



Northern & Yorkshire Medical Student and Trainee Presentations

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Medical Student/ FY1 Poster Presentations

MSP1 **Laura Ward**

The Relationship Between Eating Disorder Fasting Behaviours and Personality in an Adolescent Sample

Background: Studies show that personality is associated with eating disorders (EDs). The substance use and risk profile scale (SURPS) is a questionnaire used to identify individuals at risk of substance abuse. However, research shows that the personality traits assessed by the SURPS may also be associated with EDs. The aim of the study is to investigate whether the SURPS predicts ED fasting behaviours in an adolescent sample.

Methods: A sample of 2213 adolescents were recruited at age 14 and followed up at age 16 and 19. ED fasting behaviours were identified from the DAWBA questionnaire. Logistic regression was used to analyse the data.

Results: Hopelessness was significantly associated with ED fasting behaviours in the whole sample at age 14, 16 and 19: (OR = 1.10 95% CI = 1.06-1.14); (OR = 1.09 95% CI = 1.05-1.13); (OR = 1.10 95% CI = 1.06-1.14). Anxiety sensitivity showed a similar association. There was a weak positive association between impulsivity and ED fasting behaviour at 14 and 16; (OR = 1.05 95% CI = 1.00-1.09), (OR = 1.14 95% CI = 1.08-1.19), but the results at age 19 were insignificant. Likewise, the results of the sensation seeking dimension were insignificant at 14 and 16, but there was a significant weak positive association at age 19; (OR = 1.04 95% CI = 1.01-1.08).

Conclusions: All personality dimensions were significantly positively associated with ED fasting behavior, highlighting that the SURPS may be a useful clinical tool in predicting ED fasting behaviours in adolescents.

MSP2 Bettina Teruzzi

The Emotional Impact of Working in Paediatric Neuro-Oncology

Background: Multidisciplinary healthcare professionals (HCPs) in paediatric neuro-oncology (PNO) work in a highly emotionally charged discipline. 'Normal' work includes caring for children and their families through the trauma of early diagnosis, critical illness, painful procedures and on occasion death. Working with chronic and critically ill children has been associated with burnout, defined as a long-term stress syndrome.

Objective: To assess emotional fatigue and burnout in HCPs in a PNO MDT.

Method: The emotional impact of 10 HCPs within a UK PNO MDT was measured using a semi-structured interview and the self-report Oldenburg Burnout Inventory (OLBI), a measure of burnout with exhaustion and disengagement subcomponents.

Results: 80% of participants scored highly on the exhaustion subcomponent of burnout; 40% scored highly on both subcomponents. Qualitative analysis found themes relating to a high level of commitment, acknowledgment of the burdens and challenges of the job.

Conclusion: This study bridges the current literature gap through the analysis of the whole PNO MDT. Emotional exhaustion was found throughout the discourses. A potential explanation could be high levels of professional commitment to patients create a performance pressure in these HCPs associated with burnout. Further interventions should target reduction of emotional fatigue in HCPs in this speciality.

Is systemic inflammation an important factor in the pathophysiology of major depressive disorder?

Background

During my psychiatry rotation I observed treatment-resistant depression as a source of frustration for service-users and service-providers alike. The hopelessness experienced by individuals upon exhausting other treatment options, and those working with them, inspired me to explore advances in the search for a definitive “cause” of depression, and correspondingly more effective treatments.

Methods

This research is a discussion of literature answering the question ‘Is systemic inflammation an important factor in the pathophysiology of major depressive disorder?’. This was achieved via triangulation of different study types exploring different aspects of the relationship and an exploration of literature regarding the pathophysiological pathways through which inflammation is claimed to have these effects.

Results

My results answer ‘yes’ to my research question, supporting the implication of systemic inflammation in depression’s aetiology, and suggests a dose-responsive relationship. However, although clear that the two are inextricably linked, neither element appears to be entirely necessary or sufficient for the other.

Conclusion

The suggestion of an inflammatory subtype of depression could offer new hope via anti-inflammatory agents. As the relationship between the two is elucidated, a high-risk population may be identified and attention brought to an individual’s mental health at an earlier stage. Compliance could be improved in immunotherapy patients, of which psychiatric symptoms are a common cause of treatment discontinuation. An acknowledgement of this relationship could ensure mental health services are accessible before, during, and after treatment. Whilst more research into this relatively novel avenue is vital, it holds significant promise and hope for many.

Audit of weight monitoring for patients on antipsychotics

Background:

Background

Obesity and being overweight is a recognised issue countrywide, particularly within mental health secure units with rates reaching 80%. Reasons include poor diet, decreased activity and medication. These individuals generally have a severe mental illness, with an accompanying increased mortality rate 2-3x that of the general population. We opted to focus on antipsychotic initiation; weight gain in the first 6 weeks is predictive of future gain. We believe clinicians have an important role in obesity prevention, included in an overall multidisciplinary strategy.

Standards

The Trust Antipsychotic Prescribing and Nutrition policies were used as criteria. A standard of 100% was set, with allowances made for patients too unwell to cooperate with monitoring on admission.

Method

Computerised notes were reviewed for patients on one medium and one low secure ward (24 patients total). Methods included keyword searches in progress notes and examining care plans and relevant forms within the core clinical documents.

Results

Data collection is in progress and we anticipate completion within a fortnight. Early findings indicate the nutrition policy is well adhered to, the antipsychotic monitoring policy less so. Discussions regarding potential weight gain were poorly documented. No patients were weighed weekly following commencement of antipsychotics and recorded early weight gains were not actioned.

Impact

This audit will be presented at ward management meetings. There is scope for improvement in all areas and a greater awareness is needed, both for staff to implement changes and for medics to take responsibility for ensuring monitoring is undertaken for medications they prescribe.

Management of Bone Health in Patients with Anorexia Nervosa within a Specialist Eating Disorder Service in Newcastle

Background

Reduction in bone mineral density is common in patients with anorexia nervosa (AN), leading to the co-morbidities osteopenia and osteoporosis. The gold standard test for detection of osteoporosis is dual energy x-ray absorption scanning (DEXA). The main prevention and treatment of osteoporosis in AN is to maintain a healthy body weight, with calcium and vitamin D supplements recommended as adjuncts.

Objective

To audit practice within a specialist eating disorder service against the local protocol and NICE guidelines for management of osteoporosis in AN.

Methods

Data were extracted from paper and electronic patient records (RiO and ICE systems), using an audit tool.

Results

Sixteen patients (inpatients and day-patients) were included. One patient declined the use of their data, leaving 15 patients for analysis: 100% female, mean age 30.8 years (range 19-64).

All patients with an absolute indication for a DEXA scan had one performed. Only 14% of patients with osteopenia or osteoporosis had a repeat scan after 2 years. 91% of patients were prescribed calcium and vitamin D supplements. Only 33% of patients had the scan discussed in advance, 46% had results explained and 77% received additional relevant information.

Conclusions

Initial DEXA scans are performed as per guidelines, however they are not routinely repeated within the stipulated 2-year period. There is also inconsistent documented evidence of patient discussions.

Recommendations

Implement a checklist to facilitate and improve patient discussions and documentation. Also, develop a more robust method of ensuring repeat DEXA scans after 2 years. This may require liaison with GPs.

FY2/Trainee Oral Presentations

The Treatment of Autism Spectrum Disorder with Auditory Neurofeedback: A Randomized Placebo Controlled Trial Using the Mente Autism Device
Background:

Introduction: Children affected by autism spectrum disorder (ASD) often have impairment of social interaction, difficulty with emotional communication and postural problems with recognized relationships between postural control mechanisms and cognitive functions. Beside standard biomedical interventions and psychopharmacological treatments, there is increasing interest in the use of alternative non-invasive treatments such as neurofeedback (NFB) that could potentially modulate brain activity resulting in behavioural modification.

Objectives: Mente Autism is a medically certified portable NFB wireless device manufactured by Neurotech that was engineered to provide a home-based therapy for children with ASD. The objective of this study was to assess the effectiveness of the Mente Autism device at treating children with ASD.

Methods: Eighty-three ASD subjects were randomized to an Active group receiving NFB using the Mente device and a Control group using a Sham device. Both groups used the device each morning for 45 minutes over a 12 week home based trial without any other clinical interventions. Pre and Post standard ASD questionnaires, qEEG and posturography were used to measure the effectiveness of the treatment.

Results: Thirty-four subjects (17 Active and 17 Control) completed the study. Statistically and substantively significant changes were found in several outcome measures for subjects that received the treatment. Similar changes were not detected in the Control group.

Conclusions: Our results show that a short 12-week course of NFB using the Mente Autism device can lead to significant changes in brain activity (qEEG), sensorimotor behaviour (posturography), and behaviour (standardized questionnaires) in ASD children.

Audit of baseline ECG monitoring on the Acute Inpatients wards of BDCFT

Background:

Many psychotropic drugs are associated with ECG abnormalities, especially those in antipsychotic class causing an increased risk of serious ventricular arrhythmias and sudden cardiac death. ECGs are used to establish a baseline of the patient's cardiac status and to monitor for QT prolongation.

Standards:

This audit looked at adherence to BDCFT's Physical Health Care Policy that an ECG should be completed within 1 week of admission.

Method:

A retrospective study of 75 patients from 5 acute inpatient wards using electronic record keeping system. Secondary data was collected on patient-related health factors that may impact on cardiac health, such as age, physical co-morbidities and use of medications.

Results:

50 patients (67%) had an ECG carried out within one week of admission, 8 (11%) did not and 17 (23%) refused.

The most common reason for non-completion was absence of evidence of completion following ECG being recorded in the plan. Other reasons indicated unavailability of working ECG machine and patient agitation.

There was no significant difference between the patients who had ECG completion, non-completion and refusal when analysed by patient-related health factors, indicating that these factors did not impact ECG completion.

Impact:

This audit gave moderate assurance of 89% of adherence to BDCFT policy. Recommendations in BDCFT have been placed for:

- a. Greater emphasis in the training of junior doctors at induction to document ECG completion and reasons for non-completion
- b. Escalation to senior management about lack of availability of ECG machine resulting in the ordering of a new ECG machine

FY2/Trainee Poster Presentations

TP1 Dr Jenny Cole

Can the type of psychiatry placement affect a Foundation Year Doctor's overall perspective of the speciality?

Background and objectives

There are many studies looking at the experience of medical students during their psychiatry placement, and the affect this has on their perspectives of the profession, but fewer looking at the experience of Foundation Year (FY) doctors. In Leeds there are 7 different types of FY posts; working and old age inpatient, intensive community placement, crisis team, working and old age Liaison and eating disorders.

This study develops previous research by exploring the FY doctors' experience during their psychiatry placements, how these experiences impacts their perspective of the profession and likelihood of applying for the specialty.

Method

The study gathered data from 33 FY doctors from two cohorts during 2017. FY doctors complete three semi-qualitative questionnaires during their 4month placement. Data was analysed using thematic analysis which enabled themes to be identified from each set.

Results

The results were discussed under the following themes; overall perspectives of psychiatry as a profession, placement experience, core psychiatry skills gained and the likelihood of applying for core psychiatry training.

Clinical implications;

The FY doctors' experiences during their psychiatry rotations lead to variation in skills gained and appear to effect on the FY doctor's perspective of psychiatry. The paper discusses the role supervisors have in getting the balance between clinical exposure and adequate support. The results are then discussed in the context of recruitment opportunity.

Ward Transfers in Patients with Dementia in York Hospital

Background

There is increasing awareness of the impact of transfers between wards particularly for patients with dementia with evidence they can cause delirium, worsen patient outcomes and prolong hospital admissions. Patients with dementia or delirium are frequently more disturbed in the evening and overnight therefore transfers at these times should be avoided.

Standards

York Hospital Dementia Awareness week launched their Dementia Strategy in May 2017. This states patients with dementia should only be transferred for clinical reasons.

Method

A retrospective case note audit identified patients with dementia referred to the hospital liaison team during a 3 month period from January 2017 (46 patients) and re-audited in June 2017 (32 patients). Data was collected regarding ward transfers with the time and reason for transfer, professional instigating transfer and notification of a relative.

Results

71% of ward transfers were appropriate clinical transfers compared with 78% in the re-audit. 29% in the initial audit were either non-clinical transfers or transfers with no discernible reason compared to 22% in the re-audit. 56% of transfers in the initial audit and 70% in the re-audit took place out of hours.

Impact

Family members are infrequently informed about transfers which could be perceived as poor care and lead to complaints. Timing of transfers has been highlighted as a potential focus for change. Following this audit we have recommended the use of a ward transfer proforma aimed at reducing non-clinical and out of hours transfers; this is being piloted for all patient transfers in York Hospital currently.

Review of Models of MDT working in Older People's Community Mental Health Teams

Background: MDT meetings are resource-intensive and greater multidisciplinary is not necessarily associated with more effective decision-making. There is limited guidance as to the recommended structure, process or content of MDT meetings in the community setting and within the community Older People's Services (OPS).

Objectives: To examine the current approaches to MDTs within OPS and propose new guidance to reduce inappropriate variation.

Method: A questionnaire was used which contained 23 questions including 19 multiple choice questions and 4 open questions.

Results: Theme 1: Discussing the care of individual patients: The majority of team members felt that MDTs aided clinical-decision making, shared decision-making, team working and sharing of information. However team members commented on the meetings being too large.

Theme 2: Team work: the majority of team members felt able to contribute to discussions and felt this was valued.

Theme 3: Team management: The majority of staff identified the Clinical Lead as the preferred chair, followed by the Consultant/Doctor. The qualities of a good chair included good time-keeping, listening skills, to be focused and assertive.

Theme 4: Learning and development: the majority of staff stated that they felt that the MDT should play an important role in sharing learning and best practice however few felt this was achieved.

Impact: This evaluation provided invaluable insight into staffs' views as to the role, value and importance of the OPS MDT. A standardised approach to the MDT would enable their effectiveness to be understood, monitored and evaluated.

Teaching Psychiatry in General Practice to GP Trainees: A Bespoke and Collaborative Approach

Background:

The World Health Organisation estimates that one third of GP consultations have a direct mental health component. However, only one third of doctors have received mental health training in the past five years and 10% feel concerned about their mental health training. There is, therefore, a need to collaborate with GPs to develop the appropriate skills to manage this safely.

Methods:

We distributed questionnaires to GP trainees in a psychiatry rotation and used this information to develop the teaching programme content. We designed a four session programme encompassing; 10-minute psychiatric consultation, referrals and psychiatric team, psychotropics and psychiatric specialities. This was delivered to the first cohort and feedback was collated to inform changes for the second cohort. With the second cohort a pre-course questionnaire was distributed asking the trainees to assess their confidence at in various aspects of psychiatry in general practice. This was distributed again following the teaching programme.

Results:

The feedback from the first cohort was very positive, however, there were issues regarding low attendance. We used this to guide changes to improve attendance for the second. The pre-course self-rated confidence scores in each category were compared to the post- course scores using a paired T-test and were shown to demonstrate a statistically significant improvement ($p=0.00017$).

Conclusions and Recommendations:

Working collaboratively with GP trainees in their psychiatry placement we have developed and delivered a bespoke teaching programme. The trainees have reported a greater level of confidence in various areas of psychiatry following this teaching programme.

An audit looking at benzodiazepine prescribing patterns in Crisis Services within Northumberland, Tyne and Wear NHS Foundation Trust (2016 and 2018)

Background:

BACKGROUND:

Inappropriate prescribing of benzodiazepine medication can lead to increased tolerance and dependence.

In 2016 we conducted an audit of Crisis services within Northumberland, Tyne and Wear NHS Foundation Trust (NTW). This was to assess compliance with trust policy for safe benzodiazepine prescribing. A number of actions were then implemented.

A repeat audit was completed in 2018.

STANDARDS:

There should be a documented clinical indication, intended duration, plan for review and discontinuation for all newly prescribed benzodiazepines.

METHOD:

Retrospective data was collected from electronic records of patients in contact with crisis services. The identified patients all had benzodiazepines started by the team involved. 40 patient records were checked for the period January-March 2016. 40 different patient records were checked for the period June – August 2018. Search of records focused on identifying information needed to meet policy standards.

RESULTS:

In 2016, of the 40 patients, 35 (87.5%) had a documented clinical indication. 29 (72.5%) had an intended duration of treatment. Only 19 (47.5%) had review of the prescription documented, and only 20 (50%) had a discontinuation plan.

In 2018, 40 (100%) of patients had a documented clinical indication. 32 (80%) had an intended duration of treatment. 38 (95%) of patients had both a review of prescribing and discontinuation plan documented.

IMPACT:

Compliance with benzodiazepine prescribing policy showed significant improvement in 2018 compared to initial audit results in 2016. The highlighting to all teams involved of the policy guidelines, and action taken to ensure documentation was included in electronic records was key to this improvement.

Wasted Potential – Lithium use in Bipolar Disorder

Background: Lithium is an established treatment for bipolar disorder, but are patients receiving the full therapeutic benefit? NICE guidelines recommend that patients be maintained with a serum lithium level of 0.6-0.8mmol/L. If patients relapse whilst within this range then the guidelines suggest that consideration should be given to modifying the target range to 0.8-1.0mmol/L.

Standards: All patients with bipolar disorder on lithium should have lithium levels within the target range and if a relapse happened whilst within this then consideration should have been given to modifying the target to 0.8-1.0mmol/L.

Method: Lithium registers and PARIS notes were used to establish which patients with bipolar disorder had been admitted to hospital in the preceding two years. For these patients the lithium level prior to admission was checked to see whether it was within 0.6-0.8mmol/L. For patients where this was the case the electronic notes were checked to see whether consideration was given to modifying the target range to 0.8-1.0mmol/L.

Results: 33% (5/15) patients had lithium levels lower than 0.6mmol/L prior to admission. Of the 10 patients whose levels were 0.6-0.8mmol/L or above, only 2 (20%) had their target modified to 0.8-1.0mmol/L. Rationale was provided as to why this was not modified in 4 others (40%). 40% (4/10) did not have their level modified and no reason was provided.

Impact: There is clear scope to optimize lithium use both in the community and in inpatient settings by aiming for lithium levels within 0.6-0.8mmol/L and increasing the target range should this prove insufficient.

TP7 Dr Helen M Buckley

Prevalence and typology of out-of-hours requests on mental health wards in Leeds

Currently there are limited data to describe the distribution of requests out-of-hours relating to physical or mental health on inpatient mental health wards. Informal reports indicate that Trainees' emergency psychiatric experience may be jeopardized due an overabundance of calls to attend routine physical health needs, a situation compounded by a lack of system-resilience to meet physical health needs of inpatients across the multidisciplinary team (MDT).

This service evaluation project provides baseline data on the prevalence and typology of requests to the out-of-hours team on mental health wards in Leeds. A proforma was developed to capture the details of requests, allowing standardised data collection over the month of October 2018. Data were analysed to determine the duration spent on physical and mental health matters, split further into routine and emergency cases, and by different groups of trainees whilst working out-of-hours.

Results indicate that the majority of time whilst working on-call was spent on routine physical health matters with only approximately 10% of requests attributable to emergency psychiatry needs, in line with anecdotal evidence.

These data will allow service improvement planning for meeting the physical health care needs of inpatients in mental health units in Leeds, including with the introduction of 'Bitesized teaching', as provided by Health Education England, on physical health conditions for staff as required across the MDT. These changes may allow for a higher standard of care to be offered by a more resilient MDT, potentially to allow core trainees to increase their exposure to emergency psychiatry experience out-of-hours.

