) With respect to the serum markers, the mean intra-individual CV_i for OC is lower (4.5% and 5.6%) than that for CrossLaps™ (8.6% and 9.2%) which would suggest that the marker of bone formation (OC) is a more stable marker for both groups. The corresponding mean intra-individual CD_i is also lower (9.5% and 12.3%) for OC than for CrossLaps™ (19.0% and 20.3%).
- (3) The mean intra-individual CV_i for the urinary measure of dPyr (marker of bone resorption) is 3.5 - 4 fold that of CrossLaps™ (serum marker of bone resorption) for the male subjects and 2.5 - 3 fold that of CrossLaps™ for the female subjects.
- (4) The mean intra-individual CV_i was for dPyr lower in the 24h (nmol/day) urine sample (28.9% and 22.6) than in the mid-flow FMV (nM/mM Cr) urine sample (33.6% and 26.7%) for both groups. The greater biological variation in the latter measure may be attributed to the need to correct this data for creatinine output which varies itself (37.3% and 27.9%). The corresponding mean intra individual CD_i is also lower for the 24h sample (63.0% and 49.4%) than for the FMV (72.8% and 57.9%) sample.

References

1. Carroll P., Jakeman P.M., Barrett E., Murphy N & Donnelly R (2002) *The Optimum Marker of Bone Resorption for Both Healthy Young Males and Non-Osteoporotic Post-Menopausal Women: Sample Collection, Mode of Assessment and Inherent Variability*. National Institute of Health Sciences; Research Bulletin 1, (2); 41-42
2. Fraser C. and Harris E. (1989) *Generation and application of data on biological variation in clinical chemistry*. Clin. Rev. Clin. Lab. Sci. 27, 5; 409-437

Presented

7th Annual Congress of the European College of Sports Science in Athens, July 2002 by Paula Carrol

This work has been sponsored by Roche Diagnostics Ltd. & is Enterprise Ireland funded SC/97/228

An Exploration of Aggression and Violence experienced by Nurses in Mental Health Care Practice in Ireland

Ryan, D.
Mid-Western Health Board Regional School of Mental Health Nursing, St. Joseph's Hospital, Limerick

Introduction and Rationale

The current study was undertaken as part of a wider European Research initiative and designed to address some of the definitional deficits in relation to aggression and violence in the workplace apparent in the literature.

Objectives

It was specifically undertaken to determine the types of experiences of aggression and/or violence which nurses in Irish Mental Health Services encounter as part of their work.

Methodology

A self report method was employed in recognition of the dubious reliability of the official recording methods. The instrumentation used was the S.A.V.E. Questionnaire, which is a modification of the P.O.P.A.S. Questionnaire (Oud, 1998). It describes 16 types of aggression and violent incident, including verbal forms of aggression, contact violence as well as physical attacks encountered. The sample comprised all nursing staff employed in Limerick Mental Health Services (N = 280). There was a 31% response rate.

Results

Preliminary data presented in this paper suggests that a high proportion of staff had encountered forms of aggression - with verbal aggression being the ones that were most encountered by the respondents in this study. Approximately 80% were subjected to non-threatening and 54% to threatening forms of verbal aggression in their working environment. Interestingly, at the extreme end of the spectrum of violent behaviour, no respondents encountered sexual assault or rape in their work setting and only one person (1%) encountered a completed suicide in the period. Another interesting finding relates to fact that 18% of respondents reported having had experiences of sexual intimidation or harassment in their working environment. It is also interesting that the most likely source of aggression and violence of all categories are patients. There also appears to be a major discrepancy between the level of official reports and self reported exposure to aggression and violence.

Conclusion

The implications of the findings were explored in relation to their implications for practice and the questionable reliability of official recording methods is confirmed as remaining an issue of concern.

Presented

At the Annual Research Conference of the Faculty of Nursing in the Royal College of Surgeons in Ireland in February 2002 by Denis Ryan.

Title

Extracorporeal shock wave therapy for treatment of plantar fasciitis

Authors

Dastgir, N.,¹ Healy, C.,² Mordan, D.,² Burke, T.E.,¹ D'Sauza, L.¹
Department of Trauma & Orthopaedics¹
Department of Physiotherapy²
Mid-Western Regional Orthopaedic Hospital, Croom, Co. Limerick

Introduction

Although the application of low-energy extracorporeal shock waves to treat musculoskeletal disorders is controversial, there has been some limited short-term evidence of its effectiveness for the treatment of chronic plantar fasciitis.

Objective

The aim of this study is to explore the effect of high energy extracorporeal shock waves in patients with chronic plantar fasciitis.

Methodology

In this prospective study 31 heels in 24 patients with chronic plantar fasciitis in whom conventional conservative treatment consisting of non-steroidal anti-inflammatory drugs, heel cup, orthoses and/or shoe modifications, local steroid injections have failed, were treated with low energy ESWA. Standard radiographs of the affected heels were obtained before ESWA to document the existence of a calcaneal heel spur.

Pre and post therapy subjective and objective scoring systems are being used to assess the functional outcome (SF36 Health Survey score, Short Form McGill Pain Questionnaire, Visual analogue Pain score, A 100 point scoring including 70 points for the pain score and 30 points for the functional score). Patients were reviewed at 6 and 12 weeks post treatment. At follow-up pain was decreased by 90% on the visual analog scale (VAS) and the comfortable walking distance had increased significantly. There were no reported side effects.

Conclusion

Our initial study indicates that in patients with chronic plantar fasciitis, the ESWA provides significant relief of pain and a satisfactory clinical outcome.



Call for abstracts for the next issue of the NIHS Research Bulletin

Subject area: please tick the appropriate box

| | | | |
|-----------------------------------|--------------------------|---------------------------------------|--------------------------|
| Medical | <input type="checkbox"/> | Personal & Social Services | <input type="checkbox"/> |
| Surgical | <input type="checkbox"/> | Nursing | <input type="checkbox"/> |
| Clinical Services | <input type="checkbox"/> | Research in Progress | <input type="checkbox"/> |
| Health Related Professions | <input type="checkbox"/> | Other * | <input type="checkbox"/> |
| Mental Health Services | <input type="checkbox"/> | | |

* Please specify other _____

Estimated Start date _____ Estimated duration _____

Title of Research _____

Author(s) _____

Your abstract should reflect the following suggested headings:

Rationale, Objective(s), Introduction, Methodology, Results, Recommendations, Conclusion(s)

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

Has this abstract been Published or Presented? Yes No

If "yes", please state when, where and by whom _____

Your Contact details (including e-mail if possible). Name: _____

Postal address: _____

Tel: _____ E-mail: _____

Please send your abstract and this completed form to:

Catherine Kennedy, National Institute of Health Sciences
St. Camillus' Hospital, Shelbourne Road, Limerick
Tel: 061-483975, Fax: 061-483974 Email: ckennedy@nihs.ie

We particularly welcome submissions by e-mail on the online version of this form which may be accessed on our website at www.nihs.ie or by e-mailing ckennedy@nihs.ie