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BOOK OF ABSTRACTS

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Employment, work disability and quality of life associated with Ankylosing Spondylitis. Results from the Ankylosing Spondylitis Registry of Ireland (ASRI)

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Introduction
It is estimated that approximately 10% (458,825) of the Irish population are unemployed due to work disability[1]. Unemployment rates in people with Ankylosing Spondylitis (AS) can be up to three times higher than in the general population [2,3].

Aims & objectives
To identify the prevalence of work disability (WD) in a cross-sectional study of patients with AS attending the NWRU and the associated clinical characteristics associated with their WD.

Methodology
In collaboration with the Ankylosing Spondylitis Registry of Ireland (ASRI), data on patients attending the NWRU with a diagnosis of AS was routinely recorded on the ASRI database and included in the study analyses. The main outcome variable (WD) referred to all patients who were unemployed or working part-time directly as a result of their AS. Independent T-tests were carried out to identify differences between the groups. Functional status and disease activity were measured using the BASDAI, BASFI, ASQoL and HAQ scores. Spinal and hip mobility were assessed using the Tragus to wall, cervical rotation, chest expansion, schobers test and lumbar flexion measures..

Results

There were 128 patients (males:88.3%) mean age 47.0 (±13.3) included in the study. In total 38 patients (29.7%) were either unemployed or working part-time as a result of their AS. The independent T-test identified that disease duration (p =0.041), Bath AS Functional Index (BASFI; p = 0.010), tragus to wall (p = 0.016), cervical rotation (p = 0.03) and AsQOL (p = 0.010), retained an independent association with work disability. WD did not correlate significantly with age, gender, marital status or number of co-morbidities.

Conclusion
The prevalence of WD in a cohort of Irish patients with AS attending the NWRU was 30% similar to the findings of other studies. The main factors associated with WD in this group were longer disease duration, structural damage and poorer quality of life.

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A comparative study of lean muscle mass in patients with newly diagnosed Inflammatory Arthritis and established Inflammatory Arthritis

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Introduction

Low lean muscle mass has been commonly identified in patients with chronic inflammatory diseases[1,2]. Studies however, evaluating changes in lean muscle mass at different stages of disease progression are limited.

Aims & objectives

To identify differences in lean mass in two separate patient groups attending the NWRU, one newly diagnosed with Inflammatory Arthritis (IA) and one with established Inflammatory Arthritis.

Methodology

Anthropometric measurements were recorded and appendicular lean mass was measured using Dual-Energy-X-ray-Absorptiometry (DXA) scan. The Sarcopenia definition by the European Working Group on Sarcopenia in older people (EWGSOP) was used to quantify low lean muscle mass[3], The cut-off points for sarcopenic muscle mass are gender-specific: SMI of <7.26 kg/m^2 for males and <5.5 kg/m^2 for females[3]. All data was recorded and analysed on SPSS version 23.0. Factors associated with low SMI in the two patient groups were assessed using Independent T tests.

Results

In total N=196 patients (44% with established IA, 56% newly diagnosed IA) attending the NWRU were included in the study. The mean age of the patients was 59.2 yrs ($\pm$14.8), males n=73(37%). A total of 56 patients (29%) had low lean muscle mass. The SMI in females was significantly lower in the established IA group compared to females newly diagnosed with IA (P=.038). The mean SMI of male patients was also lower in the established IA group than the newly diagnosed IA group however the difference was not statistically significant. In the established Inflammatory Arthritis patients (N=86) further analyses did not identify any statistical significant differences in the SMI of patients treated with biologic therapy compared to patients not on biologic therapy.

Conclusion

In total **29%** of patients with inflammatory arthritis attending the NWRU were identified as having low lean muscle mass. Targeting low lean muscle mass in established IA pts may be a way to improve outcomes for patients in the future. Further work needs to be done in this area.

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The Prevalence of Sarcopenia in Patients with newly diagnosed Rheumatoid Arthritis (RA) and associated factors

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Introduction

Sarcopenia is defined as a progressive and generalised loss of skeletal muscle mass and strength either age or disease activity related or both[1]. It has been commonly identified in patients with chronic inflammatory diseases, such as RA [2].

Aims & objectives

To identify:1) the prevalence of and factors associated with sarcopenia in newly diagnosed RA patients attending the NWRU 2) any changes in body composition 12 months post initiation of therapy.

Methodology

Body composition was measured using Dual-Energy-X-ray-Absorptiometry (DXA) scan. Disease activity was measured using the CDAI, quality of life using the HAQ scores and muscle strength using the Handgrip Strength. The Sarcopenia definition by the European Working Group on Sarcopenia in older people (EWGSOP) was used to quantify low lean muscle mass[1]. In total 30 of the patients had a repeat DXA scan carried out approximately 12 months post initial visit. All data was recorded and analysed on SPSS version 23.0. Factors associated and related to sarcopenia were assessed using Independent T tests.

Results

In total 108 patients (53% females) were included in the study (mean age 55yrs). The prevalence of sarcopenic muscle mass was 22.2% (25% in men, 19% in females). The prevalence of sarcopenic muscle mass and sarcopenic muscle strength was 12% (11% in females and 14% in males). While not statistically significant patients with sarcopenic muscle mass tended to be older and had reduced dominant hand grip strength. There was no statistically significant association identified in the HAQ or CDAI scores between the groups or in duration of symptoms. There was an overall 3.5% ($\pm$5.87) increase in the SMI/kg2 between the first and second DXA scan with no significant difference between the sarcopenic and non sarcopenic patients (P=.498).

Conclusion

The prevalence of sarcopenia in patients newly diagnosed with RA attending the NWRU was 22.2%. Sarcopenia is a reversible cause of disability and may benefit from intervention, especially at the early stage [2].

References

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Examining the effectiveness of a Cognitive-Affective Stress Management Programme in individuals attending an Adult Mental Health Service

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Introduction

Cognitive-Affective Stress Management Training[1] (CASMT) is an emotion-focused coping skills programme that can be delivered in a group or an individual basis. This 6 week intervention is informed by theoretical and empirical developments in emotional regulation and combines a number of practical techniques to teach individuals a range of strategies to cope with stress.

Aims & objectives

This research aims to qualitatively determine the effectiveness and usefulness of CASMT as a therapeutic intervention to alleviate symptoms of stress among individuals attending Adult Mental Health Services.

Methodology

This research project made use of a qualitative. Clients who attended at least 4 of 6 session of CASMT were invited to participate in this research. Nine participants took part in semi-structured interviews that lasted approximately 30 minutes each. Interviews were recorded and transcribed and were analysed using Thematic Analysis with the aid of ATLAS qualitative software.

Results

Two main themes emerged from the interviews; The Perceived Benefits of CASMT and Tips for Facilitators.

Participants noted the benefits of openly discussing common difficulties, learning and motivating each other to attend sessions and practice skills, the opportunity to learn a range of coping skills and preventative techniques as well as having a folder to revise the programme material after the programme has finished.

The facilitator should continuously aim to increase and encourage motivation and discipline in practicing the skills and techniques between sessions, acknowledging the difficulties of implementing changes to thinking and patterns of behaviour.

Conclusion

All of the participants in this research recommended that CASMT be continually offered as a therapeutic interventions to alleviate symptoms of stress. Adult Mental Health Services as well as other support services working with a population at risk of experiencing high levels of stress should consider offering this type of brief, yet effective intervention.

References

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Postnatal Women's Experiences of Breastfeeding Support - A Settings-Based Analysis in Western Ireland

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Introduction

The rates of breastfeeding are extremely low in Ireland when compared to European rates.[1.] Expectant women's' experiences, challenges and perceived benefits of participating in a breastfeeding preparation class (BFPC) was explored.

Aims & objectives

To investigate post-natal women's experiences of breastfeeding, after participating in a pre-natal breastfeeding preparation class.

Methodology

This study took place over a period of 18 months A two and a half hour prenatal breastfeeding preparation class (BFPC) was held in Sligo. The consenting women then completed a self-administered questionnaire approximately 10 weeks post Expected Date of Delivery (EDD). The questionnaire contained both qualitative and quantitative questions exploring a variety of health related variables including; the length of time after birth the first feed took place, their experiences of the breastfeeding preparation class and their perceptions about the amount of support received from medical staff, family, friends and partners regarding their breastfeeding choice. A 2-fold data analysis was conducted on the results of the questionnaire. The closed questions were analysed through the database SPSS and the open questions were analysed through thematic analysis.

Results

The self-administered questionnaire was completed by 165 consenting women. The BFPC was found to be of a benefit to the women while they were in the postnatal period. The class had a positive effect on both breastfeeding initiation rates with 58% offering a feed within the first hour after birth, and also the duration of feeding at 9-13 weeks after giving birth with 64% of participants continuing to breastfeed. The women experienced support both in the hospital and on discharge from hospital and recommendations on how both the class and the support can be improved were outlined by the participants.

Conclusion

The class investigated the support experienced by women in hospital, on discharge and also during the Breastfeeding Preparation Class and there was an opportunity for the new mothers to give recommendations.

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Conservative Management of CIN II in Colposcopy Clinic

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Introduction

Traditionally, diagnosis of Cervical Intraepithelial Neoplasia II (CIN II) is managed with long loop excision of the transformation zone (LLETZ). In our unit however, pathology reports after LLETZ done for CIN II often confirm low grade or normal result. We wondered – are we over-managing CIN II?

Aims and Objectives

This study was designed to assess the acceptability and outcomes of the conservative management of CIN II. We wanted to establish if monitoring the disease is sufficient in selected patients.

Methodology

In this prospective cohort, patients under 30 years were selected by histological diagnosis of focal CIN II from cervical biopsy and discussed at MDT. In clinic, patients were informed of their biopsy results. After explanation of CIN II and its implications, patients were informed of the risks and benefits of conservative management versus LLETZ. Patients who opted for conservative management are seen at colposcopy for repeat biopsy +/- smear at 6 monthly intervals for 2 years. High risk HPV testing is done every 12 months. During the follow-up period, patients were offered treatment with LLETZ if there is progression to CIN III or CIN II has not regressed.

Results

30 patients were included in the study, with a mean age of 26.9 years. At the 6 month follow-up appointment, 8 (27%) of patient's biopsy results showed regression of CIN II to CIN I. One patient progressed to CIN III. Ten patients had LLETZ. The remainder of the patients showed persistence of CIN II and will be continuing in the full 2 year follow up.

Conclusion

This study shows that in a selected, low risk population, a conservative approach may be considered sufficient for the management of CIN II.

The Experiences of Myeloma Patients Undergoing Haematopoietic Stem Cell Transplant: A Qualitative Thematic Synthesis

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Introduction

The use of Haematopoietic Stem Cell Transplant (HSCT) in treating multiple myeloma is growing and expanding and presently remains the standard of care for transplant eligible myeloma patients[2]. As there are no known qualitative synthesis studies focusing specifically on myeloma patients undergoing transplantation and their experiences, the purpose of this study is to examine same.

Aims & objectives

The aim of this study was to systematically identify and synthesise all qualitative evidence on the experiences of adult myeloma patients undergoing haematopoietic stem cell transplant (HSCT).

Methodology

A systematic search strategy was used using all possible combinations of the key words which included “myeloma patients”, “haematopoietic stem cell transplant”, “experience” and “qualitative”. A rigorous search of the literature was undertaken searching six databases (CINAHL, Embase, Medline, Psych Info, Ethos and Proquest). Eleven qualitative studies including myeloma patients undergoing HSCT were selected in the final sample. Quality appraisal of each study was undertaken using the Critical Appraisal Skills Programme (CASP). Confidence in each finding was assessed using Confidence in the Evidence from Reviews of Qualitative research (CERQual).

Results

There were eighty three myeloma patients included overall across the eleven studies and the countries of origin included Belgium, United States of America, United Kingdom and Australia. The qualitative methodologies used included some mixed methods but predominantly grounded theory. Six main themes were identified; Individual disease, changed relationships, feeling of isolation, altered body, importance of treating hospital, exercise, and living while dying.

Conclusion

This qualitative thematic synthesis identifies the physical and psychological effects of HSCT and its associated treatments on myeloma patients. Patients’ information needs vary over their transplant journey. Nurses therefore need to continually assess these needs. Patients also need ongoing support for challenging symptoms such as fatigue. Exercise during the transplant process can help improve patients’ recovery, both physically and psychologically. A structured exercise programme to suit the needs of each patient should be standard practice in the transplant process.

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Serum lipid profile in new inflammatory arthritis patients attending the North West Rheumatology Unit

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Introduction

Patients with Inflammatory Arthritis (IA) are at an increased risk of cardiovascular (CV) disease compared to the general population (ref). The European League Against Rheumatism havehighlighted the importance of screening for CV risk factors in IA patients and recommend use of total to HDL cholesterol ratio (1), with a ratio > 3.5 considered abnormal (2). Lipid profiles of patients with active inflammation have been shown to be falsely low (1).

Aims & Objectives

1) To carry out a retrospective analyses of lipid profile in patients attending an early IA clinic
2) To assess the relationship if any between lipid profile and measures of disease activity.

Methods

This cross-sectional study of 29 patients at an early IA clinic measured lipid profile and clinical disease activity index (CDAI). The data was recorded in SPSS V24 and recoded for analyses. Descriptive statistics are presented in the form of means and standard deviation and correlation statistics were performed to identify associations between the variables.

Results

Mean age of cohort was 55 years (SD 15), 59% female. The average Total Cholesterol to HDL ratio (TC/HDL) was 3.2 and the average CDAI was 19 (indicating moderate disease activity). Nine patients (31%) had a TC/HDL ratio of ≥3.5. The Pearson correlation between CDAI and TC was -0.363, and between CDAI and LDL was -0.357, both of which approached significance (p=0.053 and 0.057 respectively). There was no significant correlation between CDAI and TC/HDL ratio p=0.98.

Conclusion

Although a relationship between CDAI and total/ HDL ratio was not found, the fact that 31% of patients had an abnormal ratio and that total cholesterol and LDL correlated negatively with CDAI are important findings and perhaps as we increase cohort size these finding may become significant.

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Community Based Phase IV Cardiac Rehabilitation: Participants Experiences and Perceived Benefits

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Introduction

Transition from phase III cardiac rehab (CR) to Phase IV is an important step in the long- term maintenance of positive health behaviour change[1] as adherence declines when health care professional support is withdrawn[2]. Most research has focused on the transition into phase III CR programmes.

Aims & objectives

The present study explored participant experience and perceived benefits in transitioning from phase III to Phase IV CBCR.

Methodology

This qualitative study collected data from participants on phase IV CR through three focus groups and one interview. Data consisted of text in the form of transcribed interviews. Thematic analysis was conducted using Braun and Clarkes[3] approach.

Results

There was a strong sense of the need for a CBCR programme. The link between the hospital and community provider was crucial in supporting the transition to the CBCR programme. Exercise instructors were viewed as competent but some participants also wanted the presence of medical professionals for reassurance and queries. The routine of the exercise classes with the addition of fitness testing, talks and the social aspect were valued components of the overall programme. Although participants had different perceptions on the level of difficulty, they wanted a variety of exercise formats including circuits, dance and gym that were fun and challenging. Physical, psychological and social benefits including moving from fear to confidence in ability to exercise were viewed as perceived benefits.

Conclusion

The study findings provide an important insight into the experiences and perceived benefits of attending a CBCR programme. Prospective studies should follow participants to investigate if the needs, experiences and benefits change over time to ensure the appropriate structure is in place to maintain their positive health behaviours.

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Effects of Participation in Phase IV Community Based Cardiac Rehabilitation on Selected Fitness Indices - A Pilot Study

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Introduction

Community based phase IV cardiac rehabilitation (CBCR) programmes are important in the long-term maintenance of healthy lifestyle behaviours for individuals following a diagnosis of cardiovascular disease or post-coronary event/intervention[1]. Such programmes provide an on-going opportunity to maintain or develop optimal levels of physical fitness[2] and could be used as more immediate feedback to increase the effectiveness of CR programmes.

Aims & objectives

The purpose of this study was to evaluate the effect of participation in a newly established CBCR programme on selected fitness indices.

Methodology

Following successful completion of phase III cardiac rehabilitation, 23 individuals who met the inclusion and exclusion criteria established by the National Exercise Referral Framework[3] for Category B Individuals were referred to a 10 week CBCR programme. Exercise classes followed the BACPR recommended structure[4]. The following fitness parameters were recorded pre-and-post intervention; cardio-respiratory fitness (6MWT), muscular strength (hand grip), functional exercise capacity (timed sit-to-stand) and flexibility (sit-and-reach test). Paired sample t-tests were used to compare differences between mean values, and data is presented as mean ± SE.

Results

A total of 18 participants (10 male, 8 female) completed the CBCR programme. There was a statistically significant increase ($p<0.01$) in functional exercise capacity (19.7 ± 1.3 vs 24.5 ± 1.4 sec). Although not statistically significant ($p=0.09$), there was an average increase of 11.8m in distance covered during the 6MWT. There was no significant change in muscular strength or flexibility.

Conclusion

Participation in a 10 week CBCR programme resulted in an improved functional exercise capacity with no significant change in any of the other measured fitness components. The preliminary results are promising however the effectiveness of this programme requires further analysis with a larger cohort and inclusion of suitable controls. .

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Modifiable Factors Associated With Adherence To Adjuvant Endocrine Therapy Among Breast Cancer Survivors

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Introduction

Adjuvant Endocrine Therapy (AET) reduces risk of breast cancer recurrence and improves overall survival in women who have been diagnosed with early stage hormone receptor positive breast cancer[1]. An adherence level < 80% is associated with poorer health outcomes and reduced survival rates[2, 3, 4]. Exploration of factors that are modifiable to sustainment of adherence is imperative to achieve efficacy of the treatment.

Aims & objectives

The aim of the study was to describe and explore modifiable factors of adherence to adjuvant endocrine therapy in a population of women attending a hospital in the North-West of Ireland.

The objectives were:

1. Ascertain AET adherence levels.
2. Ascertain patient beliefs about AET
3. Ascertain if there is an association between beliefs about AET and adherence.
4. Determine modifiable factors that promote adherence to AET
5. Determine modifiable factors that mitigate against adherence to AET

Methodology

A quantitative, cross-sectional approach was used to invite 146 women with early stage breast cancer, > 18 years, prescribed AET and attending a medical oncologist at the hospital within the last year (2016/2015). Multiple questionnaires (MMAS-8, BMQ-specific and modifiable-factors questionnaire) were posted to the sample population. Frequencies, bivariate correlations and the Mann-Whitney U test were employed to analyse data.

Results

Among 108 women, 75% (n = 81) were adherent to AET. Factors that promoted adherence were *establishing a medication-taking routine* (u = 693, p = .002, r = .299) *frequent clinic visits* (u = 741, p = .013, r = .227) and *support from nurses* (u = 773, p = .050, r = .193). Factors that mitigated against adherence were *concern* beliefs about AET (u = 752, p = .015, r = .272), *difficulty in communicating with healthcare providers about treatment apprehensions.* (u = 646, p = .012, r = .261), *depression* (u = 646, p = .006, r = .261) *anxiety* (u = 476, p = .015, r = .261) and *uncontrolled side effects* (u = 519, p = .015, r = 255,).

Conclusion

To optimise the efficacy of AET, adherence to the treatment should be discussed with patients and concerns about the treatment explored on an ongoing basis. Side effects of AET should be assessed frequently and prompt treatment of them implemented.

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Analysis of data from a Rheumatology Advanced Nurse Practitioner (RANP) led Treat to Target (T2T) in Early Inflammatory Arthritis

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Introduction

Systematic screening of patients for co morbidities and co morbid risk factors is an important part of the management of patients with inflammatory arthritis (I.A).

Aims & objectives

1) To evaluate the prevalence of co-morbidities and co-morbid risk factors in newly diagnosed IA patients enrolled in a nurse led Treat to target programme.
2) To determine what factors impact on patients achieving disease remission in early inflammatory arthritis.

Methodology

Newly diagnosed IA patients (n=158) were referred to the RANP for 12 month follow up in a T2T programme with the main objective being to achieve early disease remission. Disease activity was assessed using clinical disease activity index (CDAI) at each visit and recorded along with symptom duration before referral, demographic details, body mass index (BMI), smoking status, lipidemia (HDL, LDL), glucose and blood pressure on an SPSS database. Pre-existing and newly detected co morbidities were recorded at each clinic visit. All patients had a DEXA scan and were screened for vitamin D deficiency.

Results

In total 73 (46%) of the patients were newly diagnosed with co-morbid conditions by the RANP the most common were as follows: Osteoporosis/Osteopenia n=44(28%), hypercholesterolemia n=22 (14%), hypertension n=4 (3%). Vit D deficiency (<30nmol/L) was detected in 72(47%) of patients and 101 (67%) of patients were identified as either overweight or obese. Duration of symptoms before referral was significantly associated with time to reaching target in the log –rank test (p=0.034) In a secondary analysis using chi-square tests there was a significant association identified between T2T and BMI status, smoking status and CDAI group at initiation with p-values of 0.031, 0.031 and 0.026 identified respectively. In total 63.6% of non smokers reached their target in < 6 months in contrast to 36.4% of smokers (p=0.031).

Conclusion

These findings highlight the benefits of implementing nurse led T2T programs to target modifiable risk factors as part of the T2T strategy in inflammatory arthritis.

Factors affecting time to reach target in patients with early rheumatoid arthritis (ERA): An observational cohort

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Introduction

Several prognostic markers have been identified as influencing time to target in patients with ERA including Anti-Citrulinated Protein Antibodies (ACPA), Rheumatoid Factor (RF), age and BMI.

Aims

To explore the affect if any of prognostic factors on the time to reach target (remission or low-disease activity) in a cohort of patients with ERA attending the North Western Rheumatology Unit (NWRU).

Methods

All data on patients with ERA attending the NWRU between September 2014-March 2017 for a 12 months period (n=79) under the T2T program was prospectively recorded and analysed on an SPSS V24.0 database and updated during each clinic visit. Association between individual and composite factors affecting time to target were analysed using independent T-tests. The association between sub groups of categorical data and time to target were further analysed using the chi-square test.

Results

The mean time to reach target steroid free was 7.09 ($\pm$4.45) months. There was a statistically significant mean difference of 2.6 months (p=0.010) in T2T between the DMARDs monotherapy group (5.8 +/- 3.8 months) and the DMARDs combination/triple +/- biologics (8.4 +/- 4.7 months) group. Duration of symptoms before referral was significantly associated with time to reaching target in the log-rank test (p=0.034) with patients with symptoms $\leq$ 6 months before referral achieving their target in 6.31 ($\pm$ 3.61) and patients with symptoms for > 6 months achieving their target in 8.50 ($\pm$5.5). In the chi-square tests there was a significant association identified between Time to Target and BMI status, smoking status and CDAI group at initiation.

Conclusion

The mean time to target steroid free was 7.09 months. Factors identified as influencing the time to target were duration of symptoms prior to referral, BMI and smoking status along with CDAI status at baseline visit and drug combination used to reach target.

Are women with Gestational diabetes attending for post partum glucose screening/testing protocols: Sligo University Hospital

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Introduction

The numbers of women presenting to the diabetes clinics in Ireland with Gestational Diabetes is increasing dramatically. It carries a 50% likelihood of developing diabetes later in life outside of pregnancy. The American Diabetes Association guidelines are that all such individuals be requested to attend post partum for a 75 gram oral glucose tolerance test (OGTT). NICE (National Institute of Clinical Excellence) guidance 2015 recommends a fasting glucose between 6-13 weeks post partum and do not routinely recommend an OGTT.

Methods

Retrospective data collection from notes of all women with gestational diabetes attending the diabetes service in Sligo University Hospital Diabetes Service in 2015.

Results

72 women attended SUH diabetes clinic with a diagnosis of gestational diabetes in 2015. 24 have a history of previous gestational diabetes. 22 had a fasting glucose post partum, 11 within the recommended 12 week period. 21 of these were normal and 1 was abnormal. Only 12 of the 72 patients had an OGTT performed, and 2 were abnormal. All positive tests were referred to the hospital diabetes service.

Discussion/Conclusion

Few women with gestational diabetes are taking up this follow up service despite advice to do so and leaflets been given on discharge. Postulated reasons for low adherence include the cost of this GP visit, time constraints, perceived lack of importance upon completion of the pregnancy. Potential solutions include appointment of a dedicated diabetes nurse midwife to follow up individuals post partum. The new guidelines for a fasting sugar/Hba1c instead of OGTT will also assist compliance.

Assessment of Compliance Rates with Follow up Visits in Patients Diagnosed with Gestational Diabetes Mellitus

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Introduction
Currently there is no published data nationally on the rate of lost appointments for Gestational Diabetes Mellitus (GDM) care during the antenatal period.

Objective
To determine the rate of did not attend appointments (DNAs) for patients with GDM during their antenatal period and the differences in attendance between GDM and obstetric follow-up visits and their associated factors.

Methods
A retrospective examination to all the newly diagnosed patients with GDM during 2016 was conducted.

Results
31.6% of GDM patients didn't attend for at least 1 visit during their antenatal period compared to 12% of obstetric visits (p-value <0.0001). They attended 3 visits in average during their pregnancy. There was a significant difference between the age of regular attendants and non-attendants (mean age 35 Vs 30 respectively). Most Irish patients (72.8%) attended their appointments regularly compared to only 52% of non-Irish nationals.

Discussion/Conclusion
The two big factors influencing attendance/follow up were maternal age and nationality. Further qualitative analysis needs to be performed to determine the reasons for non attendance. From a service and child-first perspective guidelines need to be in place to encourage attendance and determine the lines of acceptability for forcing attendance.

Supporting the Bereaved Child: A Scoping Study of Interventions and Supports

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Introduction

Bereavement is an unavoidable part of any individual's life, including children[(1)]. The concept of death may prove very difficult for young children to understand[(2)(3)]. From research undertaken on suicide and professionalisation through the Health Research Board and engagement in subsequent reading, the need for further research around the topic of children and bereavement became apparent. Informal discussions with early year's professionals highlighted the need for the provision of adequate information and knowledge on how to support a bereaved child proficiently within the early years environment. The identification of effective interventions and supports to aid bereaved children was considered to be the first step in attempting to meet such need.

Aims & objectives

The aim of this study was to identify effective interventions and supports available to bereaved children that may prove useful to future policy and practice in the early year's sector.

Methodology

Searches containing key words were undertaken across 9 specific databases, namely, JSTOR, ScienceDirect, British Standards, Emerald, Ebrary, PubMed, Academic Search Complete, ResearchGate and British Standards; 2 general search engines and 9 websites of relevant institutions. Several national conferences associated with the topic were attended to supplement knowledge. 84 potential items for review were identified. Application of specific criteria through systematic review resulted in 12 items being listed for analysis. A thematic analysis was also carried out on the qualitative data highlighted in the aims of each of the final selected items.

Results

The findings highlight how the support required depends on numerous factors and no one method of intervention is suitable or effective in meeting all needs of a bereaved child. Therefore, more refined and specific interventions aimed at supporting the holistic development of each child is necessary.

Conclusion

This research assisted in providing a wide variety of information on interventions available to aid bereaved children, which may prove valuable to assisting professionals within the early years sector. It also created the foundations for the subsequent Masters in Research being undertaken by the presenter on the topic of children and bereavement, such is the need for further research.

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P86 Effectiveness of neonatal screening for hypothyroidism, born to hypothyroid mothers positive for thyroid autoantibodies

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Introduction:
Neonatal hypothyroidism can be related to the transmission of maternal thyroid antibody and can persist for some weeks post partum. In this hospital we monitor neonatal serum TSH testing at day 10 in addition to heel-prick testing in babies whose mothers are thyroid antibody positive. This study looks at TSH results in these neonates and maternal thyroid antibody status.

Method:
This study involved a review of all patients with hypothyroidism in pregnancy attending endocrinology OPD in 2015 and 2016 and correlating with the TSH levels of the newborn babies.

Results: In the year 2015-16 there were total 66 such pregnant patients who were on treatment with exogenous thyroxine supplementation. Out of 66 pregnant hypothyroid females we found 56% positive and 30% negative for thyroperoxidase antibodies. With 13% patients having unknown antibody status. Out of all pregnant hypothyroid females with positive TPO we found that TSH was checked for 45% neonates and not for 51%. Abnormal TFTs in babies born to TPO positive vs TPO negative mothers was 17.6% vs 20% respectively.

Conclusion:
Current results suggest that the incidence of neonatal hypothyroidism might not be associated with maternal thyroid autoantibodies.

Is there any other factor responsible for neonatal hypothyroidism in such cases? There is need for further research in this respect. There is lack of adherence to local guidelines.

We are extending the time span for the study to include years from 2008 onwards effectively making it a 9 year study, which will add confidence to the results.

Brain Health complications of diabetes mellitus: awareness among individuals with diabetes and the general public in Ireland

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Introduction

Awareness of the brain as being vulnerable to adverse effects of diabetes resulting in depression, cognitive impairment and dementia[1], is growing among the research and clinical community. Such complications can adversely affect quality of life and diabetes outcomes[2]. Research exploring translation of these findings into awareness among individuals with diabetes and the general population is lacking

Aims and objectives

To identify awareness of potential brain health complications of diabetes among patients and the public via an interview administered questionnaire.

Methods

This observational, cross-sectional survey study recruited adults with diabetes attending a secondary care diabetes clinic and representatives of the general population in Ireland. An interviewer-administered, study specific questionnaire gathered data on respondents' knowledge of (i) brain health complications of diabetes, and (ii) modifiable risk factors for both dementia and type 2 diabetes (T2DM). Data was also gathered on socio-demographic, personal health and lifestyle factors. Multivariable logistic regression was undertaken to identify variables independently associated with knowledge.

Results

Respondents totalled 502 adults: 250 in diabetes group (37.2% female, mean age 62.7 +/-14.23 years) and 252 general population respondents (51.2% female, mean age 46.5 +/-16.58 years).
Respondent awareness of dementia (34.9%) and memory problems (47.4%) as potential brain complications of diabetes was poor compared to awareness of other organ complications such as kidney (83.9%) and eye damage (83.9%).
Respondents were 1.5 times more likely to identify an individual could take steps to modify their risk of developing T2DM, compared to their risk of dementia.

Conclusions

This study demonstrates poor awareness of brain health complications of diabetes among individuals with diabetes and general population in Ireland. Poor awareness of dementia risk as modifiable is also concerning.
Results suggest a need for expansion of public awareness campaigns and diabetes education programmes to promote awareness of brain health complications of diabetes in older adults as part of a life-course approach to dementia prevention.

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A study of the correlation between the verbal Months Backwards Test (MBTv) and a novel computerised version (MBTc) in a population with mixed neuropsychiatric conditions

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Introduction: Delirium is a prevalent condition in inpatient hospital settings (21%)[1], 50% of cases are misdiagnosed, detected late or missed[2]. Highest rates are found in older/established dementia[1]. Accurately detecting delirium is hampered by the lack of convenient tools to assess impaired attention[3]. The Months Backwards Test (i.e. MBTv) is the most sensitive bedside test of attention for identifying delirium in older patients[4], but Hospital staff have difficulty with interpretation of the scoring system(MBTv). We hypothesise that employing a standardised test (on a handheld electronic tablet) will allow ease of interpretation, reduce scoring inconsistency and lead to quicker/reliable diagnoses.

Aims and Objectives

To observe if there is significant correlation between patient performance in the MBTc and the MBTv in a cohort with mixed neuropsychiatric conditions.

Methodology

Participants were recruited from the Psychiatry of Old Age Consultation/Liaison Service at Sligo and Galway University Hospitals, allocated to four different (>65 yo) cohorts (Dementia and Delirium, Dementia, Delirium, Cognitively Intact) based on prior diagnosis, collateral history (IQCODE), clinical impression and the rating scales listed:Revised Delirium Rating Scale (DRS-R98),MMSE,MBTv ,MBTc ,IQCODE

Agreement between the two versions of the test was investigated.

Results

75 patients, mean age: 80(SD:7.6) 31 male(37.3%). 36 delirium and dementia(DMDL), 7 delirium only(DL), 13 dementia only(DM), 19 cognitively intact. Overall Spearman's rho=0.772($p<0.0001$). Agreements between the assessments were: DMDL rho=0.666, $p<0.0001$, DL rho=0.778, $p=0.039$, DM rho=0.378, $p=0.203$, cognitively-intact rho=0.143, $p=0.559$.

Conclusion

Overall, there was statistically significant agreement between the MBTc and MBTv. The delirious subset (DMDL, DL), had statistically significant agreement. However, poor inter-test correlation existed in the group without delirium (DM, cognitively intact). These results would imply that the MBTc is as effective as the MBTv in patients who are clinically suspected to have delirium (DLDM, DL only) and its ease of scoring interpretation may favour its use in the future. Next step would be to pilot the app with Psychiatry Liaison Nurses to test real-life feasibility.

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Eosinophilia and COPD exacerbation

Dr. Jan Kara, Dr. Katherine Finan

Introduction

The presence of eosinophilia in bronchoalveolar lavage and sputum in patients with asthma is associated with an enhanced response to inhaled and systemic glucocorticosteroid treatment. The association between eosinophilia and response to glucocorticosteroid treatment of an exacerbation of COPD is less well established.

Aims and objectives

To establish whether peripheral blood eosinophilia in patients admitted with COPD exacerbations was associated with shorter length of hospital stay. This would imply better response to glucocorticosteroids which are together with bronchodialators the cornerstone of treatment of these patients.

Methodology

Patients with a diagnosis of COPD discharged from Sligo University Hospital in the first 8 months of 2015 were included. The patients were divided into two groups based on peripheral blood eosinophil count on the day of admission. Normal eosinophil count group was defined as eosinophil count <2% of total white blood cell count. High eosinophil count group was defined as ≥2% of total white blood cell count. There were 85 patients in the normal eosinophil group and 22 patients in the high eosinophil group.

Results and Conclusion

The median length of hospital stay of a patient with a primary diagnosis of COPD with high oesinophil count was 3 days (interquartile range 2-9 days). In contrast the patients with the same diagnosis and a normal oesinophil count had a median hospital stay of 6 days (interquartile range 3-8 days).

The results of this study indicate the possibility of better response to glucocoticosteroid treatment of a COPD exacerbation in a patient with high eosinophil count. This association is already well known in asthma.

This association could help to identify patients with a COPD exacerbation who benefit from glucocorticosteroids the most. This information could be very valuable if there is an alternative effective treatment for the patients with normal eosinophil count in the future.

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An Innovative Approach to Enhance Communication

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Introduction

The clinical records of the patients receiving chemotherapy in a day care unit are complex with frequent changes. Their physicians in the community need to be provided with all relevant information to facilitate care in the community. Patient involvement allows an important contribution. The Institute for Healthcare Improvement (IHI) emphasizes that the health care system needs to be more patient cantered and to involve patients and families in the design of car (Jangland 2009)

Aims & objectives

1) To develop electronic discharge summary template for same day communication to primary care physicians appraising them of change in patient's medication or treatment plan.
2) Patient comment cards were designed to seek their opinions and advice for any changes that can be made to improve the services

Methodology

Initial step was involving team members to work on the current discharge template for the inpatient unit and design a communication tool for patients specifically attending the day care unit.
Weekly multidisciplinary team meetings were organised to brief the team the utility of Performa.
A run chart displayed the performance. The criteria were percentage of visits resulting in discharge communication.

Results

Run chart captures the change in the provision of digital communication.
The cumulative small changes showed progressive improvement in provision of discharge information.Results that were evident showed random variation (Provost 2011)[2] .

Conclusion

The hospital discharge innovation provided enhanced support for continuity of care with consistent and relevant information being provided at the right time at the right place. [3,4]

Despite the time constraints and busy schedules it was possible to bring the team together who strived to achieve the target of the correspondence letters to the primary physicians [5]
The future aim will be to receive feedback from the community physicians regarding the innovative approach for the communication tool that has been developed.

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An audit of screening for Thyroid and Coeliac disease in Paediatric Patients with Trisomy 21 in Sligo University Hospital

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Introduction

Patients with Trisomy 21 have a higher incidence of thyroid and coeliac disease[iiiiiiivv]. National guidelines are available for the medical management of children and adolescents with Trisomy 21 in Ireland[vi]. In these children, Down Syndrome Ireland recommend Thyroid Function Tests (TFTs) yearly between age ≥1 - <5 years and every 2 years in those aged 5-18years[vi].

Aims & objectives

We aimed to identify if Paediatric patients with Trisomy 21, are being appropriately screened for thyroid and coeliac disease with the view to implementing changes if necessary to improve the service.

Methodology

A retrospective quantitative audit was carried out in August 2017. Paediatric patients with Trisomy 21 in Sligo were included in the study. Patients were Exclusions- patients <1year of age and > 18 years of age. Data were analysed in 2 groups- ≥1 - <5 years of age and ≥5-18 years of age.
Patients were identified using the hospital log of patients with Trisomy 21.
Results of recent thyroid function tests and coeliac screens were collected and obtained from the computerised lab system. Data were analysed using Microsoft Excel programme.

Results

72 patients were identified, 4 excluded due to age >18 years or <1year.
Total number of patients analysed 68.
19 patients 1-5 years, 49 patient aged 5-18 years.
In the ≥1 - <5 years of age, 12(63.1%) had TFTs within 1 year, 5(26%) within 1-2 years, 1 (5%) within 2-3 years 1(5%) had no TFTs performed.
13(68%) had screening for coeliac disease.
In the 5-18years group, 35(71.4%) had TFTs within 2 years, 3 (6.1%) within 2-3 years,1(2%) within 3-4yrs , 3 (6.1%) > 6ys and 7(14%) never had TFTs checked.
38(77.5%)had a Coeliac screen performed.

Conclusion

This audit identified a need for better adherence with national guidelines in Sligo for screening for thyroid disorder in children with Trisomy 21 as approximately 30% of patients in both age groups were not screened in the recommended time frame. However it is reassuring that 77% (>5 yr group) and 89% (1-5yr group) are screened within 1 year of the guideline recommendations.

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Trends in hospitalisations for musculoskeletal diseases in Ireland 2005-2015

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Introduction
The incidence and prevalence of several musculoskeletal (MSK) diseases are rising, including osteoarthritis (OA), rheumatoid arthritis (RA) and gout. Hospitalisations are an important metric of health care utilization for any diagnosis, reflecting disease severity, availability of resources, and the infrastructure and policies of the healthcare system [1].

Aims & objectives
To analyse hospitalisation trends for MSKs in Ireland between 2005 and 2015.

Methodology
Absolute numbers and direct age-standardised rates of hospitalisations for OA, RA and gout were analysed using the National Hospital In-Patient Enquiry System (HIPE) database. Age bands were grouped into 3 age categories: 'young adults' (Age 19-44 years), 'middle-aged adults' (Age 45-69 years) and 'older adults' (Age 70 years and older). Future projections of hospitalisations to 2045 were computed based on the 2015 incidence rates applied to the projected populations.

Results
The age-standardised rates of hospitalisation increased by 79% and increases were evident across the three age bands and in all 3 disease groups. The highest rate was evident in the over 70 year age group which increased by 38% from 12.2/1000 population to 16.9/1000 population. The number of patient-days per year spent in hospital with a principal diagnoses of OA, RA and Gout decreased from 72,063 days to 53,372 with the largest decrease of 31% in the number of bed days for OA from 62,452 to 43,035. The mean LOS for hospitalisations for the 3 MSDs decreased overall by 43% over the 11-year study period. Assuming stable age-standardised incidence rates from 2014 over the next 30 years, the number of hospitalisations for the 3 MSKs would be expected to increase by 66 % from 19,924 to 32,999.

Conclusion
Assuming stable age-standardised incidence rates from 2015 over the next 30 years, the number of hospitalisations with a principal diagnoses of OA, RA and Gout would be expected to increase by 66 % from 19,924 to 32,999.

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Do we DEXA?

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Introduction
Osteoporosis is a disease characterised by low bone mass and structural deterioration on bone tissue. Osteoporosis leads to fragility fractures, the consequences of which are significant - one in every two women and one in five men will break a bone after the age of 50(2). Fragility fracture is defined as a fracture resulting from the force of a fall from a standing height or less, or a vertebral compression fracture. (8)
Recommendations from International Society of Clinical Densitometry (ISCD) and the Irish Osteoporosis Society are that patients that present with a fragility fracture should have DXA scan within 12 weeks. (1)

Aims & Objectives
The aim of our audit was to ascertain if patients who have attended the Emergency Department with fragility fracture have had a DXA ordered. There is no pathway available for patients presenting with fractures to have a bone health or falls assessment.

Methodology
In May 2017, DXA orders and scans have been made available through the NIMIS system. Education about the NIMIS system is included in induction for the NCHDs in July 2017.We looked at all new fracture OPD referrals during the month of August 2017 using the IPMS computer system to ascertain what proportion had a DXA scan referral. Inclusion criteria included age greater than 18 years and the presence of a fracture.

Results
There were 61 new referrals to fracture OPD which fit our inclusion criteria. Of these 24 were consistent with fragility fractures. 3 DEXAs had been performed, 14 DEXAs were pending, and 1 DEXA was cancelled by patient's request. Of the 24, 18 (75%) had a DEXA ordered

Conclusion
The results of this audit showed that a high proportion of patients with fragility fractures had received a referral for a DEXA scan. However the ISCD and Irish Osteoporosis Guidelines recommend that all adults with a fragility fracture should have a DEXA scan(1,2). A Fracture Liaison Service (FLS), which is a secondary fracture prevention services implemented by healthcare systems for the treatment of osteoporotic patients with the aim of reducing subsequent fractures, would help to bring this number closer to 100%. FLS close the care gap for patients who have sustained a fracture and are currently not offered screening and or treatment for osteoporosis. As 50% of people who experience hip fracture have broken a bone in the past, FLS represents an ideal opportunity for intervention in the journey to avert that hip fracture (4,5,6,7).

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Audit of Referrals From Paediatric Department SUH to Psychology Services 2016

Dr Muhammed Abu Baker, Dr Dara Gallagher (Department of Paediatrics SUH) Dr Mark O'Callaghan (Director of Pyschology Services HSE Markievicz House Sligo)

Introduction

Paediatric Psychology Referrals from SUH can be made to

- Youth Counselling Network (YCN),
- Primary Care Psychology (PCP)
- Child & Adolescent Mental Health Services (CAMHS)

Referral Guidelines for referral of children to community mental health services have been documented by the Sligo/Leitrim/West Cavan framework and are part of the operational policy for Sligo Leitrim Mental Health Teams. Each of the community mental health services has clearly established referral criteria.

Aims & objectives

This audit aims to assess whether referrals were sent to appropriate psychological services according to referral guidelines. A secondary aim is to illustrate the common reasons for which psychology referrals were sent.

Methodology

A retrospective review of the charts of patients referred through Paediatric OPD to psychology services between Jan 2016 to December 2016 was conducted. Data recorded included

- Demographic details
- Referee
- Reason for referral
- Services to which patient was referred
- Appropriateness of referral.

The completed data was analysed and a report was generated by the Clinical Audit Support Team.

Results

73% of referrals were appropriately made. 12% were inappropriate either being referred to the wrong service or not meeting the criteria for psychology referral. In 15% of cases the referral letter was unclear or did not contain enough information to assess appropriateness. The commonest reasons for referral were anxiety and behavioural issues with the next commonest being issues relating to ADHD and Autism Spectrum Disorders.

Conclusion

Referrals should be made to appropriate services according to referral guidelines. Time duration of issues/symptoms should be clearly mentioned on referral letter to decide whether YCN or PCP will be the appropriate service for patient further management. Consideration should be given to the development of a performa outlining severity, impact on life and duration of concerns to accompany referral letter

References

Sligo/Leitrim/West Cavan partnership framework (referral guidelines) for children to community mental health services.
Operational Policy for Sligo Leitrim Mental Health Teams.

Moving Towards Target

Sinead Molloy, Claire Maye, Amanda Kilcullen, Dr Bilal Java, Dr Orla Neylon, Patricia Harte
SUH

Introduction
Type 1 Diabetes Meillitus (T1DM) is a chronic condition affecting 5-40 per 100,000 of paediatric population[1]. Ireland, along with the U.K and Scandinavia, has a high incidence. There are approx 2,700 children in Ireland with T1DM. Clinical Audit was carried out by the Paediatric Diabetes Nurses due to noted improvement in HbA1c in clinics. Previous audits had showed a high mean HbA1c among our clinic cohort for 2009 and 2013. Other factors that contributed towards A1c reduction were examined. Ireland underperforms relative to other European countries in metric outcomes such as HbA1c.

Sligo University Hospital (SUH) in previous audits has underperformed and action was needed reduce Hba1c and improve outcomes. Diabetes control and complications trial (DCCT) and Epidemiology of Diabetes Interventions and Complications (EDIC) provide conclusive evidence that intensive management strategies improve glycaemic control and outcomes in children

Aim
To assess the glycaemic control in paediatric diabetes population in SUH 2016

Method:
An assessment of glycaemic control utilising HbA1c measurement was conducted in 2016. Each child that attended clinic had their HbA1c checked and a clinic average was obtained. Results were then stratified by age and by insulin regimen. Children who were newly diagnosed in 2016 and children attending our service from other hospital for pump assessment or initiation.

Results
Results were compared to similar audits carried out in 2013 and 2009. The clinic average for all children on (CSII and MDI's) for HbA1c was 7.8% (61mmols) demonstrating a move towards a target HbA1c of <7.5% (59mmol/l)[3] as recommended by ADA and ISPAD. 40% of children on CSII and 29% of children on MDI achieved the target of <7.5% (58mmols) in 2016. The improvement is likely related to an increase in intensive insulin management regimens and improvement in staffing ratios with a treat-to-target philosophy. Factors such has technology, structured education and an 'all singing from same hymn sheet ethos' has has contributed to reduction in Hba1c. It is encouraging in terms of mitigation of diabetes-related complications within our patient cohort

Open Disclosure Training Initiative Focusing On Consultant Staff Working At Sligo University Hospital

David Carty, Quality & Safety Department, SUH

Introduction
Adverse events are a feature of any healthcare system. It is recognised that Open Disclosure in the event of a clinical incident is hugely beneficial for the patients and staff involved. This audit is of the voluntary participation of hospital consultants in an evolving local training programme provided by the Quality & Safety Department at Sligo University Hospital in support of the National Open Disclosure Policy.

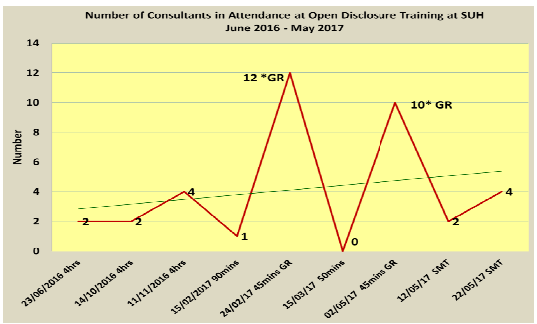
Aims & objectives
The aim of my study was to audit the participation of Consultants (72) working at Sligo University Hospital in a local training programme and by obtaining feedback to develop a programme that has good outcome for Sligo University Hospital. A good outcome by internal standards was considered to be 50% participation.

Methodology
The audit was prospective from June 2016 to May 2017. Interactive PDSA (Plan Do Study Act) cycles were used to customise the National training programme to local requirements. Structured feedback was used to modify the content and direction of the training programme. Run charts and driver diagrams were used to display the data

Results
The feedback over two iterations of PDSA resulted in the evolution of two 45 minute sessions. The sessions, with the agreement of the clinical departments were substantiated for some of the routine multidisciplinary weekly education session. By the end of the audit 60% of the 72 Consultants had participated in the two 45 minute training modules.

Conclusion & Recommendations
Integration of training in aspects of Quality & Safety into the routine multidisciplinary and development programmes at Clinical department level is an acceptable way of providing support for Open Disclosure. A record of attendance was provided and the training was accredited for the purposes of CPD/ Competence Assurance requirements. The completion of feedback forms by the participants was productive.

It is recommended that the Quality & Safety department continues to refine the approach to supporting Open Disclosure and reports again after one year.



High Interest Low Influence Myself & Quality & Safety team	High Interest High Influence Consultants with an interest in Open disclosure
Low Interest Low Influence NCHD's	Low Interest High Influence Consultants with NO interest in Open disclosure

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An audit of annual screening for older adults with type 2 diabetes mellitus in Sligo University Hospital

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Background
When caring for older adults with type 2 diabetes mellitus (T2DM) particular consideration should be given to their broader needs including mental and cognitive health. Brain health conditions such as depression, cognitive impairment and dementia, although more common in people with diabetes, may go unnoticed in older people with complex health problems. Such conditions may affect an individual's ability to successfully manage a complex chronic condition such as diabetes as well as increase personal and health resource burden. On review of the research literature limited data exists examining current annual screening practice of older adults with diabetes.

Aims/Objectives
To evaluate the standards of annual screening of older adult patients with T2DM attending a diabetes secondary care service in Sligo University Hospital.

Methodology
A comprehensive literature review revealed variance in the guidance provided for annual screening of older adults with diabetes. Standards addressing screening of broader health and social domains were obtained from International Diabetes Federation (2013), National Institute for Health and Clinical Excellence (NICE, 2015) and American Diabetes Association (2017) guidelines. A study-specific data collection tool was used to examine electronic records of older patients (65 years and over) attending a diabetes secondary care service in Sligo University Hospital during the study period 1st June 2017 to 1st August 2017. The proportion of patient records in compliance with the standards was calculated.

Results
Electronic records of 144 older patients (mean 74.12 years, sd 6.438) were audited. Results showed that 11.8% (n=17) had a review of mood status and 6.3% (n= 9) had a cognitive assessment documented in the past one year. Few older patients had a pain risk assessment (14.6%, n=21) or a falls risk assessment (6.3%, n=9) and no patient had a documented sexual health screen.
In contrast there was a documented screen of blood pressure in 97.9% (n=141), lipid profile in 95.8% (n=138) and nephropathy in 82.6% (n=119). Nutrition status was screened in 63.2% (n=91) of cases and 41.0% (n=59) had a diabetic foot screen in the previous twelve months.

Conclusion
Results show mental and congitive health screening is not routinely being performed as part of annual screen of adults with T2DM, despite the high prevalence and personal and health resource costs of diabetes brain health complications. Annual review of older adults with T2DM represents an important opportunity to integrate mental and cognitive health screening and treatment into multidisciplinary team diabetes care.

References
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Audit of the Colorectal Screening Programme, 3 years on – Round 1. SUH

Cassidy, M., Walsh, K., Harte, P., Fitzpatrick, M., Endoscopy Department, Clinical Audit Support team, Sligo University Hospital.

Introduction
Bowel screen the National Colorectal Screening Programme was launched nationally in 2013. Clients aged between 60-69 years are being invited to complete a faecal immunochemical test (FIT). If positive, clients are offered a screening colonoscopy.

Aims & objectives
This audit aims to highlight the outcomes of the Colorectal Screening Programme in Sligo University Hospital after 3 years- Round 1 and compare some of the findings to results found nationally.

Methodology
From May 2013 to May 2016, 570 screening colonoscopies were carried out in SUH. All clients were entered onto a database. The results were correlated from client outcome data.

National Results – Oct 2012 to Dec 2015
- Number of clients invited nationally in Round 1 - 488,628
- Low level uptake 40.2%
- 8,062 attended for colonoscopy
- 521 screening participants were diagnosed with CRC
- 71% of the cancers detected were at Stage 1 or 2
  13,000 pre cancerous adenomas or polyps were removed

SUH Results
Age profile ranged from 60 years to over 70 years
Gender profile ranged from 63% male to 37% female over the 3 years
Presence of polyps averaged at 78% of clients screened over the 3 years
Adenoma detection rate for SUH averaged 61%

Tables and Charts by 4 will be on proposed poster highlighting SUH results.
- Graph 1: Age profile over 3 years
- Graph 2: Gender profile over 3 years
- Graph 3. Break down of polyp yield and size over 3 years
- Graph 4: Histology results and comparing the adenoma detection rate (ADR) to national figures.

Conclusion
- At the end of Round 1, in SUH Adenoma Detection Rate (ADR) remained consistently higher than expected at an average of 61%. (KPI- 25% to 35%)
- More men than women required screening colonoscopy in SUH. (Nationally, uptake of screening for females was higher than in males 44.1% compared to 34.6%)
- Caecal Intubation rate with photographic evidence (CIR) stood at an average of 96% over the three year period (KPI – 90%-95%)

References
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Under Pressure! A Pressure Ulcer Prevention Strategy to Reduce Hospital Acquired Pressure Ulcers.

Moya Wilson, Quality & Safety Department

Introduction

Sligo University Hospital (SUH) Quality & Safety Department analyses and manages the incidents reported in the hospital via the Quality Management Information System (QMIS). Over a nine month period, 211 pressure ulcers were reported; 64 were acquired in hospital and 20 of these were grade 3, which are Serious Reportable Events (SRE's). Reviews of all SRE's were undertaken to determine causation[3 4].

Aims & objectives

- To determine if current practice is adhering to the recommended guidelines regarding pressure ulcers[1]
- Develop recommendations from the review findings when practice is not meeting the recommended standard[2]
- To improve the quality and safety of patient care in Sligo University Hospital.

Methodology

Systems Analysis Reviews were undertaken in the case of the 20 grade 3 pressure ulcers acquired in hospital in line with the HSE SRE management Policy. The following multi-factorial approach was taken from the recommendation of the reviews and forms the pressure ulcer prevention strategy;

1. Mandatory Pressure Ulcer Prevention Awareness Skin Care Bundles were implemented on all wards
2. Education sessions tailored for Healthcare Assistant staff
3. Education sessions tailored for student nurses
4. Pressure Ulcer Prevention Ward packs were developed for all wards.
5. CNM2 Workshops undertaken to ensure sustainability of learning.
6. Education session provided on Legal & Professional Issues for the RN
7. Pressure ulcer prevention included in Q&S Walk-rounds
8. Review of care planning documentation of pressure area management was undertaken and amended.
9. Audit of skin care, to include skin inspection and documentation of skin care carried out on each ward.
10. Bed manager to be made aware of patients whose skin is deemed at risk- admission sheet amended.
11. Waterlow Assessments are now undertaken in ED and AAU.
12. Report on beds in use on each ward was completed and 13 replacement beds were secured.
13. Process was agreed with Services Manager around the efficient management of pressure relieving mattresses on contract from external provider.
14. Heel protectors and pressure relieving cushions were ordered for each ward/unit.

The above approach was led out by the Quality and Safety Manager and the Director of Nursing in collaboration with a Hospital wide multidisciplinary team which included;
Nursing, healthcare assistant, medical, allied health, nurse practice development, centre for nursing and midwifery education, procurement, services manager, general management, Quality and Safety Executive Committee (QSEC) and the Executive Management Team(EMT).

Results

- Reduction of 38% in hospital acquired pressure ulcers
- Reduction of 90% in hospital acquired grade 3 or 4 pressure ulcers.
- An increase in pressure ulcer reporting of 18%
- Improved quality of reporting.

Conclusion
The support of the EMT and QSEC was vital to the success of the strategy. The collaboration of the MDT and a multifactorial approach worked to improve care by reducing significantly hospital acquired pressure ulcers.

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Hyponatremia in Psychiatry of later Life, Sligo/Leitrim Mental health services

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Background
Antidepressants have long being associated with hyponatremia. Incidence of hyponatremia varies from 0.5–32%, with risk increasing with age. As a service catering to an older cohort often requiring pharmacological therapy for depression, antidepressant associated morbidity is an important consideration. Acute hyponatremia is a medical emergency while chronic hyponatremia is associated with an increased length of stay in hospital and increased risk of death.

Aims/Objectives
To evaluate presentations of hyponatremia to Psychiatry of Later life Sligo /Leitrim Mental health services.
To measure compliance with Maudsley guidelines, specifically: Serum sodium should be determined at baseline and 2 and 4 weeks, and then 3-monthly for those at high risk drug induced hyponatremia

Method
Diagnoses of hyponatremia in patients attending Liscarney house were recorded from January 2017 to September 2017. An audit tool recorded data based on patient's clinical notes and correspondence, which were reviewed by the authors. Maudsley guidelines on the prescribing of antidepressants were used as a standard.

Results
Eighteen cases (14 women, 4 men) of hyponatremia met inclusion criteria. Mean age was 78.9 years, 16 (88.9%) had a psychiatric diagnosis, 11 (61.1%) were prescribed an antidepressant, 16 (88.9%) were prescribed other psychotropic medications.
Eight (44.4%) were classified as mild (130-135) hyponatremia, 3 (16.7%) moderate hyponatremia (125-129) and 7 (38.9%) as profound hyponatremia (<125). Six (33.3%) were asymptomatic, 12 (66.7%) had moderate symptoms, 9 (50%) required hospital admission, with average stay of 21.3 days. Of the remainder, 4 (22.2%) cases were managed by psychiatry services, 1 (5.5%) in primary care, 3 (16.7%) in other locations. Data was unavailable for 1 (5.5%). In total, 15 mini-mental state examination results were available, (average score 24.2).
Maudsley guidelines were poorly adhered to; of the eleven patients prescribed antidepressant medication, 5 (45.4%) had sodium measured at baseline, 4 (36.4%) had Sodium measured at 2 weeks, 3 (27.3%) had sodium measured at 4 weeks, 2 (18.2%) had sodium measured at 12 weeks.
Risk factors for hyponatremia included; 17 (94.4%) with existing co-morbidities increasing vulnerability to hyponatremia, 8 (44.4%) were at extremes of old age (>80), 6 (33.3%) had low baseline sodium, 6 (33.3%) had a history of hyponatremia, 1 (5.5%) had reduced renal function. Seventeen (94.4%) were taking additional medications contributing to hyponatremia.

Conclusions
Hyponatremia associated morbidity in the older population is high, with a significant rate of hospital admissions. As many patients attending psychiatry of later life have existing co-morbidities the aetiogy of hyponatremia is not always clear. Nevertheless antidepressants should always be considered as a significant cause. This audit showed poor rates of compliance with the Maudsley guidelines for monitoring of sodium levels in context of antidepressant use.

Iodine uptake following use of seaweed baths, inhalation or dermal absorption?

Tarha Westby, Aodhmar Cadogan, & Geraldine Duignan, School of Science, Institute of Technology Sligo, Noreen Montgomery, Chief Medical Scientist, Biochemistry Dept, Sligo University Hospital

Introduction

Seaweed baths containing the *Fucus serratus* Linnaeus seaweed are a rich source of iodine, with the potential to increase the urinary iodide concentration (UIC) of the bather. However the extent and mechanism of uptake has not been previously studied.

Aims & objectives

To carry out an *in vivo* study to investigate whether a subjects' UIC increases by immersion in, or by being adjacent to, a seaweed bath.

Methodology

The study involved 30 adult subjects (20-50 yr). These were assigned randomly to 2 study groups; bathing (n=15) and non-bathing (n=15). Both groups were exposed to warm seaweed baths. Bathing subjects were requested to immerse themselves in the seaweed bath for 40mins. Non-bathing subjects sat beside the seaweed bath, inhaled normally for 40mins and had no contact with the seaweed or bathwater. Pre-treatment urine established a normal UIC profile for each subject and was compared to post-treatment urine samples. The UIC was measured using the Sandell Koltoff (SK) method. The creatinine concentration was determined using the Roche Modular Analyser (Jaffé method) at SUH to calculate the corrected iodine concentration[1].

Results

As expected, there was no significant difference found between the pre-treatment UIC of both groups ($p = 0.479$) where bathers pre-treatment median =72 µg L^{-1} and non-bathers pre-treatment median =75 µg L^{-1}. This is in line with WHO[2] which classes the Irish population (adults 22-61) as mildly deficient (UIC 82 µg L^{-1}) in iodine.

The UIC of the population shows an increase following the seaweed bath from a pre-treatment median of 76 µg L^{-1} (range 60 – 94 µg L^{-1}) to a post-treatment median of 95 µgL^{-1} (range 64 – 104 µg L^{-1}). The bathers' post-treatment median was 86 µg $L^{-1}$and non-bathers post-treatment median was 105 µg L^{-1}.

Conclusion

The bath increased the UIC by a significant amount and furthermore the inhalation of volatile iodine is a more significant contributor to UIC than previously thought. While not a very efficient method it may be an effective treatment, in iodine deficient subjects.

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Clinical Reaudit of Ca, PI4 and PTH levels in haemodialysis patients in SUH 2017

Dr Muhammad Fahad Iftikhar[1], Dr Chaudhry Adeel Ebad[1] , Dr Muhammad Muzammil[1], Dr Utkarsh Painuly[1], Patricia Harte[2], Mary Fitzpatrick[2,] Dr James Lineen[1], Nephrology[1], Clinical Audit Support Team[2]

Introduction

In 2003, the National Kidney Foundation–Kidney Disease Outcomes Quality Initiative (K/DOQI) published a guideline recommending tight control of serum calcium, phosphorus, calcium-phosphorus product (Ca × P), and intact parathyroid hormone levels in patients with chronic kidney disease. K/DOQI recommends to check calcium, phosphate and calcium and phosphate product every month in CKD 5 Haemo Dialysis patients and that PTH to be checked once every three months. Consistent control of the markers of the bone metabolism and disease within targets is strong predictor of survival in haemodialysis patients

Aims & objectives

- To compare current patient meeting KODQI guidelines for Ca, PO4 and PTH in SRH HD unit.
- Measures to improve quality of care for more patients to meet target ranges.
- Consistent control of the markers of the bone metabolism and disease within targets is strong predictor of survival in haemodialysis patients

Methodology

This was a retrospective study audit in SRH HD patients between 01/01/2017 – 31/03/2017 (39 patients in total). Performa for data collection was designed. E-med Renal System for data collection. Lab system was used where required to double check data results.

Results

- Percentage of Calcium levels within target range in months of January, February and March were 85%, 87% and 87 % respectively.
- Percentage of Phosphate levels within target range in months of January, February and March 41%, 36% and 36 % respectively.
- Percentage of Calcium and Phosphate product levels within target range in months January, February and March were 69%, 59% and 59 % respectively.
- 39% were in target range for PTH levels in months of January.
- 77% of our patients are on Non–Calcium based phosphate binders.
- 36% of our patients are on Calcium based phosphate binders.
- 74% of our patients are on Vitamin D analogue and 15% on calcimimetics agents.
- All of our patients were seen by Dietician on ongoing basis every month.

Conclusion

- KODQI recommend 100% patients to meet target Calcium levels every month.
- 85%, 87% and 87 % were meet by our patients respectively.
- KODQI recommend 100% patients to meet target Phosphate levels every month. 41%, 36% and 36 % were meet by our patients respectively.
- KODQI recommend 100% patients to meet target Calcium and Phosphate product levels every month. 69%, 59% and 59 % were meet by our patients respectively.
- KODQI recommend 100% patients to meet target for PTH only 39% were in target range for PTH levels.
- All of our patients were seen by Dietician on ongoing basis every month.
- 74% of our patients are on Vitamin D analogue and 77% of our patients are on Non – Calcium based phosphate binders.
- Non Compliance with medication and advice is another factor in strict control for target ranges.

References

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Case Report - Ipilimumab induced hypophysitis

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Ipilimumab is an anti-CTLA-4 monoclonal antibody licensed for metastatic melanoma.

A 70-year-old female with metastatic malignant melanoma presented with anorexia, malaise and confusion two weeks after her fourth dose of Ipilimumab. She had a low serum sodium of 124 pmol/L on proton pump inhibitor and selective serotonin reuptake inhibitors, which were stopped and she was fluid restricted to 1.5 litres/day. Her urinary sodium was elevated 65mmol/L.

Serum cortisol was 19nmol/L with no history of steroid use. A short synacthen test demonstrated a baseline cortisol of 18nmol/L rising to 176nmol/L at 90 minutes, and glucagon stimulation test baseline cortisol of 19nmol/L to only 20nmol/L at 120 minutes, GH rose to maximum <0.3mIU/L.

Her FSH and LH were low at 5.8 mIU/ml /0.4mIU/ml respectively, oestradiol undetectable, TSH inappropriately low at 0.5 IU/ml for T4 of 6.1pmol/L. ACTH was 3.2pmol/L range (1.1- 13.2). MRI pituitary was normal
.
She was commenced on dexamethasone 0.75 mgs od and is currently well and continues on 0.75 mgs to date. 6 months later TSH has returned to normal 0.71IU/ml (T4 19.2pmol/L), Na 137pmol/L.

Ipilimumab inhibits CTLA-4 receptors on T-cells, enhancing immune response and has been associated with immune related adverse events (irAEs). Hypophysitis accounts for 1 – 6% of Ipilimumab associated irAEs with some studies showing anterior pituitary antibodies in the serum of patients that developed ipilimumab induced hypophysitis (IIH).

Measurement of these antibodies may help early diagnosis. Caturegli et al analysed autopsy pituitary samples of six patients treated with anti-CTLA-4.

All samples expressed CTLA-4. The highest expression was found in the patient who had a pre-mortem diagnosis of IIH. Individuals with high pituitary expression of CTLA-4 may have a higher risk of anti-CTLA-1 hypophysitis.

There are currently no available tests to identify these individuals.