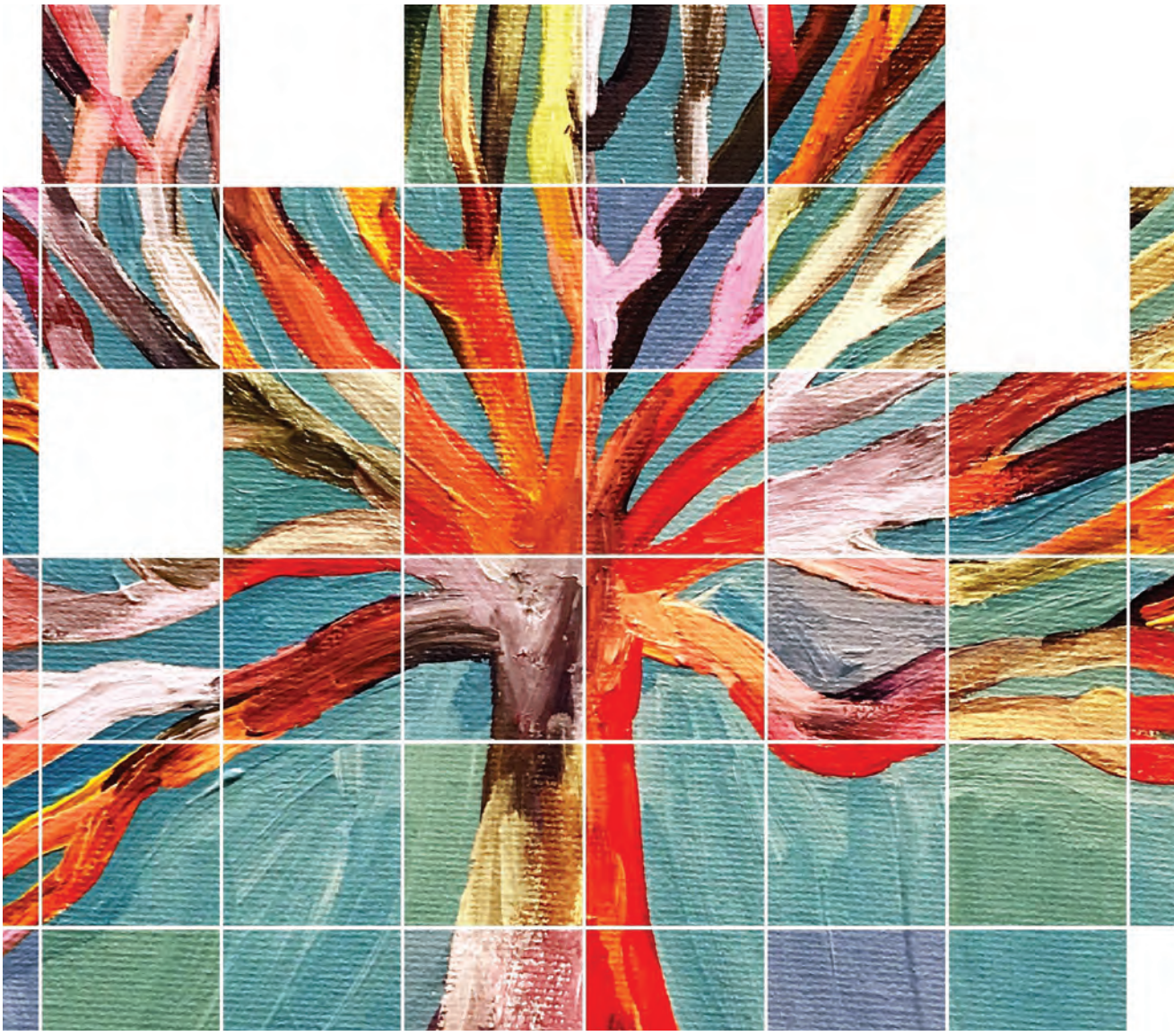
NHS
Kent and Medway
NHS and Social Care Partnership Trust

Kent Journal of Psychiatry

Dedicated to Psychiatry trainees and trainers

September 2017 - Volume 1 - Issue 1



Kent Journal of Psychiatry is a psychiatric journal with emphasis on the publication of research by psychiatry trainees and their mentors. This traditional source of new medical knowledge is under pressure due to the logarithmic growth of journal submissions; this journal attempts to redress this balance.

The editors will offer support to young authors in the presentation of their findings. This will be followed by rigorous peer review. The procedure will enable the journal to fulfil a valuable educational and developmental role in addition to presenting high quality research to a wider readership.

Kent Journal of Psychiatry is a free online publication. It offers the best of new research from innovative young thinkers on the front line of mental health care.

Editors

Contents

Kent Journal of Psychiatry - Instructions for authors

Types of accepted articles and their specifications are given below. Word count for the main manuscript includes only the main body of text (not including tables, figures, abstracts or references). All pages should be numbered. Manuscripts should be double-spaced, submitted as a word document. All abbreviations should be spelled out the first time they are used anywhere in the manuscript. British spelling should be used.

Types of articles the Kent Journal of Psychiatry will accept

Original research or audit

Abstract to be no longer than 250 words.

The text should not exceed 3500 words, with the following structure: introduction, methods, results, discussion.

In case of original research the Journal will expect to see evidence of ethical approval, or explanation of why formal ethics committee approval was not sought.

Reviews or meta-analyses

Abstract to be no longer than 250 words.

The text should not exceed 5000 words, with the following structure: introduction, methods, results, discussion.

Case reports or case series

Abstract to be no longer than 250 words.

The text should not exceed 2000 words, with the following structure: introduction, methods, results, discussion.

In case of case reports or case series the Journal will expect to be provided with signed written consent of patients, or in case of incapacity, the next of kin. Patient details should be anonymised.

Opinion papers

Abstract no longer than 250 words.

The text limited to 5000 words, with the following structure: introduction, methods, results, discussion.

Letters to the editor

No abstract, text limited to 500 words.

Book reviews

No abstract, text limited to 500 words.

References

All manuscripts should be referenced in Vancouver referencing style. Use of a reference manager such as EndNote or Mendeley is recommended.

Manuscript/tables/figures

All should be provided in a single word .doc or .docx files. The main manuscript should be double-spaced in times new roman or arial size 11 font.

On page 1 should be the title page with the title of the article submitted clearly stated. Authors in the relevant order, their place of work and the contact details of the corresponding author should also be detailed on the title page.

On page 2 the abstract should be placed.

On page 3 the main manuscript should begin.

This should be followed by references.

Tables and references can be either embedded within the manuscript or added as appendices at the end.

Completed manuscripts should be sent to aamer.sarfraz@kmpt.nhs.uk

Alongside a covering letter for consideration in the Journal.

An email of acknowledgement will be sent once submission has been received and feedback will be given if it needs amendment or is rejected.

Does the Clinical Assessment of Skills and Competencies (CASC) examination meet the standard? Assessing utility for a high stakes postgraduate psychiatry clinical assessment

Dr Musa Basseer Sami (ST4)
Laurel House, Canterbury.

Introduction

The Clinical Assessment of Skills and Competencies (CASC) is the final and clinical exam for Membership of the Royal College of Psychiatrists (MRCPsych). The CASC is a 16 station Objective Structured Clinical Examination (OSCE) undertaken near the end of Core Psychiatry Training, or by middle-grade doctors who have cleared the previous portions of the Royal College exams. The examination consists of eight seven-minute single stations and eight ten-minute paired stations. Single stations relate to a single task whereas paired stations allow for testing of linked tasks (such as history taking from a patient and then explanation of diagnosis to a relative). The aim of the examination is to test higher-order competencies in history taking, mental state examination, risk assessment, cognitive or physical examination, case discussion and difficult communication across the range of recognised psychiatric sub-specialities (general adult, old-age, forensic, learning disability, child and adolescent and psychotherapy)(1).

The CASC is a high stakes examination allowing for entry to registrar training and thus for an eventual pathway to becoming a consultant psychiatrist. The examination is a summative pass/fail assessment and not designed for formative purposes. Feedback given is limited: candidates who pass are only informed of how many stations they passed whereas candidates who fail are informed of generic areas of concern in the stations they failed.

A typical learner who would undertake the examination is a Core Psychiatry Trainee who has completed Foundation posts and at least two years of psychiatric training at Senior House Officer level. Such a learner will have had to pass their last Assessment of Review of Competencies (ARCP), dependent upon a successful number of Work Based Placed Assessments (WBPAs) to be entered for the examination. This learner also has to demonstrate a degree of competency in psychotherapy techniques via WBPA. Those learners who are middle grade doctors will have to demonstrate equivalent clinical experience and competency to core trainees in order to be eligible for the examination (2). The learner will have also passed the written aspects of the MRCPsych exam (Paper A and Paper B), which are summative knowledge based tests, comprising topics in neuro-scientific principles and knowledge of psychiatric and psychological principles of assessment and treatment. In Paper B half of the paper is devoted to a critical appraisal skills exercise. Thus the candidate who prepares for the CASC examination has already undertaken a number of hurdles to demonstrate a thorough psychiatric grounding to be entered for examination.

Critique of assessment requirements:

Justification for the CASC exam can be understood in a historical context. The traditional psychiatric clinical examination had been long and short cases. Despite validity in seeing and working through real clinical cases, there were various criticisms. These included the possibility of examiner bias; the possibility of variation in cases and case difficulty seen between candidates; and the inability to sample more than a small area of the curriculum (3, 4). A move to standardised patients and standardised marking criteria was implemented in 2003. However the marking criteria for the OSCEs was criticised as a ‘check-list approach’ and unable to fully test higher order competencies (3). Consequently the CASC examination was introduced in 2008 based upon principles of (i) standardised patients using actors (ii) standardised criteria for marking (iii) the ability to assess higher order competencies by using global ratings

and marking domains and (iv) an ability to assess widely across the curriculum by adhering to a blueprint for stations (1). These were thus aimed at making the CASC a reliable and valid exam.

The Royal College, as part of its Quality Assurance process, states that features to ensure the reliability include (a) standardisation of consultant examiners and training workshops (b) a standardisation exercise for role players and examiners (c) the use of observers and (d) the calculation of psychometric measures and reliability coefficients by station and exam day (5). Standardisation across exams would likely increase test-retest reliability; whereas (d) is a measure of internal consistency (i.e. that the stations within an exam are reliably measuring the same set of skills). However, it is difficult to determine whether there remains inter-rater reliability as there is only one examiner per station. It is difficult to critique this further, as very little reliability data is available in the published literature. This problem has been noted before by previous authors (3,6). The released cumulative results report looked at all 3,171 attempts over the period 2008-2010, noting a significant reduction in pass rates with number of attempts ($p<0.1$) (7). There was a 49.0 per cent pass rate for first attempt decreasing to 19.8 per cent for the fourth attempt. This suggests a degree of test-retest reliability i.e. that those who fail the test are more likely to do so again. However this is not a direct test of reliability, as preparation for examination between attempts acts as a confounding variable.

Is the CASC examination valid? As Marwaha (3) puts it: "there is no 'gold standard' by which other assessments could be compared". However we could see the CASC is an assessment of clinical components of the curriculum (8). There is thus good evidence for the content validity of the CASC, as it is based upon a blueprint approach which samples wide areas from the curriculum (6). Thompson would also argue that there is good face validity of a comprehensive test which tests the key areas of the curriculum, using a previously acceptable approach (i.e. OSCE stations). However, this last area is open for debate: in one survey of candidates at a MRCPsych preparation course, all candidates (n=18) agreed that the exam was fair, and most agreed that 'a competent psychiatry ST3 would pass' and 'an incompetent ST3 would fail' (9). This was in a group of highly motivated individuals who would be taking the exam within the month. A larger online survey of trainees (n=110), found mixed views: less than half (48 per cent) agreed with the statements that 'CASC examines the required competencies to progress to higher training' and that 'CASC scenarios reflect the real life situations faced in clinical practice'. Interestingly, examiners (n=22) held the CASC in higher regard with 59 per cent agreeing that CASC examines required competencies for progression, whereas 77 per cent agreed that CASC reflects real-life scenarios (10). The debate regarding real life scenarios often relates to the time pressure of undertaking a 7-10 minute station. In real life a full psychiatric assessment would take an hour, akin to a long case. Thus 'there is a risk of trainees who are competent in routine clinical work failing the exam, whereas those who may be clinically inept … may pass it' (4). It is, however difficult to quantify this as there are no published studies of predictive validity (i.e. does passing the CASC exam predict future psychiatric competence?). Furthermore, although the College has made a statement that the quality assurance process undertakes psychometric testing to assess the criterion validity of each station, it has not published the data to make this available for critique (5).

The feasibility of the examination needs to be considered. Any one complete round of CASC examinations will test 8 candidates across 16 stations using eight actors and eight examiners. As discussed inter-rater reliability could be increased by having two examiners at a station. However this would require twice as many examiners and is thus not a feasible option. Similarly validity is noted to be

increased in long cases when cases are observed. Up to 10 'long cases' have been estimated to provide a reliable for high stakes examination at final year of medical school (11). Indeed some authors have called for revival of such multiple cases to replace the CASC (4,12). However an hour assessment is required to be clinically akin to real life, and having multiple lengthy stations would render the examination impractical. Hence the elements of reliability, validity and feasibility require compromise to deliver a practicable assessment.

The CASC has an impact on the learning of trainees. Positive elements identified in preparing for the CASC have been trainees preparation for exam; self-reflection on performance; and developing communication skills (13). CASC preparatory courses are valued by participants, and trainees appreciate that CASC and mock exams allow for testing of complex cases with realistic simulated patients (9, 14). There has also been a focus on group learning and learning from peers (14). Notably in the literature, there appears to be no mention of the need for consultant supervision, nor for maximising exposure to clinical cases. A more critical view suggests CASC skewing psychiatric practice in trainees: 'Trainees have become unwilling and/or unable to assess, formulate and present whole cases...they have adapted their learning style to passing the exam…..undertaking only those tasks which can be completed in 10 minutes' (4). This is an anecdotal observation and may or may not be of broader more widely applicable. Further evidence is required to determine if this is a more widespread concern.

For transparency purposes the College details the quality assurance processes. However, there are some key areas where more transparency is required. Candidates who fail are provided with generic feedback or the domain they failed in. This has been noted by both examiners and candidates as lacking specificity and thus of limited utility (10). Similarly there is an increased failure rate in international medical graduates compared to UK and irish medical graduates, who have a 2-3 times likelihood of passing which is statistically significant (7). Although it may be argued this is due to the UK and Irish medical curriculum preparing the candidates better, this is only likely to be part of the picture, as within UK graduates there remains a statistically significant difference pass rate between White (89.3 per cent) and non-White (74.7 per cent) candidates (7). These differences are measured at all parts of the MRCPsych examinations including the written components and have not fully been explained. This can lead to non-white, international medical graduates feeling that the exam is an assessment of language or cultural concepts that cannot be learnt and therefore questioning the validity of the exam as a test for psychiatric competence.

Finally where does this assessment fit into the requirements of the learner? The preceding written papers A or B are focussed on knowledge or critical appraisal skills. This is the final high-stakes exam and thus the trainee is required to demonstrate that he has merged the art and science of psychiatry to perform in an array of clinical situations. However, this exam does not mark the end of training, as a further three years of Higher Specialist Training are still required. Consequently this exam allows for the accreditation of clinical competency allowing for the trainee to focus on development of skills which are more difficult to examine such as professionalism, leadership and team management. At this stage passing the CASC examination effectively signals an acquired clinical competency in psychiatric examination to trainee and society. However, there remains a gap in the formulation and management of complex cases, which cannot be demonstrated in a series of 7-10 minute assessments (4). Although work placed-based assessments were designed to address this gap, they have been widely criticised for being a tick box exercise and ineffectual - a fuller discussion of which is outside of the scope of this article (15, 16).

Conclusion

The CASC assessment is a structured assessment which by ensuring wide curriculum coverage aims to ensure that psychiatrists of the future have a holistic understanding of the core psychiatric skills. The College goes to great lengths to ensure reliability and validity of the CASC assessment using a rigorous quality assurance process. However, there are gaps in the evidence as the College has not published the full psychometric data. Thus this article demonstrates the rigor of the exam, whilst accepting the College can do more to make the process transparent. This can be an important conversation to have with some learners who can sometimes become focussed on perceived unfairness in the exam, detracting from continuing to improve their psychiatric clinical skills.

References

1. Royal College of Psychiatrists. MRCPsych CASC Blueprint. 2011. Available at: https://www.rcpsych.ac.uk/pdf/MRCPsych%20CASC%20Blueprint%20March%202011.pdf [Accessed: 1st October 2017]
2. Royal College of Psychiatrists. Eligibility Criteria and Regulations for MRCPsych Written Papers and Clinical Assessment of Skills and Competencies (CASC). 2015 Available at: [Accessed: 1st October 2017]
3. Marwaha S. Objective Structured Clinical Examinations (OSCEs), psychiatry and the Clinical assessment of Skills and Competencies (CASC) same evidence, different judgement. BMC psychiatry. 2011 May 16;11(1):85
4. Michael A, Rao R and Goel V. The long case: a case for revival?, The Psychiatrist, 37, pp. 377–381. 2013 doi: 10.1192/pb.bp.113.043588
5. Royal College of Psychiatrists. CASC Quality Assurance Process. 2011 Available at: https://www.rcpsych.ac.uk/pdf/CASC Quality Assurance Statement - July 2011.pdf [Accessed: 1st October 2017]
6. Thompson CM. Will the CASC stand the test? A review and critical evaluation of the new MRCPsych clinical examination. The Psychiatrist. 2009 Apr 1;33(4):145-8
7. Bateman A. MRCPsych examinations: cumulative results 1997-2002. 2011 doi: 10.1192/pb.bp.105.009035 [Accessed: 21 March 2015]
8. Royal College of Psychiatrists. Core Training in Psychiatry CT1-CT3 - A Competency Based Curriculum for Specialist Core Training in Psychiatry. 2013 Available at: http://www.rcpsych.ac.uk/pdf/Core Curriculum_FINAL Version_July2013_updatedFeb15 KM.pdf [Accessed: 1st October 2017]
9. Whelan P, Lawrence-Smith G, Church L, Woolcock C, Meerten M, Rao R. Goodbye OSCE, hello CASC: a mock CASC course and examination. The Psychiatrist. 2009 Apr 1;33(4):149-53
10. K Kamatchi R, Bandyopadhyay S, Jainer AK, Somashekar B, Marzanski M, Marwaha S. 3 years on: Examiners' and candidates' views on the CASC (Clinical Assessment of Skills and Competencies). British Journal of Medical Practitioners. 2012 Dec 1;5(4)
11. Wass V, Jones R, Van der Vleuten C. Standardized or real patients to test clinical competence? The long case revisited. Medical Education. 2001 Apr 22;35(4):321-5
12. Kashyap G, Sule A. MRCPsych CASC exam: is there a better choice?. The Psychiatrist Online. 2012 May 1;36(5):197-
13. Hussain A, Husni M. Preparing for the MRCPsych CASC-an insight based on experience. BJMP. 2010 Jun;3(2):55
14. McMullen I, Checinski K, Halliwell S, Maier M, Raji O, Rands G, Rao R. Peer observation in simulated CASC events and its effects on learning. The Psychiatrist Online. 2013 Mar 1;37(3):111-5
15. Sikdar S. WPBA or CASC/OSCE: where is it going wrong? 2010 The Psychiatrist, pp. 72–73. doi: 10.1192/pb.34.2.72b
16. Thomson AB, Harding D. CASC candidates need better preparation. The Psychiatrist Online. 2012 Aug 1;36(8):314-5.

How could commissioners re-commission an Adult ADHD service effectively?

M Aamer Sarfraz (Consultant Psychiatrist)
Carlos Almonte (CT2)
Hugh Logan – Ellis (FY1)
Hamid Rahmanian (ST6)
Imran Qazi (SD)
Christiana Lewis (ST6)

Elizabeth Raybould Centre, Dartford.

Introduction

Attention Deficit and Hyperactivity Disorder (ADHD) is a neuropsychiatric syndrome found in children with a triad of symptoms related to hyperactivity, impulsivity and inattention. Research since the 1990s has confirmed that a significant number of children with ADHD continue to have symptoms into their adult lives. In adulthood, the hyperactivity decreases, but inattention, disorganisation, and impulsivity might remain, resulting in difficulty in functioning at home and at work (1). Such patients are more prone to other psychiatric symptoms and disorders including substance abuse and associated risky behaviours. Treatment of ADHD includes psycho-education and pharmacotherapy for ADHD and comorbid disorders, coaching, cognitive behaviour therapy and family therapy (2).

The prevalence of ADHD in adults is 2-5 per cent, and 10-20 per cent in those with common mental health disorders. These rates are higher among those attending forensic, addiction and personality disorder units, which highlights the importance of screening for adult ADHD in such high-risk populations (2, 3).

Our trust is not commissioned for the treatment of adult ADHD. Therefore, such cases are referred to the specialist centre at the Maudsley for assessment and treatment. This happens despite local consultants being able to diagnose and treat adult ADHD. Following assessment at the Maudsley, they are sent back to the General Practitioner (GP) to implement the treatment plan. In a number of cases, the trust (secondary psychiatric service) is requested to manage the co-morbid disorders. This leads to confusion among clinicians regarding their treatment roles and causes additional stress to the patients and their carers. A single referral to the specialist centre costs the Clinical Commissioning Groups (CCGs) £1250 with a limited scope for re-referral if the treatment plan does not work. The waiting time for the approval of funding from the CCGs and subsequent specialist assessment can take up to 12 months.

Adult ADHD patients in whom the diagnosis has not been made and/or where ineffective treatments are in place for alternative diagnoses, add to higher rates of presentations to A&E or emergency departments and mental health services along with health, legal and financial risks and implications. Transition from child to adult psychiatric services also remains a major concern for having no local service level agreements between various care providers because ADHD treatment is not commissioned for the adult population.

NICE clinical guidelines (4) are a great resource for healthcare professionals to develop, with relevant agencies, effective services for the diagnosis and management of adult ADHD. These guidelines make a case for commissioning services for the diagnosis and management of ADHD, specify service requirements, and help determine local service needs while ensuring quality. They also cover the transition of ADHD cases receiving treatment from child mental/ health services to the adult mental health services. Department of Health (DoH) (5) made similar recommendations after highlighting the multidimensional social, health and legal needs of adult ADHD sufferers and their carers.

Various government initiatives over time, including National Service Framework (6) New Ways of Working (7) and New Horizons (8) for mental health services, have recommended faster, equal and easy/local access and ways to combat discrimination against individuals/groups

of patients to prevent future crises of care. More recently, Chief Executive of the National Health Service (NHS), Simon Stevens, has talked (9) about commissioners finding smart ways of getting more value for money while appreciating the pull for treating patients close to home though more local and community-orientated services. He also argued that medical training and staffing should not drive the wholesale reorganisation of district general hospitals across England.

There is no doubt that the NHS is facing a financial challenge and needs to come up with considerable improvements in performance and outcomes if it is to continue providing high-quality services without additional funds. Therefore, there is a great drive from the DoH, cascaded down to CCGs to improve productivity in mental health services while offering support for coping with the future challenge of building a preventive and empowered mental health systems (10).

Case example

An interest group of consultants experienced in treating adult ADHD met on three occasions and produced:

1. Current system/journey of ADHD patients within the trust – attached as appendix 1

2. Summery of skills/resources available in the trust to set up an adult ADHD service.

This group was divided into two subgroups. The first subgroup surveyed adult ADHD services in and outside UK and produced a protocol for use within the trust – attached as appendix 2. The second subgroup met with finance and development directors. They also collated data acquired from CCGs to know how many cases of ADHD were referred and treated outside the trust and its cost. The main group was kept informed by one of the authors who was a member of both subgroups.

Table 1: Number of adult ADHD referrals, assessments and treatments over three years across the trust

	Our trust		
	2010/11	2011/12	2012/13
No of adult referrals	191	437	526
No of adult assessments	156	213	356
No of Adult treatments	418	512	685

Table 2: Number of follow-up appointments for those referred over the three years

Period	Number of sessions
01/06/10 – 31/03/11	266
01/04/11 – 31/03/12	320
01/04/12 – 31/03/13	400

It is clear from table 1 that adult ADHD referrals, assessments and treatments have been increasing year on year. There is an unmet need and a risk that less than half of those referred could not be assessed due to possible problems with funding, diagnoses or being 'lost' due to delays in organising funding or assessment.

The cost of 356 specialist assessments (2012/13), at £1250 to the CCG, is £445000. It is estimated that adults with ADHD have annual expenditures that are approximately USD,000 greater than adults without ADHD (11). If we include charges for follow up and those of screening and ongoing treatment of additional diagnoses at the secondary care service, the overall cost would easily cross one million pound per annum.

In order to develop a new adult ADHD service, resource implications are of paramount consideration. There are five community psychiatry hubs in our trust. Most of the 'cold' referrals from GPs and others sources are received there. The acute referrals where urgent inpatient or home treatment is required are received by the Crisis and Home Treatment Team. It would make sense that the new ADHD service is a part of the community care group because the bulk of the work sits there along with the resources. The acute referrals to inpatient units can be picked up through interface meetings, which take place daily.

Workforce

Most patients with ADHD and comorbid disorders are already within the adult psychiatric services. Considering the

prevalence of adult ADHD (3-4 per cent) and quicker discharges back to the GP in most cases after first assessment, implications for a large increase in recruitment of staff are minimal. Each hub can evaluate their existing skill mix and may decide to recruit an experienced lead nurse (approx. £40,000 per annum) and perhaps a staff grade doctor (£60,000 per annum) for this service.

Training and education requirements

Good quality one-day courses for mental health professionals who either want to work in ADHD service or refresh their relevant skills are available at £250 per person. Since this is a trust-wide initiative involving many professional, organisers of a course can be invited to run it at the trust site at discounted rates. From there on, medical/nurse education and learning and development departments can ensure that ADHD is a subject for ongoing continuous professional development programme for the relevant staff and forms a part of their annual appraisal.

Funding

Lead nurse practitioners (x5) = £200,000
Staff Doctors (x5) = £300,000
CBT and social skills training = £20000
One-off course (30 x £250) = £7500
Grand total = £527,500

Annual CPD for all ADHD professionals in the trust = £10000

Keeping in view all the above, consultations with trust directors and communications with the CCGs, a robust case for a local adult ADHD service can be made. Objectives of this new service may include: early identification, accurate assessment involving relevant organisations/significant others, smooth transition from child into adult services, improve joint working, review systems and outcome measures and improved skills for professionals through training and supervision.

Commissioning challenges

As commissioners, various challenges need to be tackled in the process of deciding to re-commission an existing service because commissioning for quality and care is "a multifaceted concept…not amenable to a single performance measure or simple metric" (12). They need to take into account views of different stakeholders including patients, clinicians, practitioners, managers and leaders. They also need to consider that any new proposal is consistent with current professional knowledge and ensures: easier, timely and reliable access; cost effective use of resources in primary/secondary care; good interface and joint working and ability to monitor and control quality though key performance indicators.

Commissioners would keep in view the recommendations made in the white paper (13) that patient should be central to the process (vis-à-vis choice, control and compassion) and clinical outcomes are delivered through empowered health professionals. In line with that, before deciding to move from current to the future model of care, the first challenge for commissioners is to look at 'proof of value' (14) in the proposal. One of the ways to evaluate its outcomes is by examining three dimensions (patient, professional, management):

- Clinical outcomes: measure of symptoms and functionality, compliance and optimisation of medicines, improvement in detection and treatment
- Financial outcomes: reduction in outside referrals, DNA rates, mental health contacts and overall costs
- Quality outcomes: measure of quality of life, increase patient choice, improve partnership working and improve patient experience and engagement

A more comprehensive way (15) to evaluate this proposal is through "seven dimensions of performance" (effectiveness, efficiency, safety, timeliness, equity, coordination, and people-centeredness). The proposal seems to be effective as it has clear clinical outcomes and patient journey (Appendix2) is less complicated with obvious potential to improve their quality of life. This is also more cost-efficient in terms of finance and

time-consumption. Regarding safety, a local service could be more reliable and prevent referrals lost during transition from child to adult services. A local service also has the potential to reduce waiting times and inequalities, provide greater access and be user-friendly. Some variables in these dimensions cannot be considered (e.g., patient experience, portability, cultural sensitivity, etc.) at this stage or could only be evaluated when the system is in place.

The next step for commissioners is to decide what approach they want to take regarding tendering. If they are convinced about the merits of the proposal, they could ask our trust to submit a formal business case while pursuing the Kotter (16) approach. Alternatively, they could take the tendering route perhaps by pursuing the 'qualified provider' approach. However, the latter may not be suitable because it would be similar to the current commissioning model with risks including inefficient access, impaired joint working and higher costs.

If our trust is commissioned, the next steps for commissioners, following Kotter approach, would be: create and communicate your vision to the trust, establish a sense of urgency, empower the trust and set-up relevant achievable short-term steps, and agree upon ways to consolidate/institutionalise the new service.

In case of re-commissioning, the existing providers could lose £0.5-1.0 million per annum. The commissioners would need to meet them before and after making the decision and communicate how they have reached the decision to re-commission. Since the current providers may feel aggrieved and highlight their specialist credentials, the commissioners could decide to partially compensate them by offering to remain a tertiary referral service, just like others specialists services at the Maudsley, for giving second opinion to locally identified complex cases and also offer training courses to the local staff.

Conclusions

Adult ADHD is a neuropsychiatric disorder with national gaps in treatment/management services. Due to its associated risks, care burden and rising costs, it has become a commissioning challenge for stakeholders. A current commission model for an adult ADHD service was examined along with its risks, and a strong case for re-commissioning is made using a case example backed up by NICE and DoH guidelines and various government policies and initiatives.

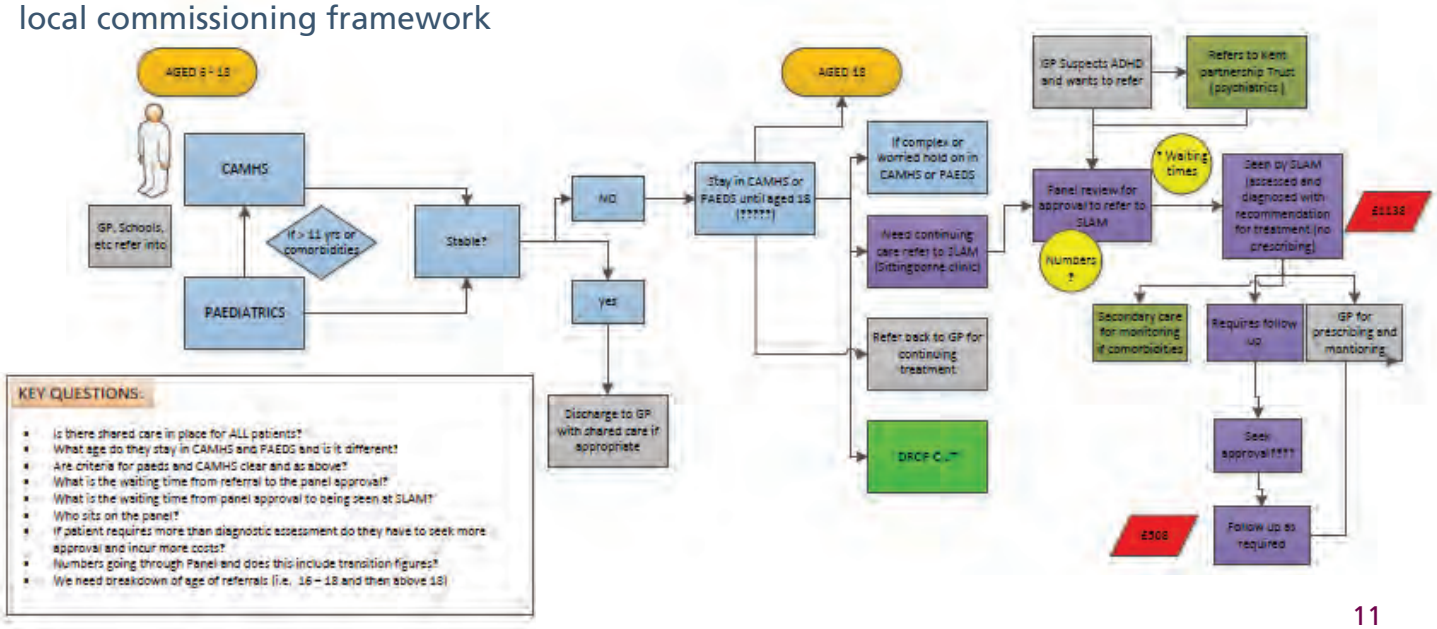
** We are grateful to Drs. Karen White, Rehab Khalifa and Vijay Delaffon for their advice.

Appendix 1

Current practice

Variability and inconsistency across our trust

The current model is not cost effective for commissioners and is not in concordance the local commissioning framework



Appendix 2

Clinical needs and resources associated with patients' care pathway in adult ADHD services

Stages in the pathway:

- Referral/screening phase
- Diagnostic assessment
- Titration/stabilisation
- Psychotherapeutic interventions
- Follow up.

Referral/screening phase

Patient referred by GP/consultant psychiatrist

- Collecting further information/notes from GP/consultant psychiatrist, arranging appointment/screening tools sent out to patients to complete
- Referrals discussed at fortnightly referrals meeting
- Attended by multidisciplinary team including consultant psychiatrist, psychologist, ADHD nurse practitioner/s (2-3 hrs)
  - review referral and screening tools completed and allocate to one of the clinics (15 minutes/patient)
  - discuss new patients' diagnostic assessment and agree care plan (30 minutes/patient)
  - discuss follow up patients (15 minutes/patient).

Diagnostic assessment

- 3 hours with a consultant psychiatrist at one of three clinics over three appointments
- One and ½ hours with ADHD nurse practitioner - community setting (1 hour) clinic with consultant psychiatrist (½ hour).

Psychotherapeutic interventions

- Group CBT delivered by ADHD nurse practitioners over 12 sessions at one of three clinics (45 minutes/patient).

Titration/stabilisation phase

- Three hours with a consultant psychiatrist at one of three clinics over four – six appointments.

Follow up phase

- 30 minutes with a consultant psychiatrist/ADHD nurse practitioner at six monthly intervals at one of three clinics.

Service level resource needs

- Training for consultant psychiatrists in diagnostic assessments and treatment
- Training for ADHD nurse practitioners in delivering CBT/social skills training
- Supervision for individual clinicians
- Pharmacological interventions
- Education of GPs and establishing shared care protocols
- Interface meetings with other services – CAMHS/general adult/forensic/prison services
- Service evaluation and clinical governance activities.

References

1. B Brod M, Pohlman B, Lasser R, Hodgkins P. Comparison of the burden of illness for adults with ADHD across seven countries: a qualitative study. Health and quality of life outcomes. 2012 May 14;10(1):47.
2. K Kooij SJ, Bejerot S, Blackwell A, Caci H, Casas-Brugué M, Carpentier PJ, Edvinsson D, Fayyad J, Foeken K, Fitzgerald M, Gaillac V. European consensus statement on diagnosis and treatment of adult ADHD: The European Network Adult ADHD. BMC psychiatry. 2010 Sep 3;10(1):67.
3. K Kessler RC, Adler L, Barkley R, Biederman J, Conners CK, Demler O, Faraone SV, Greenhill LL, Howes MJ, Secnik K, Spencer T. The prevalence and correlates of adult ADHD in the United States: results from the National Comorbidity Survey Replication.

American Journal of psychiatry. 2006 Apr;163(4):716-23.

4. National Institute of Clinical Excellence (NICE). Attention deficit hyperactivity siorder: diagnosis and management. 2008, updated 2016. Available from: https://www.nice.org.uk/guidance/cg72 [last accessed: 1st October 2017]
5. Department of Health (DoH). National service framework for children, young people and maternity services. The mental health and psychological well-being of children and young people. London: Department of Health; 2004.
6. Department of Health. The National Service Framework for Mental Health. Modern Standards and Service Models. London: Department of Health; 1999.
7. Care Services Improvement Partnership National Institute of Mental Health in England, Changing Workforce Program, et al. New Ways of Working for Psychiatrists: enhancing Effective, Person-Centered Services Through New Ways of Working in Multidisciplinary and Multiagency Contexts. Final Report. Department of Health; 2005.
8. Department of Health. New Horizons: Towards a shared vision for mental health: Consultation. 2009. London: Department of Health.
9. Stevens S. Thinking like a patient, acting like a taxpayer – from NHS challenges to new solutions. 2014. Available: www.healthpolicyinsight.com/?q=node/1554 [last accessed: 1st October 2017]
10. Naylor C, Bell A. Mental health and the productivity challenge. Improving Quality and Value for Money. The King's Fund. 2010.
11. Secnik K, Swensen A, Lage MJ. Comorbidities and costs of adult patients diagnosed with attention-deficit hyperactivity disorder. Pharmacoeconomics. 2005 Jan 1; 23(1):93-102.
12. Sutherland K, Coyle N. Quality in healthcare in England, Wales, Scotland, Northern Ireland: an intra-UK chartbook. London: Health Foundation; 2009.
13. Department of Health. Equity and Excellence: Liberating the NHS. 2011. Available from: www.dh.gov.uk/en/Healthcare/LiberatingtheNHS/index.htm [last accessed: 1st October 2017]
14. Barnes C, Blake H, Pinder D. Creating and delivering your value proposition: Managing customer experience for profit. Kogan Page Publishers; 2009 Oct 3.
15. Aguinis H. Performance management. Upper Saddle River, NJ: Pearson Prentice Hall; 2009.
16. Kotter JP. Leading Change. Harvard: Harvard Business School Press; 1996.

Are journal clubs an effective means of teaching critical appraisal in medical education? A review of the literature

Musa Sami (ST6)
Tiago Inacio (CT3)

Trevor Gibbens Unit, Maidstone

Abstract

Aims: Although well embedded into psychiatric training, there is little guidance on what constitutes a successful journal club. This article thus ascertains whether journal clubs are effective in teaching critical appraisal skills and what factors add or detract from this. Methods: Full text articles in English containing the terms: "journal club" AND "critical appraisal" were searched in MEDLINE, Pubmed, EMBASE, ERIC, EBSCO EJournals and the British Education Index. Inclusion criteria were: (i) face-to-face journal club (ii) postgraduate medical education, and (iii) primary research or evaluation. Results: 15 articles were reviewed. Journal clubs are seen by trainees as important in the development of critical appraisal and appear to have a motivational role, but there is as yet no evidence to suggest the superiority of journal clubs in abstract skills over other approaches. Conclusion: The journal club has an important role in engaging trainees in the process of critical appraisal.

Introduction

The first journal club appears to have been described by Sir James Paget circa 1834, and assumed its formalised shape under William Osler in 1875 (1). The journal club has retained several core features since this time: (i) a regular face-to-face meeting of medical faculty (ii) a presentation and discussion regarding a paper (iii) evaluation of its merits and weaknesses and (iv) consideration as to the effect on practice. Initially, the aim was a means of updating practice, with the main focus being the content of the paper presented (e.g. smoking causes lung cancer) rather than the process (e.g. is this study rigorous?) (2). The increasing body of medical literature and the difficulty in being able to digest all the literature on any given topic led to the formalisation of Evidence Based Medicine (EBM) (3) where increasing emphasis was placed on critical appraisal - "the process of carefully and systematically examining research to judge its trustworthiness, and its value and relevance in a particular context."(4). Alongside the shift to EBM there was a shift to seeing a key aim of the journal club as a means of teaching critical appraisal skills.

Although well-embedded into psychiatric training as a mandatory requirement of the UK psychiatric training (5), there is little guidance on what constitutes a successful journal club, and whether journal club enhances critical appraisal. This article reviews whether journal clubs are effective in teaching critical appraisal skills, and what factors add or detract from this.

Methods

Full text articles in English containing the terms: "journal club" AND "critical appraisal" were searched in MEDLINE, Pubmed, EMBASE, ERIC, EBSCO EJournals and the British Education Index on 20th September 2014. Abstracts were screened against the following inclusion criteria: (i) articles regarding face-to-face journal club (ii) regarding postgraduate medical education, and (iii) primary research or evaluation reported.

There is no single measurement to evaluate effectiveness in education. This article is thus organised to encompass the multiple levels of evaluative feedback. This article uses the 'Hierarchy of Evaluation' as adapted for Medical Education (6,7) to extract data (see Tables 1 and 2). However there are also valid criticisms of strict adherence to the model as a hierarchy, given the complexity of the learning process and the multifactorial nature of population healthcare outcomes (8). Consequently, findings are presented across domains looking at evidence of

attendance, feedback on the teaching received, attitudes towards the subject, changes in knowledge and skills and changes in behaviour; to determine whether journal clubs are an effective means of teaching critical appraisal.

Results

Out of 107 abstracts reviewed, 15 articles were suitable for inclusion. An overview of the articles has been extracted in Table 1 and the outcomes extracted in Table 2.

Attendance rates

The simplest method of determining effectiveness of journal clubs is to note attendance rates. A cross sectional survey of chief internal medicine residents across 131 eastern USA training programmes showed marked variation in attendance rates from 7 per cent to 100 per cent (9). Sidorov noted that pitfalls of journal clubs were 'poor attendance and periodic abandonment'. Consequently he defined successful journal club at maintaining in excess of 50 per cent attendance over at least two years. This was achieved by forty-eight journal clubs (38.7 per cent). Features which enhanced these outcomes were: mandatory attendance, regular provision of food and a smaller number of house staff. This work covers a large range of residency programmes, and the postulated criteria retain a face validity in measuring participation, and consequently have been cited by others as evidence of successful journal clubs (10,11). However these criteria are arbitrary and would exclude other journal clubs which had important evidence of external validity of engagement, one of which (12) generated six peer review publications. Furthermore attendance and longevity do not appear to be due to the educational value of the journal clubs, but rather the provision of food and mandatory attendance. Thus attendance and longevity records provide limited information for our purposes.

Feedback

The two successful journal clubs as defined by previous criteria (attendance) also had positive feedback by trainee survey. Spillane and Crowe (1998) in their Australian surgical training programme noted that 89 per cent of participants looked forward to the next journal club (10), whereas Akhund and Kadir (2006) noted Pakistani Public Health trainees to report an educational value in attending and preparing for journal clubs (89 per cent) (11). A further journal club meeting Sidirov's criteria also showed high levels of satisfaction, relevance and educational value (mean score 4-4.6/5) (13), although this was compromised by only 5/24 participants feeding back. It is not surprising to find high levels of satisfaction from long-running, well-attended programmes with high levels of investment from faculties.

Which educational aspects of journal jlubs enhance satisfaction? One study described a comparative unstructured didactic journal club format with a programme of EBM journal jlubs focused on methodological appraisal, commencing with a two session focussed EBM workshop (1). Mean satisfaction was significantly higher for the EBM focused methods although we are not given further details on the constituent values. Thus there is evidence that journal clubs receive positive feedback and that an evidence based journal club is more valued.

Change in attitude

Do journal clubs modulate attitudes towards critical appraisal skills? Trainees appear to value the opportunity to develop critical appraisal and view it as important. A recent Nigerian study noted that of 66 surgical trainees, training across various national centres, 98 per cent valued critical appraisal skills as 'important' or 'very important' (14). Journal clubs are seen as an important vehicle to developing this. Akhund and Kadir (2006) noted that the most important reason for attendance at journal club was for learning of critical appraisal (11). However journal clubs may not develop desired attitudes in all contexts. Temple and Ross (2011) had an intensive EBM programme with homework assignments in a small sample of 10 plastic

surgery trainees over a year (15). They found a drop from 64 per cent to 50 per cent of participants feeling that journal club was an effective means of teaching critical appraisal skills. It is possible this evidences a burnout in trainees in a busy surgical programme who had to attend three-hour long journal club sessions in the evenings and noted 'moderate resentment' at the time spent on carrying out homework. Taken together, this suggests that whereas journal clubs are associated with educational satisfaction if well-supported and using evidence based structure for critical appraisal, this is endangered if the club proves burdensome for trainees.

Knowledge and skills

Do journal clubs lead to acquisition of critical appraisal knowledge and skills? Trainees felt that journal clubs enhanced confidence in various aspects of critical appraisal skills across a range of measures described in six different papers: in statistical skills (16), ability to apply literature to practice (17,18), and improved self confidence in critical skills (1,10,11,16). The one study which disagreed with these findings, suggested that a non-significant improvement in self reported critical appraisal skills ability may be explained by trainee burden as previously described (15). The results of external examination are less clear-cut. Knowledge-based tests and multiple choice questions administered before and after journal club demonstrate improved scores in some studies (13,19–21) but not all (15,18). It is difficult to determine exactly why this is – positive studies reporting improvement span across specialties (obstetrics, paediatric surgery, anaesthesiology, internal medicine) and time periods (four months – two years), as do the negative studies (psychiatry, plastic surgery, time period: three months – one year). All six studies used a proactive approach to medical education in journal club (see Table 1), including the two negative studies. The studies do not provide the multiple choice question criteria and so it is difficult to ascertain validity.

Similarly four studies undertook assessment via essay or critical appraisal exercise, which may be more likely to test abstract skills. Moharari et al., (2009) found a significant improvement with application of the CONSORT checklist after a year of focused journal clubs (21). This was to a group of trainees who had self-declared at baseline 'a lack of knowledge in this area'. Improvement in performance after a year of focused teaching is not surprising. A more rigorous methodology used in three controlled trials showed no difference in the intervention and non-intervention groups when using a critical appraisal skills exercise or essay as the outcome of assessment. This held for journal jlub vs. no journal club(18); journal club vs. control seminar (17); and EBM journal club vs. unstructured journal club (22). Taken together the evidence suggests that journal clubs improve trainee confidence for critical appraisal and there is some mixed evidence that knowledge elements of critical appraisal are improved through their use.

However, there is very little to no evidence that the use of journal clubs, or the use of evidence based journal clubs improves abstract critical appraisal skills over alternative approaches.

Behavioural change

There is some evidence that journal clubs change behaviour in relation to critical appraisal. The most replicated finding is that of journal clubs increasing self-reported reading behaviour amongst trainees (11,19, 20). The controlled studies also had similar findings (17,18). One study found that although reading preferences had not changed, trainees found they way they read papers had (18). All of these studies describe self-reported reading behaviours rather than observed behaviour, and thus a possible bias towards giving the desired answer may exaggerate the significance of this effect. There is also some evidence that journal clubs may lead to other hoped-for behaviours. In one successful journal club 19/28 (68 per cent) participants reported

that the journal club had changed their clinical practice and the same number had reviewed their practice further (10). The journal club led to the establishment of eight research projects. Sandifer et al., (1996) reported on the generation of 10 critical appraisal letters after 11 sessions of their journal club, of which six were published in peer reviewed journals (12), and Khan et al., (1999) reported on the publication of two letters from their programme (20). Successful publication as a result of journal club discussion suggests successful critical appraisal activity and represents an externally valid reference measure for the skills of the trainee.

Discussion

The question as to whether journal clubs improve critical appraisal skills has been answered in a variety of participative, satisfaction, knowledge, skill-based and behavioural outcomes. Surprisingly, across a range of journal clubs there appears to be consensus for most individual outcomes, although the evidence of improved knowledge of critical appraisal is mixed. Although only three are controlled trials, only one being randomised, the consensus nature of the outcomes gives credence to the findings. Nonetheless, we must accept that self-reported measures, as used in attitudes and behaviour questions may be prone to respondent bias; whereas the validity of the knowledge-based assessments is mostly not clearly stated. The journal clubs described are attended by specialists in training; although only one study looked in particular at psychiatry trainees (18).

Taken together, the literature suggests that journal clubs are seen by trainees as important in the development of critical appraisal, and on the whole generate satisfaction in education and development of critical appraisal, especially in those journal clubs with an EBM focus. It may be important to ensure the journal club does not prove burdensome to trainees. Trainees tend to rate development of critical appraisal skills highly, but objective testing of this proves more complex. There is more evidence to suggest that knowledge-based elements (such as different types of trials, statistical methods) improve, but there is as yet no evidence to suggest the superiority of journal clubs in acquiring the complex abstract skill of critical appraisal over other approaches.

Nonetheless journal clubs do appear to be successful in modulating behavioural change – increasing self-reported reading time and stimulating a variety of outcomes including research projects and peer-reviewed publications. Thus, it appears, whereas journal clubs provide stimulation and increased confidence in the critical appraisal approach for trainees, the development of more abstract critical appraisal skills are not themselves enhanced by a single journal club programme over other approaches. This is possibly due to the complexity of the skill set, requiring sustained acquisition and development using various methods over time. Further work to determine the set of teacher, personal, and assessment factors which would lead to development of abstract critical appraisals skill is thus required and falls outside the narrow remit of this review.

Although the effectiveness of journal clubs in learning critical appraisal skills is limited, these will continue to exist in most teaching programmes. This raises the question of how journal clubs are better run. The literature reviewed here gives us some indications. Longevity and good attendance are identified as important requirements for a successful journal club (9), despite the limited evidence of how this is best achieved. Journal clubs with an EBM focus or supplemented by focussed teaching of critical appraisal skills are also associated with better outcomes (16, 19), provided they are not too onerous on trainees (15). In order to improve the engagement of trainees with journal clubs and the development of critical appraisal skills it may be helpful to define desired outcomes, e.g. the publication of letters following journal club discussions or review of local policies.

There are important gaps in the literature. There is yet no evidence to determine whether journal clubs have an impact on further organisational behaviour or an end impact on care delivered', perhaps because healthcare is a complex multi-factorial process and such outcomes would be difficult to measure whilst controlling for confounders (e.g. development of medical technology, teacher and learner factors). There is no work on how different specialities or seniority of trainee develop critical appraisal in response to the journal club. For example psychotherapy trainees may develop more qualitative appraisal skills whereas epidemiologists may be more interested in quantitative approaches, or seniority may predict or detract from development of critical appraisal.

Conclusion

The journal club has an important role in engaging trainees in the process of critical appraisal. However, supplementary approaches are also likely required for development of abstract skills. Thus journal clubs are useful as a means of motivation, enhancing confidence and generating further interest. Tools such as the journal club presentation work based placed assessment maybe used to generate further development plans for developing skills, including considering generation of peer-reviewed letters or small projects and signposting to further resources. It is important, however, to avoid overburdening the trainee with assignments that may detract from their development.

TABLE 1: Overview of journal club papers *1/2*

Paper	Context	Duration / Frequency	Members & Response Rate (%)	Teaching Methods	Methods & Measures	Conclusions	Limitations
Linzer et al., 1988(17)	Interns at USA Medical Centre	5 sessions	44 interns	JC: handouts & critical appraisal guidelines, 3-4 hours/week preparation, focus on methodological points. Control Seminar: Lecture based. Critical appraisal skills not emphasised. Faculty spend 3-4 hours per year in preparation.	Randomised Controlled Trial to Journal Club vs. Control Seminar. Outcome: Attitudes & Behaviour Evaluation Instrument and Critical Appraisal Exercise	JC can lead to change in reading habits and improved knowledge of epidemiology and biostatistics. Improving application of critical appraisal may be longer process.	1. Self reported behavioural change (reading habits) looked at rather than actual 2. Validity of critical appraisal exercise to be established
Seelig, 1991(19)	Community Hospital Internal Medicine training programme, USA	4 months, EBM session + bimonthly journal club	14 residents	One hour supplementary teaching session, principles of adult education - active learner participation, facilitated group discussion, written assignment in addition to standard JC format	Pre and Post Attitudes and Behaviour Questionnaire. Objective testing of critical appraisal knowledge.	Teaching Intervention focussed on critical appraisal skills can successfully supplement JC and lead to improved knowledge and change reading habits	1. Difficult to distinguish effects of teaching exercise from JC
Sidorov, 1995(9)	All chief residents of internal medicine programmes in Eastern USA	Various	131/208 programmes evaluated (64.5%)	Varied	Cross sectional questionnaire	Features of successful JC identified: a) mandatory attendance b) provision of food c) fewer house staff	Does not provide direct information on effectiveness of critical appraisal skills
Sandifer et al., 1996(12)	Public Health trainee & consultant JC in UK	6 months	16 members	At least one consultant / senior lecturer in attendance	Attendance; Letters published; Impact on Commissioning Policy	Letters published in major journals externally valid marker of critical appraisal skills demonstrated in JC.	Small JC with low attendance.
Spillane & Crowe, 1998(10)	Surgical JC in hospital in Australia of Consultants and Registrars	5 years	28/39 members responded (72%)	Mentor assistance varied	Retrospective Questionnaire of members	Successful journal club valued for critical appraisal skills. Specific responses made to feedback of introduction of debate and statistician involvement	1. This JC had social element - held in consultant's house out of hours. Did this affect satisfaction rates?
Bazarian et. al., 1999(22)	Emergency Medicine Residents in training programme, USA	1 year on monthly basis	32 total: 16 unstructured JC; 16 EBM based JC	Unstructured JC - traditional JC approach. EBM based JC used (a) case base presentation format and (b) use of structured worksheets derived from key texts and (c) close faculty supervision.	Prospective Case Controlled Trial. Pre and Post course critical appraisal skills examination (essay)	EBM based JC has no advantage in non EBM based JC when measuring critical appraisal skills in essay exercise	Practice effects may have lead to improvement in both groups
Fu et al., 1999(18)	Psychiatry Residents, Toronto	12 weeks, weekly	24 total: 12 JC; 12 non JC matched controls	JC group facilitated by Professor of Psychiatry. 4 teaching sessions by staff psychologist. No similar educational interventions in non JC group	Controlled Trial. Pre and post course MCQs, case scenarios and attitudes questionnaire	Although JC fosters confidence in trainees in perusing the literature, no evidence that it improves performance vs no JC	1. Small sample size 2. Short duration

TABLE 1: Overview of journal club papers *....continued 2/2*

Paper	Context	Duration / Frequency	Members & Response Rate (%)	Teaching Methods	Methods & Measures	Conclusions	Limitations
Akhund & Kadir, 2006(11)	Community Medicine (Public Health) Residents in Pakistan	6 years, weekly	12 residents at one time, 27/32 residents responded /total (84%)	Mentorship by senior resident. Distribution of article two days prior to meeting	Attendance & Survey of participants	Demonstrates a successful JC, valued by residents	1. Is self appraisal valid measure of improvement?
Haspel, 2010(16)	Transfusion Medicine Residency programme, USA	2 months, 4 hour long sessions	7 second year residents	Designed 4 session curriculum. Use of 2 articles with different conclusions regarding same question in same session. Use of clinical questions / scenarios to enhance clinical relevance	Attitudes and self reported skills questionnaire pre and post course	JC is valued and self-reported ability can significantly improve after structured few sessions	1. Small sample size. 2. Validity of self confidence measures
Mohrari et al., 2009(21)	Anaesthesiology Residents in Iranian Teaching Hospital	One year, fortnightly JC	16 residents	Articles disseminated 4 days beforehand. Earlier sessions didactic, moving towards student-centred approach as participants became more confident	Pre and Post Test MCQ in research methodology and statistics. Critical Appraisal Exercise	JC can lead to improved knowledge base and improve critical appraisal skills if delivered as part of structured teaching programme	1. Self declared baseline ability to critically appraise set arbitrarily at zero 'as residents declared lack of knowledge in this area'.
Temple & Ross, 2011(15)	Plastic Surgery residency training programme, USA	1 year monthly 3 hour evening JCs + EBM teaching programme	10 residents	Electronic support and resources made available. Incorporation of formal teaching into extended 3 hour Journal Clubs. Three homework assignments.	Pre and post course examination (MCQ) and attitudes questionnaire	JC and EBM focussed programme maybe insufficient by themselves to improve critical appraisal skills	Small sample size - possibility of Type II error
Shokouhi et al., 2012(1)	Neurosurgery Residents in centre in Iran	2 session EBM workshop + 6 EBM JC sessions	11 residents	Two session introductory workshop on EBM methodology	Pre and post surveys comparing EBM with non EBM method of organising JC	EBM based JC improve satisfaction and self rated critical appraisal skills vs. non EBM based JC	1. Is self appraisal valid measure of improvement? 2. Limited information on survey and score design
Ibrahim et al., 2014(14)	Survey of surgical trainees across national centres in Nigeria	Various	66/123 trainees responded (53.6%)	Varied	Questionnaire: format of JC, teaching, development of critical appraisal skills, evaluation	JCs are widespread across country. Development of critical appraisal skills valued by trainees.	1. 46% trainees did not respond. 2. No explicit link between JC and critical appraisal skills
Lao et al., 2014(13)	Paediatric Surgery JC in two training hospitals, Canada	2 years, 6 sessions	24 members: 9/24 (38%) completed pre-session test and 5/24 (20%) completed post-session test	Distribution of journal article and session specific learning objectives distributed several weeks in advance. Each session targets specific study design	Pre and post session test and attitudes survey	JC is valued by members and provides immediate improvement in knowledge of critical appraisal skills	1. Low rates of participant feedback 2. No information whether knowledge is retained between sessions

TABLE 2: Journal club papers by outcome *1/2*

Paper	1. Participation	2a Attitudes	2b Knowledge or Skills	3 Behaviour	4a Organisational Practice	4b Benefit to patients
Linzer et al., 1988(17)	Attendance close to 100% for JC programme		80% JC self-reported improvement in ability to apply literature to practice vs. 44% control ($p<0.05$).Epidemiology/biostatistics scores improved in JC group ($p<0.05$). No significant difference in Critical Appraisal exercise between groups	86% JC group reported change in reading habits vs. 0% control group		
Seelig, 1991(19)			Significant improvement in test of critical appraisal knowledge from 42% to 67% ($p<0.05$)	Self reported behaviour medical journal reading increase from 3.5 hours/ week to 4.5 hours/week		
Sidorov, 1995(9)	Mean attendance 58.5%; 69.4% existed for > 2 years; 38.7% >50% attendance AND >2 year existence					
Sandifer et al., 1996(12)	19-50% attendance			10 letters submitted to journals after JC by group. 6 published.	Regional IVF and Family planning commissioning policies reviewed	
Spillane & Crowe, 1998(10)	75% attended more than 2/3 sessions	89% look forward to next meeting	93% reported very good to excellent on development of critical appraisal skills	68% lead to alteration in clinical practice, 68% stimulated to review subject further. 8 research projects commenced.		
Bazarian et. al., 1999(22)			Improvement in scores for both groups, no significant difference between groups			
Fu et al., 1999(18)	8.3/12 attendance		No significant difference in performance of MCQ or clinical scenarios between groups.	58% JC residents felt JC had positive impact on use of the literature. No change in JC in use of textbooks or journals		
Akhund & Kadir, 2006(11)			Knowledge scores significantly improved from 50.8 - 63.9 ($P<0.05$)	Average self-reported reading time increased from 2.0 hours to 3.5 hours ($p<0.05$). 2 letters of critical appraisal published in peer review journals by grou		

TABLE 2: Journal club papers by outcome *…continued 2/2*

Haspel, 2010(16)	Attendance>50%; Survival > 2 years	44% learning of critical appraisal skills most important goal of JC	85% improved self confidence in critical appraisal	44% report improve reading behaviour		
Paper	**1. Participation**	**2a Attitudes**	**2b Knowledge or Skills**	**3 Behaviour**	**4a Organisational Practice**	**4b Benefit to patients**
Mohrari et al., 2009(21)			Significant improvement in knowledge of methodology and application of information but not in study design or statistics. Demonstrated ability to appraise paper using CONSORT checklist after exercise, despite inability before			
Temple & Ross, 2011(15)	8/10 average attendance	64% pre-course felt JC useful for teaching critical appraisal skills, significantly reduced to 50% after course	Non-significant increase in self-rated confidence of critical appraisal skills; non significant improvement in examination (pre-course 43%, post course 52%; p=0.6)			
Shokouhi et al., 2012(1)		Satisfaction score: 21.9 (EBM) vs. 13.18 (non EBM) (p<0.05)	Self evaluated critical skills 40.18 (EBM) vs. 16.72 (non EBM) (p<0.05)			
Ibrahim et al., 2014(14)	90% of trainees report > 50% attendance	Critical appraisal skills rated by trainees as 'important' or 'very important' by 98% respondents				
Lao et al., 2014(13)	Average attendance 14/24 (58%)	Mean satisfaction, relevance and usefulness rated 4.0-4.6 / 5.	Improved knowledge scores from pre-test 10.8/20 to 16.9/20 (p<0.05)			

Declaration of interest: There are no conflicts of interest to declare

Acknowledgements: The author is grateful to Dr Farida Yousaf for her comments on the manuscript

References

1. S Shokouhi G, Ghojazadeh M, Sattarnezhad N. Organizing evidence based medicine (EBM) journal clubs in department of neurosurgery, Tabriz University of Medical Sciences. International journal of health sciences. 2012 Jan;6(1):59.
2. Linzer M. The journal club and medical education: over one hundred years of unrecorded history. Postgraduate medical journal. 1987 Jun 1;63(740):475-8.
3. Sackett DL, Rosenberg WMC, Gray JAM, Haynes RB, Richardson WS. Evidence based medicine: what it is and what it isn't BMJ 1996; 312:71–2.
4. Burls A. What is critical appraisal?. Hayward Medical Communications; 2009.
5. Royal College of Psychiatrists. Core Training in Psychiatry CT1-CT3 - A Competency Based Curriculum for Specialist Core Training in Psychiatry. 2013 Available at: http://www.rcpsych.ac.uk/pdf/CoreCurriculum_FINALVersion_July2013_updatedFeb15KM.pdf [Accessed: 1st October 2017].
6. Kirkpatrick, D, American Society for Training and Development (ed.)1998, 'Another look at evaluating training

programs: fifty articles from “Training & development” and “Technical training” magazines cover the essentials of evaluation and return-on-investment’.

7. Tochel C, Haig A, Hesketh A, Cadzow A, Beggs K, Colthart I, Peacock H. The effectiveness of portfolios for post-graduate assessment and education: BEME Guide No 12. Medical teacher. 2009 Jan 1;31(4):299-318.
8. Yardley S, Dornan T. Kirkpatrick’s levels and education ‘evidence’. Medical education. 2012 Jan 1;46(1):97-106.
9. Sidorov J. How are internal medicine residency journal clubs organized, and what makes them successful?. Archives of Internal Medicine. 1995 Jun 12;155(11):1193-7.
10. Spillane AJ, Crowe PJ. The role of the journal club in surgical training. ANZ Journal of Surgery. 1998 Apr 1;68(4):288-91.
11. Akhund S, Kadir MM. Do community medicine residency trainees learn through journal club? An experience from a developing country. BMC medical education. 2006 Aug 22;6(1):43.
12. Sandifer QD, Lo SV, Crompton PG. Evaluation of a journal club as a forum to practise critical appraisal skills. Journal of the Royal College of Physicians of London. 1996;30(6):520-2.
13. Lao WS, Puligandla P, Baird R. A pilot investigation of a pediatric surgery journal club. Journal of pediatric surgery. 2014 May 31;49(5):811-4.
14. Ibrahim A, Mshelbwala PM, Mai A, Asuku ME, Mbibu HN. Perceived role of the journal clubs in teaching critical appraisal skills: a survey of surgical trainees in Nigeria. Nigerian Journal of Surgery. 2014;20(2):64-8
15. Temple CL, Ross DC. Acquisition of evidence-based surgery skills in plastic surgery residency training. Journal of surgical education. 2011 Jun 30;68(3):167-71.
16. Haspel RL. Implementation and assessment of a resident curriculum in evidence-based transfusion medicine. Archives of pathology & laboratory medicine. 2010 Jul;134(7):1054-9.
17. Linzer M, Brown JT, Frazier LM, DeLong ER, Siegel WC. Impact of a medical journal club on house-staff reading habits, knowledge, and critical appraisal skills: a randomized control trial. JAMA. 1988 Nov 4;260(17):2537-41.
18. Fu CH, Hodges B, Regehr G, Goldbloom DS, Garfinkel P. Is a journal club effective for teaching critical appraisal skills?. Academic Psychiatry. 1999 Dec 1;23(4):205-9.
19. Sellig CB. Affecting residents’ literature reading attitudes, behaviours, and knowledge through a journal club intervention. Journal of general internal medicine. 1991 Jul 1;6(4):330-4.
20. Khan KS, Dwarakanath LS, Pakkal M, Brace V, Awonuga A. Postgraduate journal club as a means of promoting evidence-based obstetrics and gynaecology. J Obstet Gynaecol (Lahore). 1999; 19(3):231–4.
21. Moharari RS, Rahimi E, Najafi A, Khashayar P, Khajavi MR, Meysamie a P. Teaching critical appraisal and statistics in anesthesia journal club. QJM. 2009; 102(2):139–41.
22. Bazarian JJ, Davis CO, Spillane LI, Blumstein H, Schneider SM. Teaching Emergency Medicine Residents Evidence-Based Critical Appraisal Skills: A Controlled Trial. Ann Emerg Med. 1999; 34(2):148–54.

The old age ward: Investigation into the effects of training sessions with junior medical staff

Annabel J McDonald (CT1)
Ananth Puranik (Consultant Psychiatrist)
Baytree House, Maidstone.

Abstract

Aims

To stimulate and teach nursing staff to increase confidence and extend skills Improvement of team working between nurses and doctors.

Background

Retention of psychiatric ward staff is an ongoing problem in the UK. Staff development has been cited as a potentially retentive factor. These seminars were designed to pique the interest of nursing staff.

There can be a weak interface between nursing staff and continually changing junior doctors. It was felt that this project could augment communication and effective team working as nurses and doctors developed a better mutual understanding of their skills and knowledge bases.

Method

Two older people wards were identified at neighbouring psychiatric hospitals. One ward (n=15) received twice-weekly training sessions with a junior doctor for four months. The other ward (n=12) served as a control. The staff filled questionnaires at start and finish to evaluate changes in their confidence with both doctors and patients, enthusiasm for their jobs and plans to take further qualifications. Changes in responses were tested for significance using student t-test.

Results

The average score for all questions increased on the intervention ward. There was a fall in all average attitudes on the control ward. Student's t-test showed a significant improvement in scores following intervention (p=0.04)

Conclusion

This small study indicates that such seminars can increase nursing confidence and interest. We feel that the results justify extending the project to a larger sample and suggest that similar findings would justify building such teaching into the role of junior ward doctors.

Keywords

Nursing, ward staff, training, teaching, doctor nurse relations,psychiatric, psychogeriatric.

Financial support

This research received no specific grant from any funding agency, commercial or not-for-profit sector.

Conflict of interest

None

Background

Retention of trained psychiatric nurses is recognised as an ongoing problem (1,2) and the 2006 UK Chief Nursing Officer's review of the issue considers a number of areas where change could be of value. These include increasing public respect for the profession and improving the remunerative package as well as enhancing intrinsic job satisfaction. The review suggests that improvement in nursing skills and knowledge with an increased challenge could support the latter aim (1). Other studies have commented on the high significance, to nurses, of their relationships with physicians and their perception of a relatively low level of respect for their input by doctors (3). Nurses describe this as significantly affecting their levels of job satisfaction while suggesting that further collaboration and communication could be helpful in combating the problem. Fagin and Garelick's interesting analysis of the relationship similarly suggests that an improved understanding, by doctors, of nurses' roles and skills would be of value (4). They add that there could be value 'in arranging for doctors to train junior nurses in aspect of clinical assessments, diagnosis and treatment.'

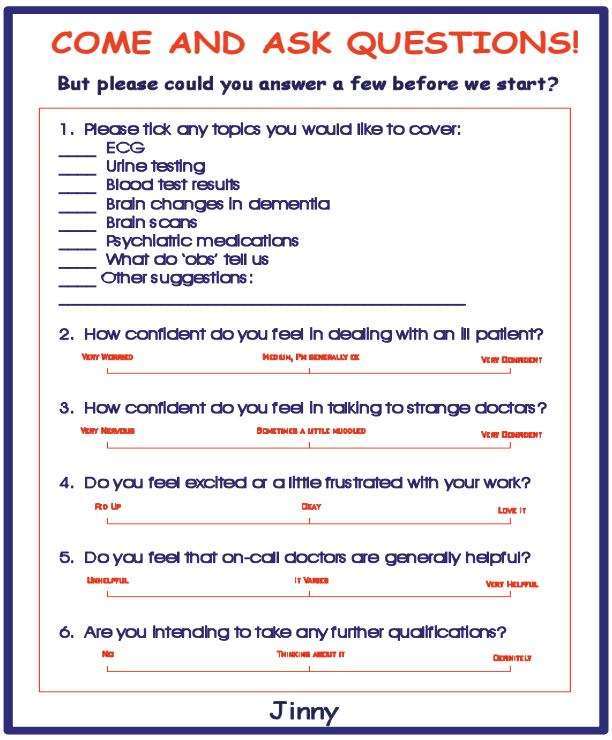
This study examines the introduction of training seminars, run by junior medical staff, for nurses on an older people psychiatric ward. It was felt that this could nurture confidence and job satisfaction by increasing the skills and knowledge of nursing staff whilst developing a better

mutual understanding, by both nurses and doctors, of their complementary roles and knowledge.

Method

Two older people wards were identified at neighbouring Kent psychiatric hospitals. Staff on each ward were asked to fill out a questionnaire (figure 1) which recorded their attitudes to their work and their doctor colleagues on Likert scales. It was noted, on the intervention ward, whether the information was provided by qualified nursing staff or health care assistants. There were no refusals.

Figure 1: Questionnaire



COME AND ASK QUESTIONS!

But please could you answer a few before we start?

1. Please tick any topics you would like to cover:
____ ECG
____ Urine testing
____ Blood test results
____ Brain changes in dementia
____ Brain scans
____ Psychiatric medications
____ What do 'obs' tell us
____ Other suggestions:
_____

2. How confident do you feel in dealing with an ill patient?
VERY WORRIED — MEDIUM, I'M GENERALLY OK — VERY CONFIDENT

3. How confident do you feel in talking to strange doctors?
VERY NERVOUS — SOMETIMES A LITTLE MUDDLED — VERY CONFIDENT

4. Do you feel excited or a little frustrated with your work?
FED UP — OKAY — LOVE IT

5. Do you feel that on-call doctors are generally helpful?
UNHELPFUL — IT VARIES — VERY HELPFUL

6. Are you intending to take any further qualifications?
NO — THINKING ABOUT IT — DEFINITELY

Jinny

Twice-weekly training sessions were set up on the intervention ward. There was no intervention on the other ward which therefore acted as a control. Each session lasted 30 minutes. One session was aimed primarily at qualified staff while the other was directed toward healthcare assistants. Sessions were held at shift-crossover time to maximise staff availability. There was no compulsion to attend.

After four months, the staff on the two wards were asked to fill in the same questionnaire again.

The mean before and after values were calculated for each question on each ward. Student's t-test was used to examine the before and after values for significance. The results from the intervention ward sub-cohorts were examined to establish whether changes primarily reflected attitude alterations in trained nurses or healthcare workers.

Results

A summary of recorded responses to the questionnaire appears in Table 1. Student's t-test showed a significant improvement in scores following intervention relative to the control ward (p=0.03). The intervention ward results suggest that changes in the views of qualified staff accounted for the majority of this improvement.

Table 1: Mean Likert Scale responses to questionnaire items on intervention and control wards

	INTERVENTION WARD					CONTROL WARD				
Question	1	2	3	4	5	1	2	3	4	5
Number respondents (n) Start/end	18 15	18 15	18 15	18 15	18 15	12 12	12 12	12 12	12 12	12 12
Mean value, start	7.3	6.6	7.1	6.4	4.4	8.4	9.3	8.2	6.3	7.3
Mean value, end	1.8	1.3	7.4	6.4	5.5	7.8	8.6	7.6	5.4	6.5
Change, %	+6.9	+10.4	+4.2	+0.2	+25.8	-7.0	-7.7	-7.2	-14.4	-11.3
HCA % change	+5.64	-1.0	-6.7	-4.4	+8.0	not differentiated on control ward				
Nurse % change	+14.7	+41.8	+32.3	+122	+75.8					

Table 1: HCA = health care assistants Nurse = Qualified Psychiatric Nurses

Questions:
1: How confident do you feel in dealing with an ill patient?
2. How confident do you feel in talking to a strange doctor?
3. Do you feel excited or a little frustrated with your work?
4. Do you feel that on-call doctors are usually helpful?
5. Are you intending to take any further qualification

Discussion

The results indicated significantly increased confidence and satisfaction on the ward where training seminars were instigated. This was further emphasised when compared to the control ward where attitudes showed a decline.

Further examination of the results suggested that the most positive effects were apparent in the qualified nursing staff rather than the healthcare assistants. This may have reflected the fact that the qualified staff chose to receive a more practical series of sessions.

The sessions with the healthcare assistants covered topics such as types of dementia, diabetes, urine dip results, physiology of patient observations, etc. The results from this group showed a positive improvement in confidence when dealing with an ill patient and an increased interest in taking further qualifications. It did not improve confidence with doctors or increase enthusiasm for their work.

The sessions with the qualified nursing staff tended to be more practical. They included sessions on reading an ECG, taking ECG's, interpreting blood results, using the online pathology reporting system and practical phlebotomy as well as some of the topics covered with the healthcare assistants. The responses to these sessions indicated increased confidence in dealing with both sick patients and doctors. There was also a reported rise in enthusiasm for the job and greater desire to take further qualifications.

The staff on the ward displayed an enthusiastic response to the seminars with good attendance. The project received firm support from the charge nurse.

A number of practical gains were made by the qualified nursing staff. Two nurses have now returned to active phlebotomy work. All qualified staff now use the hospital pathology system with confidence. Six qualified staff can now take ECG's with a broad understanding of the resultant traces

Limitations

This was a small study with a number of further limitations. The nearest old age psychiatric ward (to act as a control) was 12 miles away and thus subject to different local influences. Attendance at the seminars was variable according to duty rosters and ward requirements on the day. Changes to staff and rostering also meant that fewer final questionnaires (15) were obtained than starting questionnaires (18).

Conclusion

Seminars from general medical staff were welcomed by ward staff and appear to have fostered confidence and enthusiasm as well as the acquisition of practical skills. This was a small pilot study which would support extension to a larger population. Confirmation of observations would support the incorporation of such sessions into the role of junior ward doctors.

References

1. Department of Health. Recruitment and retention of mental health nurses: Good Practice Guide, The Chief Nursing Officer's Review of mental health nursing, 2006, http://www.nacro.org.uk/data/files/nacro-2006042401-349.pdf (last accessed 14/2/15)

2. Karlowicz, K. A., & Ternus, M. P. (2009). Issues influencing psychiatric nurse retention during the first year of employment: a case analysis. Journal of Nursing Management, 17(1), 49-58

3. Rosenstein, A. H Nurse-physician relationships: Impact on nurse satisfaction and retention. 2002 AJN The American Journal of Nursing, 102(6), 26-34

4. Fagin, L., & Garelick, A The doctor–nurse relationship. 2004 Advances in Psychiatric Treatment, 10(4), 277-286.

Antipsychotic prescribing for people with dementia

Vijay Bhatia (ST6)
Eureka Place, Ashford

Purpose

Audit report prepared for the Memory Service National Accreditation Programme (MSNAP), Royal College of Psychiatrists (1).

Aim

To audit the case notes for the use of antipsychotic drugs in people with dementia and to compare with the standards of MSNAP.

Background/rationale

British National Formulary (2) guidance on prescribing antipsychotic medication for the elderly:

'The balance of risks and benefit should be considered before prescribing antipsychotic drugs for elderly patients. In elderly patients with dementia, antipsychotic drugs are associated with a small increased risk of mortality and an increased risk of stroke or are particularly susceptible to postural hypotension and to hyper and hypothermia in hot or cold weather.

It is recommended that:

- Antipsychotic drugs should not be used in elderly patients to treat mild to moderate psychotic symptoms.
- Initial doses of antipsychotic drugs in elderly patients should be reduced (to half the adult dose or less), taking into account factors such as the patient's weight, co-morbidity, and concomitant medication.
- Treatment should be reviewed regularly.'

The Department of Health (DoH) report, written by Professor Sube Banerjee (3): 'The use of antipsychotic medication for people with dementia: Time for action' was published in November 2009. It highlighted a need to ensure that antipsychotic drugs are only prescribed to people with dementia when necessary.

The National Dementia and Antipsychotic Prescribing Audit (4) is commissioned by the DoH and delivered through the Health and Social Care Information Centre: 'The use of antipsychotic medication can lead to serious side effects for people with dementia. The Government has made a commitment to reduce the inappropriate prescribing of antipsychotic medication for people with dementia. The audit collects information from GP practices on the prescribing of antipsychotic drugs for people with dementia.'

The audit aims to:

- Provide publicly available information on the current prescribing of antipsychotic medication for people with dementia.
- Provide information to support the Government's commitment to reduce the inappropriate prescribing of antipsychotic medication.
- Help GP practices identify where services can be improved.

The Memory Service National Accreditation Programme (1) has set standards for the use of antipsychotic drugs for people with dementia and advises that local audit of the prescription of antipsychotic drugs for dementia should be evidenced for Memory Service National Accreditation.

Methodology

Standards were taken from the Memory Service National Accreditation Programme:

MSNAP Standard 5.2 – Antipsychotics are only prescribed as a last resort, after a thorough assessment of risk factors, and their use is reviewed regularly.

MSNAP Standard 5.2.1 – People with dementia who develop psychotic symptoms or behaviour that challenges are only offered antipsychotic medication when the severity and associated risks are high and when other options have been considered and excluded.

MSNAP Standard 5.2.2 – Where antipsychotic medication is given, this prescription is recorded and a single, named individual is responsible for undertaking a review. When stabilised on

medication, review should take place at least every three months.'

Sample

Time frame: 1 June 2015 to 30 June 2015.

Sample Frame: All clients seen by Consultant Psychiatrist Dr Andrew during the month of June 2015. These patients include patients reviewed in the outpatient clinic and during home visit to client homes, residential and care homes, but excludes inpatients under Dr Andrew's care on Cranmer ward St Martins Hospital Canterbury.

Electronic patient records (RiO) were audited to identify clients on antipsychotic medication. Further examination involved identifying the diagnosis and, in particular, whether a patient has a diagnosis of dementia. Any client who has a diagnosis of dementia and was found to be on antipsychotic medication had their case notes further examined to record their last review date. Letters to the general practitioner were reviewed to identify the reasons for use of antipsychotic medication and justify that other alternatives have been examined or tried. Their last review was recorded to identify clients for the purpose to see if the standard of the MSNAP has been achieved regarding review once every three months.

Clients reviewed by other medical practitioners in Ashford CMHSOP were not included in this audit and will be subject of a further separate audit.

Exclusions: Clients who are inpatients on acute psychiatric units.

Results

Total number of case records audited: 61

Total number of clients on antipsychotics with any diagnosis: 7

Total number of clients on antipsychotics with functional diagnosis: 5

Total number of clients on antipsychotics diagnosed with dementia: 2

Total number of clients on antipsychotics who have a diagnosis of dementia and have been reviewed in the last 3 months: 0

Discussion

People with dementia can have psychotic symptoms and challenging behaviours and would need management. The guidelines and standards stipulate that antipsychotics should be used as a last resort due to its potential side effects on mortality and incidents of stroke leaving them with disability. The aim is to consider other alternatives in the management of psychotic and challenging behaviours in patients with dementia.

This audit has highlighted that, although antipsychotics are used only in two cases, their last review was not in the last three months.

Limitations

This audit sample is selected from the diary of one clinician only and during one month period only. This audit may not represent all relevant clients.

Recommendations/action plan

- Clients identified in the audit not meeting the required standard will be reviewed.
- The same audit will be conducted for clients seen by the other three medical practitioners in Ashford CMHSOP in June 2015.
- A re-audit will be conducted in 2015
- Review of clinicians' caseloads to ensure that required standards are met for all clients with dementia who receive antipsychotic medication.

References

1. Hodge S, Hailey E, Orrell M. Memory Services National Accreditation Programme (MSNAP) Standards for Memory Services. London: Royal College of Psychiatrists. 2014.
2. Joint Formulary Committee. British National Formulary (online) London: BMJ Group and Pharmaceutical Press <http://www.medicinescomplete.com> [Last accessed on 02/08/17].
3. Banerjee S. The use of antipsychotic medication for people with dementia: Time for action. London: Department of Health. 2009 Nov:5.
4. Department of Health: National Dementia and Antipsychotic Prescribing Audit National Summary Report 17/07/12 https://www.digital.nhs.uk/catalogue/PUB06624 [last accessed on 02/08/17].