Ten Minute Talks - a novel approach to delivering teaching in a busy medical unit

Dr Jennifer Boyle, Dr Dominic Cochran, Dr Neil Patel

Neonatal Unit, Royal Hospital for Children, Glasgow, Scotland, UK.

NHS Greater Glasgow and Clyde

INTRODUCTION

It can be challenging to deliver teaching for trainees in busy medical units. One of our team (NP) devised a plan to introduce brief, ten-minute teaching sessions following morning handover. We believe this has been a successful development in teaching within our department solving many of the problems in delivering teaching for medical trainees.

FORMAT

- The aim was to achieve focused teaching for day and night shift staff in a short period of time without impacting upon clinical duties.
- Ten minute talks (TMTs) are delivered by consultants on topics of their choosing after morning handover three days a week.
- The speaker simply talks to the group, usually without visual aids.
- A kitchen timer is used to alert the group when ten minutes is up, ensuring night staff get away promptly and day staff are free to start their duties. (See Image 1)
- Night shift staff are always given the choice to leave following handover if they wish.

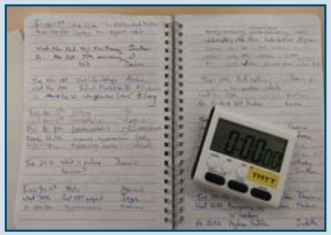


image 1: TMT topic and date log book and kitchen timer used.

CHALLENGES IN TEACHING AND THE BENEFITS OF TMTs

- Shift work and clinical duties make it difficult to gather trainees together – at morning handover staff are already gathered and teaching can be delivered to both day and night shift staff (see Image 2)
- A morning teaching session can be unattractive to those completing a night shift – limiting the session to ten minutes makes the prospect of staying on after a night shift more appealing
- Consultants having to find time to prepare teaching – Ten Minute Talks need little or no preparation

Image 2: Photograph of Dr Anne Marie Heuchan, consultant neonatologist delivering a TMT to staff at handover.

TMTs IN PRACTICE

See Table 1: A range of TMT topics since June 2017

Table 1: A Range of TMT topics delivered since June 2017.

A range of TMT topics delivered since June 2017				
Clinical Subjects	Clinical Governance/ Research	Practical Procedures	Guest Speakers (Specialty)	Trainee Presentations (grade)
Pulmonary Vasodilation	"GET SET' for congenital anomalies audit	Intubation	Infection Control (Microbiology)	'GET SET' Audit- practice for national meeting (ST5)
Skeletal Dysplasias	Discharge Audit & stickers	Central Line insertion	Acute Kidney Injury (nephrologist)	Diaphragmatic hernia (FY2)
Neonatal Seizures	Wireless monitoring research	Ventilator settings	Expressing Early (Infant feeding advisor)	Undescended Testes (FY2)
Chronic Lung Disease- 50th anniversary	Incident reporting	Extubation of the VLBW infant	Labour ward audit (obstetrics)	Ventilator settings (ST8)
Infant Mental Health	Review of Xrays- PICC audit	ETT fixation- using the new neobars	Hand washing (Infection Control team)	RSV in Kenya (ST6)
Trisomy 21	Delayed cord clamping- evidence	"Life start" beds in labour ward (Image 2)	Parenteral nutrition (pharmacist)	Perinatal asphyxia (Spec. Dr)
Nutrition & growth	Probiotics do not prevent NEC- evidence	Use of blood gas machine	Neuro-developmental aids (physiotherapy)	Fluid & electrolyte balance (ST8)

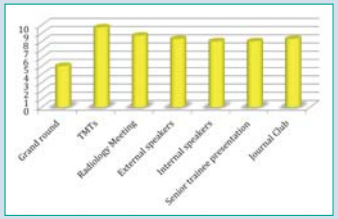
Table 1 Footnote: Over 6 months, delivering three TMTs each week allows for approximately 75 topics to be covered.

FEEDBACK

Trainees were asked for feedback, using anonymous questionnaires) and from consultants (in an email questionnaire format) to assess success of this new method.

The development of TMTs has been well received. Trainees have rated TMTs as their favourite method of teaching when compared to more traditional methods such as grand round, journal club and structured 1 hour teaching presentations. On a ten-point scale (1=poor, 10=excellent) they rated TMTs a mean score of 9.7 compared to our other educational activities, which scored 5, 8.3, & 8 respectively (see graph 1). Free text comments included:

- "I think these are great"
- "I love these"
- "perfectly digestible"
- "Excellent, concise, learn a lot. Happen as scheduled, practical, relevant"



Graph 1: Ten-point scale anonymous rating given by trainees on different types of departmental teaching.

Similarly, consultants gave a positive review of TMTs rating them 8.5 in terms of effective teaching:

- "short, sharp and informative"
- "Very effective on multiple levels. Short duration matches most people's attention spans… (and) … encourages the speaker to focus on key points & cut out waffle", "easy to prepare for"
- "A good adjunct. Could not replace other modes of teaching completely", "Rate them highly & see them closer to a teaching round than formal tutorial but not a replacement for any of these, they are complementary"
- "It captures the essence of a "teachable moment" approach".

OBSERVATIONS

- For any given topic most important points can be covered in a ten minute slot, the format encourages speakers to keep to the essential and important facts
- Although the trainees on night shift are offered the option of leaving after the clinical handover we note that they almost always stay on for the talk, knowing it is limited to just ten minutes.

POTENTIAL FOR USE IN OTHER MEDICAL DEPARTMENTS

- This method would be easy to adapt by other medical units – once the idea was conceived we were able to implement it with almost no preparatory work
- We have delivered TMTs three times a week but they could be done as often as desired from daily to once a week
- We have had a wide range of topic types but they could be targeted at a specific area e.g. reminding staff of guidelines or covering key basic topics e.g. diabetic ketoacidosis, acute asthma, exacerbation of COPD

CONCLUSIONS

TMTs have proved a popular and effective addition to the education programme in our unit. They have ensured that focused relevant teaching is delivered thrice weekly to both day and night shift staff in a very busy neonatal unit with a minimum of resources or preparation. We believe this format could easily be adapted to be used in other medical departments to complement their existing teaching. We both encourage and invite other departments to adopt a trial of this novel approach to teaching and welcome feedback as to how it is received.

FURTHER DIRECTION

It would be interesting to see how trainees would approach this style of teaching as teachers themselves and also how TMTs would be received by medical students during clinical placements. This could be discussed with university course coordinators as to how to trial and implement TMTs across the board. Further role out of TMTs would then need to be reviewed for success rates and direct feedback.

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Evaluation Of A Novel Approach To Teaching Communication Skills

Dr Gwen Collin CT2 Dr Alex Collins CT3 Dr Francis Felix CT3 Dr Jigna Patel ST7

Aims

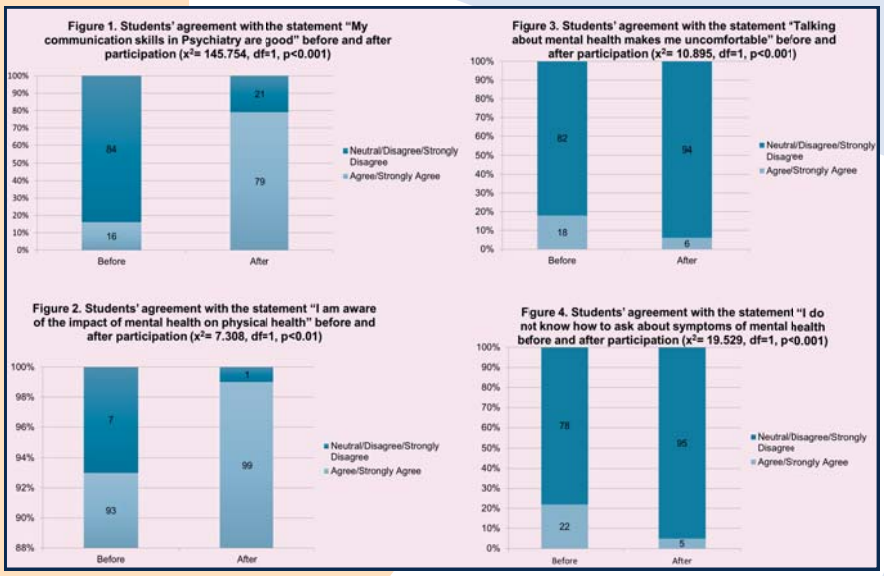
Medical students often express feelings of apprehension and a the lack of confidence when talking to people with mental health difficulties. Psychiatry Pitstop, a novel, near-peer led teaching programme, was introduced for medical students to improve their communication skills and confidence. Near-peer led teaching, a well recognised teaching method in practical disciplines such as anatomy and clinical skills remains unexplored in Psychiatry [1,2,3]. We have been running for 6 years and is delivered twice a year at 2 medical schools as an extra-curricular activity (Leeds and HYMS medical schools).

Our programme consists of six 2-hour weekly sessions. In each session, a tutor-led interactive presentation is followed by communication skills practice with simulated patients and detailed feedback on student performance. Pre- and post-course questionnaires were completed by 199 students and the results compared. Before the course, 16% of our students considered their communication skills good; afterwards, 79% did so. Following our course, students reported feeling more comfortable when talking about mental health, having improved knowledge of how to ask about mental health. symptoms, and an increased awareness of the impact of mental health. Thematic qualitative responses also support our near-peer led feedback as well received and valuable learning tool.

Methods

Each week is assigned a particular psychiatric topic: self-harm; psychosis; depression and anxiety; substance misuse; cognitive impairment; and eating disorders. Our student performance feedback is based on Pendelton's Rules. The chi-square test was used to analyse the level of the students' agreement with statements in our pre- and post-course questionnaires. Anonymous feedback at the end of each session provided thematically analysed qualitative data.

Results



Conclusions

Our 'Pitstop' near-peer led teaching is an effective way to improve student confidence and their communication skills when talking to people with mental health difficulties. A particular strength is the vigorous use of feedback as a learning tool. We therefore encourage its introduction in other medical schools and other specialities.

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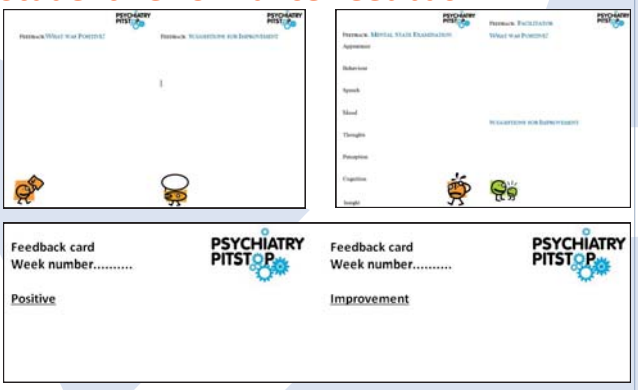
Student Performance Feedback



Interactive Presentation

Simulated Patients

Thematic Qualitative Responses

Positive Feedback:

- Supportive learning environment.
- Good diversity in tutor levels of training.
- Good range of cases and realistic scenarios.
- Good overall structure and format of sessions.
- Good opportunity to practise communication skills.
- Structured feedback from tutors, simulated patients and peers.
- Opportunity to practice talking to simulated patients with psychosis, depression, and cognitive impairment, as they do not often talk to people with these conditions in clinical placements.
- Topics of substance misuse and eating disorders valued.

Suggestions for Improvement:

- Handouts to be given.
- More time for feedback.
- To be told weekly topics in advance.
- More guidance and time on Mental State Examination.
- Request to observe psychiatrists interviewing simulated patients.
- Some suggested shorter periods with simulate patients, so more students would have the opportunity to practise their communication skills in each session.

Contact Us

@psychpitstop
Psychiatry Pitstop
psychiatrypitstop@gmail.com
https://psychiatrypitstop.wordpress.com

PSYCHED
Leeds University Psychiatry Society

Acknowledgement

We would like to thank all of the students, tutors, organisers and simulated patients.

‘Psychiatry In A Day:’ a pilot study for Advanced Nursing Practice

Dr Jennie Higgs Clinical Teaching Fellow, Medical Education Directorate NHS Lothian.
Dr Neelom Sharma Consultant Psychiatrist, NHS Lothian

Introduction

The authors designed and ran a Psychiatry Training Day for the Advanced Nursing Practice (ANP) MSc course at Edinburgh Napier University. Up to now this course has not included any psychiatry teaching. Given that practitioners work in clinical areas where psychiatric symptoms are relatively common (including prison service, hospital at night and acute medicine) this appeared a clinically significant omission. This project aimed to teach fundamentals of psychiatry in a single day.

Lecture 1: Psychiatric history taking and an introduction to common psychiatric conditions
A brief introduction to depression, bipolar affective disorder, anxiety disorders, schizophrenia and emotionally unstable personality disorder with reference to history taking, diagnosis and management
Lecture 2: Mental State Examination
Structure and content of a MSE with patient videos to illustrate specific findings
Tutorial 1: History taking and mental state examination
Participants practised history taking and mental state examination through simulated patient encounters (cases used were depression and panic disorder)
Lecture 3: The Mental Health Act and Risk Assessment
Principles, criteria for detention and specific sections were covered. Risk assessment was explored through case vignettes
Tutorial 2: “Putting it all together”
Two case examples (schizophrenia and emotionally unstable personality disorder) were used to allow participants to explore and reinforce learning around history taking, mental state examination and risk assessment via facilitated group discussion.

Figure 1: Outline of the day

Methods

The day consisted of 3 lectures and 2 small group tutorials. Lectures were delivered by a Clinical Teaching Fellow and Consultant Psychiatrist. Tutorials were delivered by Higher Trainees in Psychiatry, with 5-6 participants per group. An outline of the sessions can be seen in figure 1.

15 out of 18 of those who attended provided feedback via an online questionnaire. For each lecture participants were asked to rate their agreement with statements related to the content, learning objectives and lecture style. For both tutorials participants were asked to rate their level of agreement with statements related to the purpose, environment, tutor, and content. There were free texts boxes for additional comments for each lecture and tutorial. Participants were then asked to rate their agreement with statements about the impact of attending the day overall and to provide comments. They were also asked for an opinion on whether pre-reading would have been helpful and feasible.

At the start and end of the day participants were asked questions via Mentimeter. This allowed for feedback and comments to be collected and displayed instantaneously. This was partly done as an ice breaker and to experiment with new technology but it also gave a valuable insight into the participants’ views.

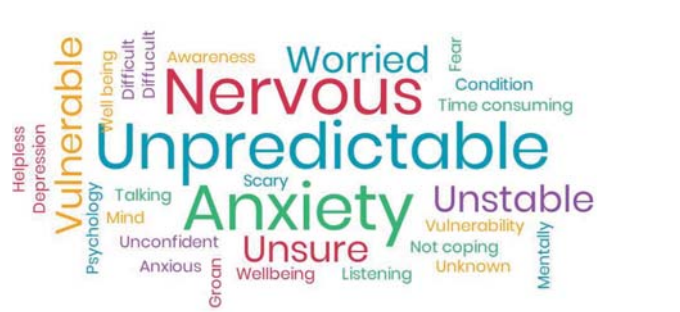


Figure 2: What words come to mind when you hear “psychiatry” or “mental health”? Responses at start of day.

Figure 3: What words would you now use to describe psychiatry? Responses from end of day

Results

Participants were asked 3 questions via Mentimeter. The change in participants’ responses to the question “what words come to mind when you hear psychiatry?” was striking, see figures 2 and 3. Participants were also asked how they would describe the training day, responses to this question can be seen in figure 4.

Detailed feedback was collected via an online questionnaire. Responses to “The content of the lecture/tutorial was relevant to me” were combined for the 5 sessions. 91% of respondents agreed or strongly agreed with this statement. This confirmed that the course content had been well designed.

Regarding the three lectures, 93% of respondents agreed or strongly agreed that the learning outcomes were clear and that the lectures were engaging. For the two tutorials, 97% agreed or strongly agreed that the purpose of the tutorials was clear while 93% agreed or strongly agreed that the small group environment helped their learning and that their learning was positively enhanced by the skills of the tutor.

Free text comments for the lectures showed that respondents found them to be interesting, well structured, engaging and at an appropriate level. It was noted that some respondents found the sessions somewhat rushed and containing too much information. One option would be to introduce pre-reading for the training day although in this small sample 6 out of 15 respondents did not feel this would be beneficial and that they may not have time for course preparation in their current role.

Free text comments for the tutorials highlighted that participants found the environment safe, relaxed and supportive and that the tutorials had reinforced learning gained from the lectures.

Overall respondents commented positively on the structure, content and tutors with 14 out of 15 participants agreeing that attending the day had improved their confidence with regards to assessing patients with mental health problems and 13 agreeing that it had helped to meet their learning needs.

Figure 4: How would you describe the training today?

Conclusion

The feedback demonstrates that the training was well received by participants and that it may be a valuable addition to the Advanced Nursing Practice course. We plan to run the training again with more participants and will gather more data to inform further development. We recognise that it was a rather full programme and will consider ways to address this such as pre-reading.

Transgender Healthcare Teaching in the Undergraduate Medical School Curriculum

University of Glasgow
School of Medicine, Dentistry & Nursing

A. Donaldson[1], J. Ewan[2] , R. Frize[1] , S.F. Sneddon[1].

1. Undergraduate Medical School, University of Glasgow; 2. Sandyford Gender Clinic, NHS Greater Glasgow & Clyde

With increasing recognition of the diverse and specific needs of transgender individuals in a health care setting, lack of knowledge, poor attitudes and prejudice towards transgender patients can result in this population being afraid to access medical care. Educating medical students early in their career in a sensitive and inclusive manner could help change these attitudes. It has been shown that medical undergraduates and post-graduates often feel unprepared or uncomfortable in caring for transgender patients due to lack of training and experience[2-4]. The aim of this study was to address this through introduction of basic transgender healthcare education into the University of Glasgow undergraduate medical curriculum, with the goal of implementing further interactive and fully inclusive teaching.

Figure 1: Transgender Symbol[1]

Aims

- To give basic medical knowledge of transgender health care to early stage medical students.
- To discern the understanding, knowledge and comfort using knowledge of early stage medical students in relation to transgender health care issues.

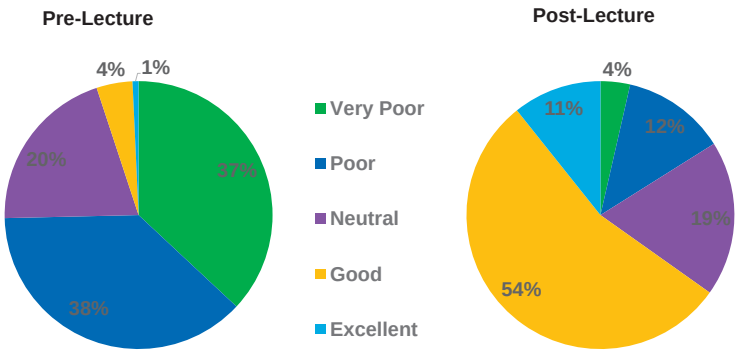
Methods

- Literature review of current research into transgender health care education was undertaken. 83 papers were found, with only 14 being eligible for full reading.
- An hour long lecture was prepared and delivered to Year 2 undergraduate medical students by a Gender Specialist containing terminology associated with gender dysphoria, the health pathway of a transitioning patient and medical and surgical options for transitioning patients.
- An anonymous 18 question survey using a Likert scale and a comment section was produced for the students to answer before and after lecture to discern:
  - Understanding of and comfort using gender terminology
  - Understanding of and comfort using medical and surgical management of transgender patients
  - Opinions of introduction of transgender healthcare into medical curriculum
  - Opinions of further education techniques that could be included into curriculum

Results

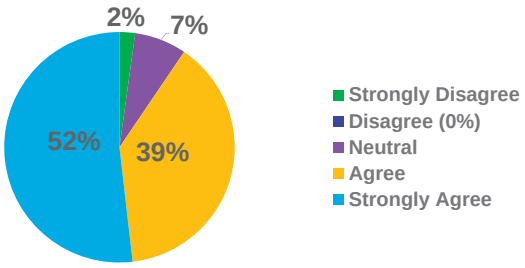
- Questionnaires were distributed to 241 Year 2 undergraduate medical students prior to and after delivery of the transgender healthcare lecture.
- 138 students completed the pre-lecture questionnaire (57%)
- 112 students completed the post-lecture questionnaire (46%)

Q. What is your understanding of specific health needs for transgender people out with the transition process?



- Before the lecture, students had:
  - Poor understanding of gender terminology e.g. binary, non-binary
  - Poor understanding of management (medical, surgical, psychological)
  - Felt uncomfortable using terms: transgender, binary and non-binary
- After the lecture, statistically significant (p=0.000) improvements were shown in:
  - Understanding of terminology and management
  - Comfort using knowledge of terminology and management

Q. The Medical Curriculum should include Teaching on Transgender Health Care.



- Student comments included wanting more teaching on transgender patient mental health problems and more interactive sessions
- Students favoured the following teaching sessions:
  - Patient consultations (66.9%)
  - PBL scenarios (57.1%)
  - Communication skills (50.9%)
  - Lectures (32.1%)
  - Small group sessions (14.3%)

Conclusions

- **This study has shown that the vast majority of medical undergraduates would value teaching on transgender health care included in their curriculum.**
- **A one hour lecture improved student knowledge and comfort around transgender healthcare, improving their confidence before practical placements start.**
- **Although the lecture was beneficial, students would like more interactive teaching involving members of the transgender community to further improve their knowledge and confidence.**
- **We wish to repeat this questionnaire after introduction of further teaching such as communication skills sessions.**

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Meeting the needs of GPs in training in South East Scotland -a qualitative review, analysing a new Obstetrics & Gynaecology study day

Dr. Sigi Joseph

Dr. Sigi Joseph

GP Partner ,Pathead Medical Practice, GPST1 Course Organiser South East Scotland Deanery, Edinburgh

NHS Education for Scotland

Introduction

Research Aim:

- Ascertain through both Quantitative and Qualitative analysis what our GPST's value most in a study day.
- Develop common themes which trainees sighted as reasons for a courses value and enjoyment.
- Utilise these common themes to assist future course development within thnit.

Method:

- Questback post course feedback was analysed to draw numerical data.
- 8 in –depth interviews were conducted with a variety of GPST's at different stages of training.
- The combined data underwent a thematic analysis to extract useful transferable themes.

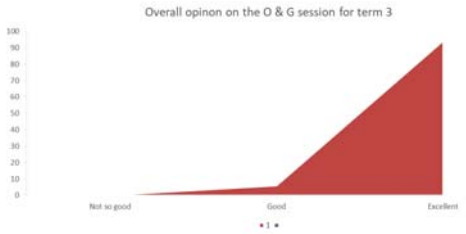
Summary of Work

- Curriculum mapping exercise is useful prior to developing a course.
- Clarifying delivery points within training against a spiral curriculum approach.
- Targeted teaching based on the needs of trainees for stage of training maintain a GP Focus is essential.
- Collaboration with specialists to get up to date clinical information pertinent to community practice is of value.
- Mixed method approach of a study day is appreciated both in terms of enjoyment and to drive learning.

Results:

Thematic analysis led to two main categories with sub themes:

- Structural Themes
  - Flexibility in educational delivery
  - Relevance to perceived training needs
- General Themes
  - Confidence building
  - Preparedness for exams or work
  - Social & supportive aspects of peer gathering



Social aspects of Learning have great weighting with our trainees

"To be honest I just love it all. I really think its valuable to get out of your practice and see your peers, social learn together and also join that kind of safe environment when people aren't afraid to say they don't know something" GPST3

"I think a lot of appreciate the chance for some learning out of practice. A chance to get a day away together and to learn." GPST1

Relevance to future working life crucial.

"Nothing can be too Gp focussed for me." GPST2

"I recall really thinking now this is useful and actually I think I could manage that in my 10 minutes." GPST3

Take Home Messages

Keeping " THE WHY" at the centre of our educational delivery and maintaining the focus on generalism to empower working life is highly valued.

Creating a "safe" learning environment which facilitates peer to peer connection and support is paramount.

Keeping CALM (Coaching, Action Learning and Mentoring) in Leadership

Ryan. C[1], Paterson. G[2] (joint first authors)
1- Specialist Registrar Geriatrics and GIM, Queen Elizabeth University Hospital, NHS GGC
2- Specialist Registrar Forensic Psychiatry, NHS State Hospital Board for Scotland

NHS Education for Scotland

Introduction:

The Scottish Clinical Leadership Fellowship (SCLF), run by NES, offers a select group of medical and dental trainees in Scotland the opportunity to develop leadership skills. From 2016 the fellowship offered Coaching and Action Learning to fellows.

Each fellow was allocated a professional coach who met with them regularly on a one-to one basis. Coaching was individual to each fellow's needs and topics were led by the fellow. Action learning is described by the Action Learning Associates Foundation as:

"The process of bringing thinking and action into harmony. Through working in action learning sets, we bring together diverse peers or people from within the same organisation to work through issues, share ideas and challenge perceptions in a trusting, supportive environment"

Action Learning was undertaken during group study days, facilitated by a professional colleague.

SCLFs accessed mentors as part of their daily work, supervising and supporting them in their individual projects.

Aims:

To assess the impact of Coaching, Action Learning and Mentoring on those taking part in the Scottish Clinical Leadership Fellowship

Methods:

A survey was developed asking SCLFs the positive and negative aspects of coaching, action learning and mentoring. This was emailed to all SCLFs from 2016 onwards. Responses were thematically analysed by two independent reviewers.

Results:

14 SCLFs replied, a response rate of 67%. Respondents were from a range of specialties from CT2 to post-CCT. All respondents made positive comments about coaching, action learning and mentoring.

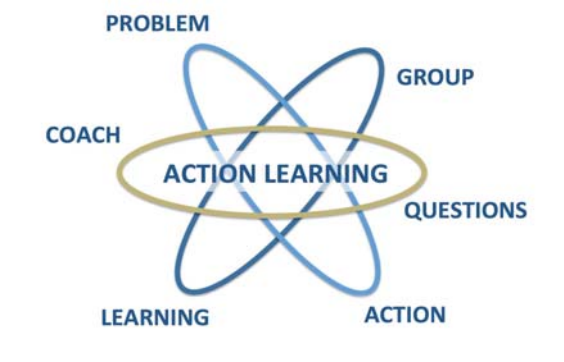


Image Source: World Institute for Action Learning (https://wial.org/action-learning/) 2018

SCLF

Coaching:

Perceived benefits of coaching were personal development (9 responses), reflection (5) and an external opinion (4). The predominant negative theme was difficulty understanding the concept.

"Opportunities to speak with someone who understands but is external to my organisations. "Me" time for personal development"

"Safe space, divorced from any clinical hierarchy, to discuss fears, concerns, and hopes for the future; insightful questioning on my own ways of working; feeling of support/building of self-belief"

Don't usually have burning issues I feel the need to explore - tend to need to think of an idea for the sessions. At times feel slight unease as other members talk more deeply about more personal issues

Great to get a group discussion to help to think about things from a different perspective. Challenged my thinking

Action Learning:

The main benefit from action learning was the opportunity to think differently about problems (7), group cohesion (5) and practical advice (4).

The main drawback was difficulty in finding the right issue (4), difficulty understanding the concept (4) and embarrassment (4). 3 trainees wished to continue action learning after the fellowship ended.

Mentoring:

Fellowship mentors were seen positively as giving external support (8) and guidance (7). There was, however a 'boss versus mentor' conflict raised by 2 respondents.

"Having gone into such a new environment and role it was very important to have someone I could look to for guidance and in confidence."

Conclusions:

Coaching, Action Learning and mentoring were all viewed positively by SCLFs. As the fellowship develops these will continue to benefit trainees. Better explanation of the concepts will enable trainees to maximally benefit. These opportunities should be considered for all trainees, not only those in a bespoke fellowship.

'Non-traditional' students' experiences of applying to study medicine in Scotland: an interview study

Rachel Ball[1], Jennifer Cleland[2], Kirsty Alexander[2]

[1]School of Medicine and Dentistry, University of Aberdeen
[2]Centre for Healthcare Education Research and Innovation, University of Aberdeen

INTRODUCTION

In the UK, students from lower social classes are consistently underrepresented in medical school, despite the widespread implementation of widening access (WA) initiatives in accordance with government and BMA policy[1].

Previous research in the area has focussed on identifying reasons students from non-traditional backgrounds are less likely to apply to medical school, such as lack of school support[2], fears about failing/dropping out of the course[2,3] and a perception that only a certain type of person could go to university[3].

However, it is also important to explore the experiences of those 'non-traditional' applicants who did choose to apply to medicine and were ultimately successful. The experiences of this group of students can provide useful intelligence for admissions and widening access policy and practice.

METHODS

This study was qualitative, with data collected via semi-structured interviews with 12 participants from three Scottish medical schools (Aberdeen, Dundee and Glasgow) who had self-identified as having "non-traditional" backgrounds. All participants were of UK origin.

Data analysis was inductive and thematic.

Of the twelve participants, ten had entered medical school as undergraduate students, either straight from school or after a gap year. The remaining two students had both completed at least one degree before starting medical school.

RESULTS

Three overarching, interlinking themes were identified in the data.

Shift from lack of confidence to having the confidence to apply

While participants had begun to consider medicine at an early age, they viewed it as elitist and thus unattainable for them, lacking the self-belief to seriously consider applying:

"I didn't think I was the sort of person that could study medicine –like smart enough…I didn't think that it was a realistic dream"

These low levels of confidence persisted until applicants found out they had performed well academically, and achieved the high entry requirements medical schools expect from their applicants:

"I'd got my five As & I thought, I can do this"

This strongly suggests that academic achievement was a vital 'turning point' in the participants' journey to medicine. Academic achievement boosted their self-confidence enough to encourage them to apply.

Resilience in the Face of Barriers

All participants in this study were faced with a variety of barriers whilst applying to medical school, which they managed to overcome by demonstrating some level of psychological resilience. This ability to successfully deal with challenges seemed key in allowing our participants to make successful applications:

"A lot of my teachers, like when I had to miss classes and things, to go to do like, volunteering and shadow work…they were very, oh…why you're doing this…to get…time off…I had to really fight for it"

Importance of Connections to the Medical Profession

Participants also stressed how beneficial they found being linked to the medical profession in some way was for their application. They viewed these connections as important in both confirming their interest in becoming a doctor, and reassuring them that they were able to become one:

"It was nice to speak to a doctor and seeing what he's been through, and through REACH it was nice to speak to students that were doing what I will be doing when I get into that"

CONCLUSION

Currently, many WA initiatives target secondary school pupils before they have sat their exams. However, our findings show that many WA students did not consider medicine a realistic possibility before obtaining the necessary qualifications. Therefore, whilst resilience and loose connections to medicine are valuable for non-traditional students in their journey into medicine, there is also an opportunity for medical schools and the Scottish Government to reach out to students immediately after exam results are released. This would provide potential candidates (who may not have considered medicine achievable prior to this) with accurate information, allowing them to meet the October application deadline.

ACKNOWLEDGEMENTS

Thank you to: REACH Aberdeen for funding this project, the participants who gave up their time to support this research, and Dr Manjool Medhi who conducted the interviews. This study was carried out by Rachel Ball as part of an intercalated degree focussing upon medical education.

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Impact of disseminating a standardised trust wide clinical skills teaching programme on undergraduate medical students

M.M.F. Scullion, A. Slater, C.L Adamson, K.M Harris, L. Mulligan, D.W Shields
Department of Medical Education, NHS Lanarkshire

Introduction

Medical students from the University of Glasgow are expected to gain competency in a defined set of clinical skills while on medical and surgical rotations during their third and fourth year (1). To support this aim, Clinical Teaching Fellows (CTFs) from the NHS Lanarkshire Medical Education Department have developed a standardised clinical skills teaching programme and disseminated it across the trust's three hospital sites.

Aims

The study had two major aims

1. To determine if programme delivery improved perceived student confidence
2. To establish if programme effect was independent of teaching site.

Methods




Each session is led by a CTF for a group of 4-6 students and lasts between 60 and 90 minutes. They begin with a short presentation on the skill, followed by demonstration and practice on clinical models

Anonymised pre and post session questionnaires were completed using a Likert scale to rate confidence. These were analysed for normality using Shapiro-Wilk testing. Wilcoxon rank-sum testing was used for comparison of non-parametric paired means and Kruskal-Wallis analysis used for multiple comparison of non-parametric data. Data was analysed using Prism, considering a p-value <0.05 a significant difference. Qualitative evaluation of the course was compiled via a free-text questionnaire.

Results

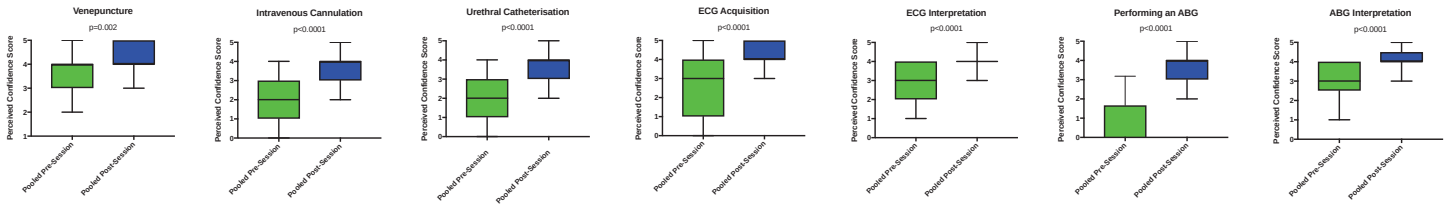

Figure 1. Box plots displaying Wilcoxon rank-sum tests for pooled perceived confidence data.

Multiple analysis of confidence before and after each intervention across all three sites showed no significant difference (Kruskal-Wallis, p=>0.999).

Free text questionnaire: Highlights

'Low pressure environment to practice in' (Venepuncture/Cannulation)
'OSCE practice' (Venepuncture/Cannulation)
'Getting in moment feedback from CTF while performing procedure' (Urethral Catheterisation)
'Step by step approach. Going through cases.' (ABG)
'Systematic approach was very useful' (ECG)

Free text questionnaire: Suggested Improvements

'More than one model to enable multiple students to practice at same time' (Urethral Catheterisation)
'More sterile packs and equipment' (Urethral Catheterisation)
'The arm isn't that easy to use/lifelike' (Venepuncture/Cannulation)
'Having more time for multiple practices' (ABG)

Conclusions

The implementation of a standardised clinical skills teaching programme gives significant improvement in perceived confidence amongst undergraduate students and appears to be independent of environment, thus improving pragmatic application of this programme across sites.

The notable logistical challenges of such a programme included setting up non-clinical areas safely for practicing clinical skills and the movement of shared clinical models between sites. Improvements suggested by students primarily focussed on requesting higher fidelity models and additional disposable equipment. We have identified an appropriate teaching space at each site and sourced funding for the purchase of additional clinical models to address these logistical challenges and suggested improvements. This programme will now form a core part of the teaching provided to undergraduates by CTFs in NHS Lanarkshire.

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PALS
Peer Assisted Learning Scheme

UNIVERSITY OF ABERDEEN

The Flipped Classroom: Peer-Led Case Scenarios in Undergraduate Medicine

Rose A[1], Rafiq N[2], Parson SH[3], Venkatesh A[4]

1. Academic FY1, NHS Greater Glasgow & Clyde, 2. 5th year medical student, University of Aberdeen
3,4. Institute of Education for Medical and Dental Sciences, School of Medicine, Medical Sciences & Nutrition, University of Aberdeen

INTRODUCTION

The flipped classroom is an instructional strategy where the order of teaching is reversed: students complete background reading and subsequently apply this learning in class through problem-solving.[1,2] Reported benefits include deeper learning, increased student engagement and satisfaction.[3,4] However, a flipped model facilitated by peer-tutors has not yet been explored. At the University of Aberdeen Medical School we introduced a flipped classroom within the established Peer Assisted Learning Scheme (PALS). Clinical cases were explored through small group discussions to promote understanding of key differential diagnoses (e.g. chest pain, headache).

METHODS

Case-based discussions (CBD) were developed across seven specialties. PALS tutors (fourth and fifth year medical students) were allocated to a group of first/second years recruited via the PALS' Facebook page. Together, they worked through clinical and knowledge-based scenarios. Tutee feedback was sought through a questionnaire including 5-point Likert scale and free text responses. Completion was voluntary and therefore consent implied.

RESULTS The three evenings were delivered by 33 tutors to 155 students

Respiratory/CVS: **33** respondents (19 first year, 14 second year) (see Fig 1)
- **100%** found the tutorial useful & felt it improved their understanding
- **100%** found the teaching style effective (84.8% strongly, 15.2% agree)

GI/Neuro/ENT/Endocrine/Urinary: 79 respondents (all second year)
- **100%** found the tutorial useful & improved their understanding (see Fig 2)
- **96.2%** found the teaching style effective, 3.8% were indifferent

Free text comments were extremely positive for both (see Fig 3)

Figure 3: Examples of free text comments

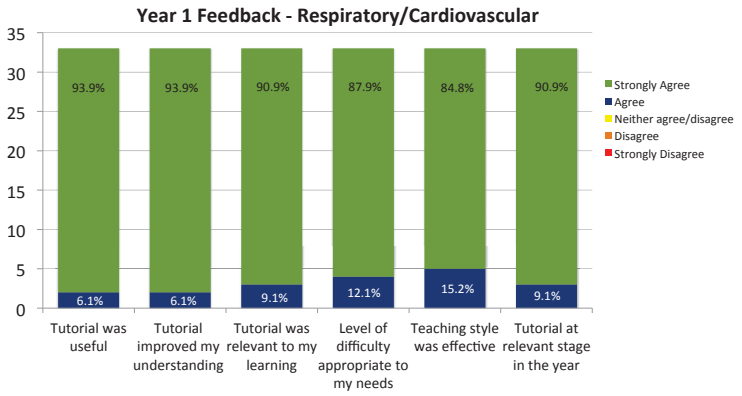
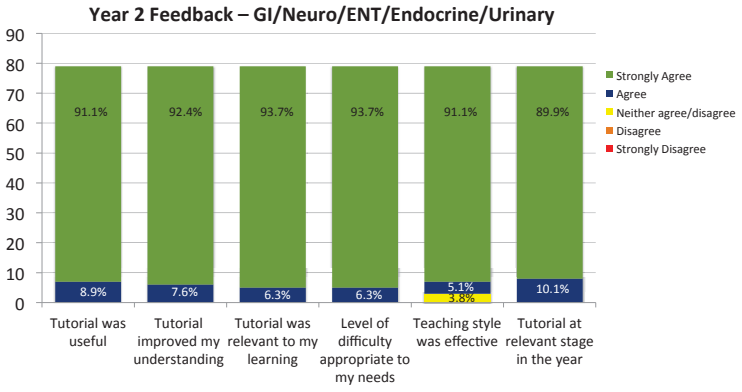


Figure 1 (above) and Figure 2 (below)



DISCUSSION / CONCLUSION

Our experience demonstrates that a flipped classroom approach is popular with first and second year tutees, improving student understanding, enjoyment of learning and confidence leading up to exams.

Given the overwhelmingly positive feedback, we have included CBDs as an annual PALS event and are keen to expand CBDs within PALS at a postgraduate level, involving foundation trainees with senior medical students. Finally, it is hoped that the results of this pilot study will be considered when reviewing the undergraduate medical curriculum outwith peer assisted learning.

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Ethical statement: PALS was approved by the University of Aberdeen's College of Life Sciences and Medicine Director for Learning and Teaching.

Acknowledgements: Our thanks to the all the PALS tutors and tutees for participating in this evaluation and for the University of Aberdeen's Centre for Academic Development's Learning and Teaching Enhancement Programme (LTEP) who funded a part of this project.

COME HERE. GO ANYWHERE

Equip, Empower, Engage;
Medical students using appreciative enquiry to improve and innovate paediatric patient experience

Marianna Przybylska [a], Niall Burke [a], Clare Harris [a], Marcel Kazmierczyk [a], Ellie Kenton [a], Olivia Yu [a], Sonia Joseph [b]
[a] Medical Student, University of Edinburgh
[b] Department of General Paediatrics, Royal Hospital for Sick Children, Edinburgh

Introduction

Scottish Children's Parliament report, 2014[1]

- 'Guide' and 'include' young people in healthcare
- 'Talk' to young people directly
- Healthcare staff to show greater empathy

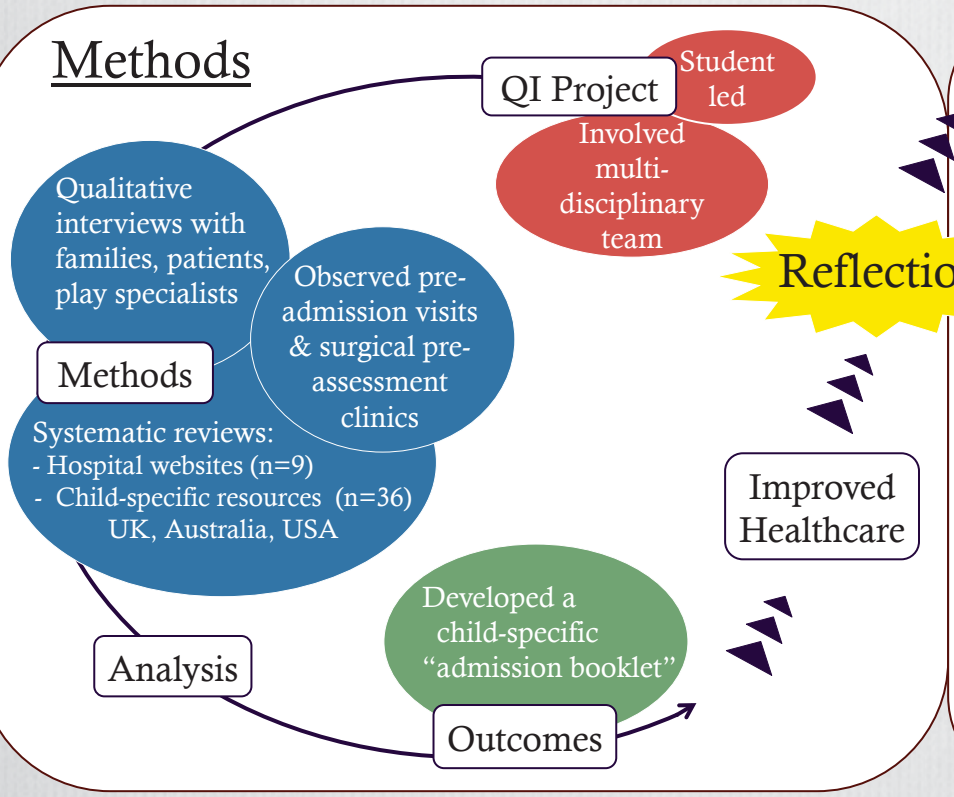
Role of medical students[2]

- Objectively observe the process of hospital care
- Highlight improvement opportunities
- Provide new insights
- Assist in evaluating and implementing system change

Medical students initiated a quality improvement project with **aims to:**

- Evaluate information needs of families admitted to the Royal Hospital for Sick Children, Edinburgh
- Compare the quality of child-specific information resources locally and globally
- Use reflective logs to track learning and development of skills

Methods



Results

- Exposure to clinical practice
- Training in communication skills: with patients and wider healthcare teams
- Learning the process of setting up a quality improvement project
- Understanding importance of reflection and the power of asking "why?"
- Empowering the next generation of doctors to realise they can make a difference

Conclusion

Harnessing student enthusiasm and empowering medical students as key leads in patient centred quality improvement projects:

- Benefited service
- Enabled deeper student understanding of healthcare provision
- Supported a positive team culture
- Provided vital learning for future careers as doctors
- Reinforced that student voices are vital in providing patient well being and patient safety

Contact Information:
Marianna Przybylska Email: marianna_prz@hotmail.com

References
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A Simple Initiative To Enhance Team Learning

Natalie Bee, Harriet Coleman, Fiona Osborne, Sonia Joseph, Mairi Stark
Royal Hospital for Children, Edinburgh

Introduction

Setting: a large paediatric hospital with a high level of clinical acuity providing both tertiary and quaternary care with 8300 admission/year.

Challenge: the impact of shift based working, transitional staffing groups and high service demand on longitudinal team learning.

Solution: a simple cost-free initiative to enhance team learning from workplace scenarios in the form of a weekly email bulletin highlighting learning points emerging from clinical practice the preceding week.

Aims

- Inspire team learning and reinforce team working.
- Promote evidence-based practice.
- Promote a culture of quality improvement and patient safety, highlighting local and national initiatives applicable to our daily work.

Methods

Initiation
- Weekly learning points email sent to senior nursing staff and all medical staff working in the team (Oct 2017) Figure 1

Survey
- After 4 months an electronic survey combining 'yes/no' questions and free text boxes was disseminated

Evaluation
- 'Yes/No' questions demonstrate learning points' 'reach' and application
- Open responses analysed in context of aims

Quote of the week:
"Don't aspire to be the best on the team. Aspire to be the best FOR the team."

Dear ARU team,

Here are the learning and QI points from this week. It has been a very busy week with everyone working hard. I must say I have been particularly proud of our team this week ☺.

Have a fabulous weekend!
Natalie, Harriet, Fiona and Team

Figure 1

Results

- Overall there were 17 respondents out of 24 (response rate 70%).
- Some respondents partially completed the questionnaire.
- 16 out of 17 read the learning points in a typical week, and 14 out of 14 would recommend reading them to a colleague.
- 13 out of 14 had changed their clinical practice based on the learning points.
- Themes identified amongst open question responses indicated key benefits including (figure 2 & 3):

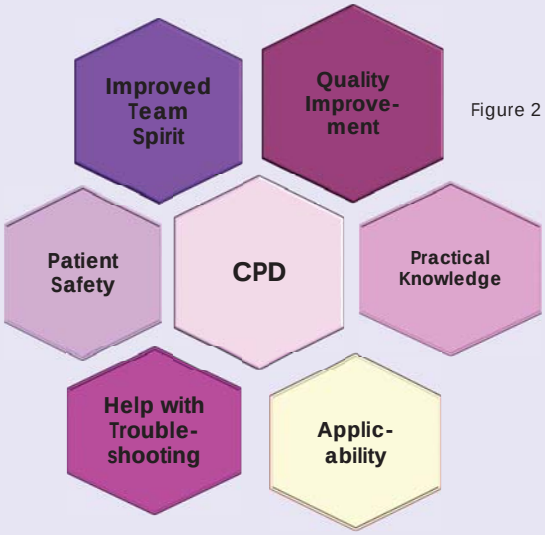


Figure 2

In your opinion, what are the key benefits of the learning points?

"Great addition to life-long learning and continuous professional development (CPD)"

"Having a summary of the interesting facts; reinforcement of facts needing special attention; positive learning from mistakes"

"A good reference for future care. Makes reflective ePortfolio entries on key topics easier"

Figure 3

Conclusion

- For our department, weekly learning point emails were successful in facilitating changes in practice to promote patient safety and quality improvement.
- This is a simple ***cost-free*** initiative which can be applied to any department to create positive change.

‘Introduction of empathy mapping exercise for medical students in early patient experience to enhance empathy and compassion in Dr-patient relationship.’

Evelyn Watson [1], Anita Laidlaw. [1]
[1] University of St Andrews

University of St Andrews

Introduction

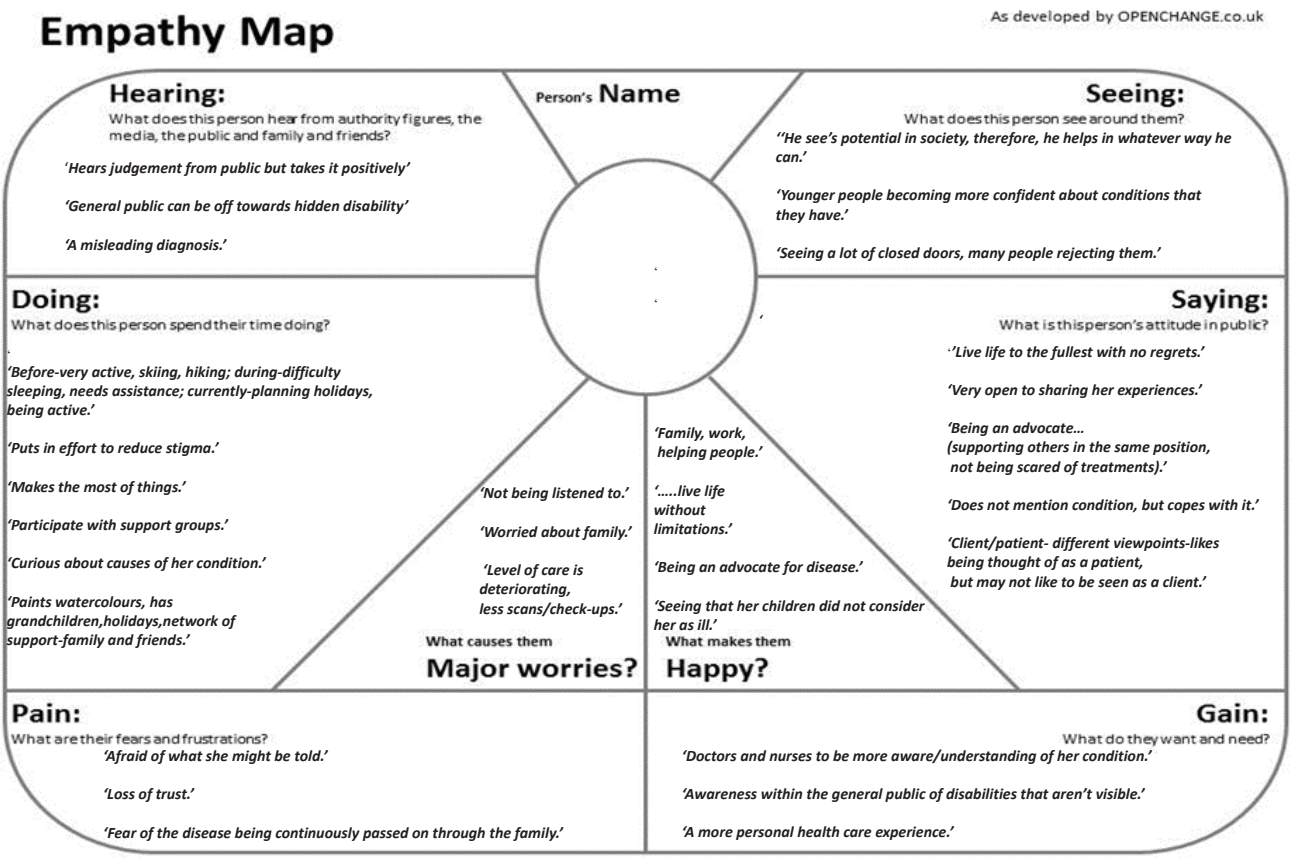
Recent concern has highlighted lack of compassion within healthcare professionals in the UK(1) and specifically with lower medical student empathy as they progress through medical training(2). Lack of compassion or empathy within healthcare professionals is of concern due to the potential impact on patient care(3). Additionally, empathy has also been linked to resilience in medical students(4), therefore encouraging empathy development and self-compassion within medical education may be of benefit to medical students and enhance their interactions with patients.

Methods

An empathy mapping exercise was introduced into existing volunteer patient conversation workshops involving 1st year medical students, University of St Andrews. Part of the workshop involved medical students working together to complete an empathy map, drawing on what they learnt during their patient conversations. Volunteer patients also completed an empathy map. There are 8 domains within the empathy map consisting of a) hearing; what was heard in relation to illness, b) doing; what the patient liked to do, c) seeing; what patient saw around them, d)saying; what was being said in relation to the patient, e) gain; identified needs f)pain; physical and psychological, g) what made them happy and h) what caused them major worry (see figure below).

Results

20 workshops (6-8 medical students, 1 volunteer patient per group) occurred. Similarities were found between empathy maps completed by medical students and volunteer patients in the eight domains of the empathy maps.



Conclusions

Introduction of this empathy map proved a useful exercise in engaging medical students with the implications of living with a long-term illness. There were considerable similarities between the empathy maps completed by medical students and volunteer patients which could suggest that this approach allowed students to enhance their empathic skills and compassion. Further research to explore student’s perceptions and beliefs surrounding the value of empathy and mapping exercise, in relation to clinical interactions with patients could be beneficial in informing curriculum development in medical education. Recent funding has been granted from the joint ASME and GMC Excellent Medical Education Award to conduct a research project further exploring the implementation of this empathy map which will occur between the Schools of Medicine at the Universities of St Andrews and Leicester. That project will involve conducting semi structured interviews with both undergraduate medical students and volunteer patients involved in sessions using the empathy map, allowing us to gain greater insight into the value of introducing this tool.

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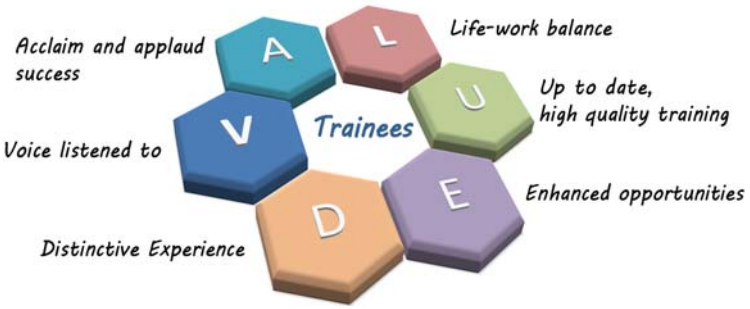
A VALUED survey of Postgraduate Medical Trainees in Northern Ireland

Dr Rachel Campbell, Dr Camille Harron, Prof Keith Gardiner

Northern Ireland Medical and Dental Training Agency (NIMDTA)

Aim

The Northern Ireland Medical and Dental Training Agency (NIMDTA) launched the 'VALUED' strategy in June 2017 to encourage doctors and dentists to train and remain in Northern Ireland. It focuses on six areas for development relevant to promoting a high quality training experience for doctors in training.



From national work, such as Health Education England's (HEE) 'Enhancing junior doctors' working lives', we know that not all training experiences are positive and that there are areas which could be improved.

In order to enhance the Deanery's insight into trainees' views a regional survey was undertaken. The aim is that information gathered from this will contribute to the development of the VALUED strategy further. Hearing directly from trainees about their training experiences will allow for targeted interventions with an aim of ultimately improving training.

http://www.nimdta.gov.uk/professional-support/valued/

Methods

An anonymous online survey was developed in consultation with senior educators at NIMDTA and trainees. A variety of Likert scales, dichotomous questions and open space answers were used to gather both quantitative and qualitative data.

The questions were organised into themes which included;

1. Overview of training

- Do you feel valued and supported by your Trust and Deanery?
- How is your morale in work?
- Are you committed to your career in medicine?

2. Training posts and rotas

- What are your biggest challenges in work and training?
- Are you committed to your training programme?
- How long before starting your post were you informed of where this would be?
- How long before starting did you get your rota?

3. Well-being and lifestyle

- How is your annual leave organised (allocated/flexible)?
- Are you in less that full time (LTFT), have you experiences any barriers to this?
- Have you returned to work after time out of training? Did you feel supported on your return?
- Do you feel work has negatively affected your physical or mental health?

4. Educational opportunities

- Questions around feedback from senior colleagues
- Have you applied for Out of Programme (OOP)? Were you granted this? Any difficulties with this?
- Have you had difficulty obtaining study leave from your employer?
- Have you had difficulties accessing prospectively applied for study leave?

5. Areas for improvement

- In your opinion what could be done to improve the working environment you are currently in?
- In your opinion what could be done to improve the training experience to make you feel valued?

The survey was distributed to trainees by email and completion encouraged through reminders in trainee and trainer newsletters.

Results

235 responses (15% completion rate) were received. The commonest challenges experienced by trainees at work and in training are highlight below.

What are your three biggest daily challenges in your clinical work?

'Balancing service provision with training needs'
'Heavy workload', 'work load and work life balance'
'Staff shortages', 'Empty rota lines'
'High burden of out of hours working'

What are your three biggest daily challenges in making progress through your training?

'Balancing the demands of training with trying to have a social life'
'finding time for portfolio'
'Increased service provision needs'
'Exams: studying whilst working out of hours'

Trainees were asked to report if they felt valued by their Trust and by NIMDTA. 54% of trainees 'Agree' or 'Strongly Agree' that they feel valued by their Trust and 44% feel valued by NIMDTA.

60% of those returning to training felt that they were supported by the Deanery with qualitative results reflecting challenges with communication during their time out of training, and difficulties returning to clinical practice and on call.

57% of trainees reported that work is having a negative impact on their physical or mental health.

When asked what could be done to **make trainees feel more valued** common themes arose:

- *More focus on training, more time allocated to teaching*
- *Improvements with rotas: notice of rota, design*
- *Improvements to working environment: lockers, office space, time for admin, on call room*
- *Improved development of trainees leadership potential*
- *Better communication between trainers/NIMDTA/trainees*
- *More training for exams*
- *More feedback*
- *Mentoring*

Outcomes and Improvements

Within the Deanery the results of the survey have been reviewed with senior NIMDTA faculty with a view to exploring priorities for action and potential solutions, some are already being tackled, examples include continued development of a:

- Peer Interview scheme to support trainees through interviews,
- NIMDTA Roadshow events to engage with trainees at their place of work
- Peer Mentoring scheme to support trainees through their career.

We have provided feedback to trainees already on how the information they provided through the survey has resulted in change and we will continue to do this.

This regional survey has provided an effective opportunity for the Deanery to engage with trainees about what is important to them. We plan to repeat the survey annually to assess improvement and to identify new priorities.

Contact details: rachel.p.campbell@gmail.com

The Princess Alexandra Hospital NHS Trust

Does medical school prepare you for difficult conversations? Assessing the impact of a palliative care study day on the confidence of final year medical students.

Dr Alice Copley[1], Dr Hannah Costelloe[1], Dr Andrew Greenhalgh[1], Mr Andrew Foster[1], Dr Pratik Solanki[1]
1. Princess Alexandra Hospital NHS Trust, Harlow

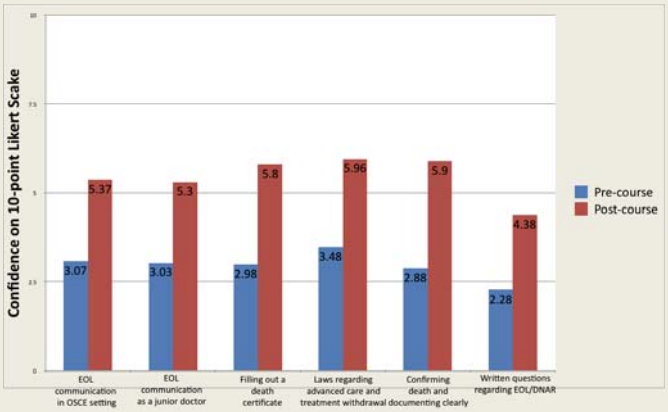
AIMS

There is anecdotal evidence that final year medical students feel unprepared for the palliative care elements of their final year exams and as a junior doctor. Most new doctors will not have practiced completing a death certificate or prescribing anticipatory medications before starting work. The literature describes that breaking bad news insensitively can cause patients additional distress.(1) There can also be consequences to the clinician including guilt, anger, anxiety and exhaustion.(2)

METHODS

We organised and delivered a palliative care study day for final year medical students. We aimed to improve confidence by building on current knowledge and facilitating communication skills practice. The course consisted of 10 practical small group teaching, simulation and OSCE-style stations. We evaluated pre- and post-course confidence and knowledge using a 10-point Likert scale and a validated assessment of knowledge.

RESULTS



The course was highly evaluated with the mean average quality and delivery rated at 4.95 out of 5. 100% of students would recommend the course to a colleague. Confidence improved in all six of the areas evaluated: end of life communication in an OSCE setting (42.2% improvement), end of life communication as a junior doctor (41.7% improvement), filling out a death certificate (43.9% improvement), knowing laws regarding advanced care and treatment withdrawal (47.2% improvement) and being able to confirm death and document clearly (43.9% improvement). All results are significant with a p-value <0.0001 on paired T-test. Likewise there was an improvement in assessment marks by 24.7% (p=0.039)

OUTCOMES AND CONCLUSIONS

"Brilliant day. Very useful skills and learning."

"Very useful - lots of material that isn't focused on much in final year."

"Great range of topics delivered in suitable manner for finalists."

Palliative care is an area in which final year medical students feel unprepared. A significant improvement in confidence and excellent feedback highlights the need for more teaching of this nature in medical schools, as well as the potential benefit of focussed teaching sessions.
The feedback we received demonstrated that palliative care is best taught via small group learning, including simulation and OSCE-style scenarios, as students prefer practical learning and value communication skills practice.

References: 1 - (Walshe et al, 1998), 2 - (Bousquet et al, 2015)