An interprofessional simulation course to address the physical health agenda in mental health

Gary Jordan and colleagues describe how a programme that gives staff realistic learning experiences was developed to improve patient care

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Abstract

The management of physical comorbidities in people with severe mental illnesses can be complicated by a lack of confidence on the part of clinical staff who may have had inadequate training in these aspects of care. Recognising this, Health Education Yorkshire and the Humber tasked a group of clinical skills project workers to explore ways of addressing this deficit. Their remit was to improve the situation through training and education, with particular emphasis on development of simulation-based education for interprofessional groups and subsequent debrief. A unique simulation programme was developed to look at the recognition and assessment of medical problems in psychiatric settings, and to suggest ways in which other regions and disciplines might wish to use or extend this model. The ultimate value of the project will be demonstrated by improved patient outcomes, such as experience of health care and reduced morbidity and mortality.

Keywords

Interprofessional training, mental and physical comorbidity, simulation-based education

THERE HAS recently been a renewed focus on the physical health agenda in mental health. Many people with severe mental illness tend to have a number of physical health problems at the same time. A number of strategies have been put in place in the UK to try to address this, such as 'Change4life' (Department of Health (DH) 2009), 'Healthy Lives, Healthy People' (DH 2010) and the development

of the mental health items of the Quality and Outcomes framework (DH 2007). In community settings, care for people with severe mental illness is co-ordinated through the 'care programme approach' and many areas have welcomed such approaches in trying to incorporate physical health assessment and intervention in day-to-day care. However, whereas progress has been made in preventing problems arising in community settings, there has been little emphasis on acute physical problems that can arise in inpatient care. Inpatient registered mental health nurses, junior doctors in psychiatry and healthcare assistants (HCAs) are expected to train in basic or intermediate life support training annually (Royal College of Nursing 2012). However, access to any other training around physical health is variable.

How simulation training can help

Simulation training is increasingly used across different medical disciplines in the UK. Bradley (2006) upholds simulation as the recreation of a given experience as close to reality as possible, involving either hi- or lo-fidelity manikins or part-task training equipment (arms/legs) as used throughout aviation, the military and more recently by the acute medical services. The Human Factors Concordat (NHS England 2014) suggests that simulation enables staff to train in a safe, risk-free environment to a level where they will do 'the right thing first time, every time' when in clinical practice. However, access to simulation training centres and the technical and clinical expertise that their specialists can offer is something that has been neglected by mental health services.

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In a regional scoping exercise carried out by the Yorkshire and the Humber strategic clinical skills advisers (SCSAs) during 2011, mental health workers were asked for their views on simulation. A number of the comments received ('What's simulation got to do with us?', 'It's for the acute services, not us', 'What's all that clinical stuff got to do with us anyway?') suggested that there existed in some staff an under-appreciation of the nature of the physical problems faced by people in their care and a clear need for a strategy to address this. This view was reinforced by the results of a training needs analysis, confirming poor knowledge and low prioritisation of the physical health needs of clients (Nash 2005).

Role play has been used over the years in undergraduate and postgraduate training and is accepted as a useful pedagogy. However, there are limitations to role play which, by its nature, involves people taking an unfamiliar role in an unrealistic environment (Van Ments 1999). Simulation can be a more fully immersive learning experience about unfamiliar roles. Professionals work in an environment that is as true to life as possible, with appropriate equipment at their disposal, working collaboratively in an inter-disciplinary fashion. Simulation training is well placed to look at and improve not only knowledge base, clinical skills, assessment skills, communication skills and decision-making processes, but also allows appreciation of the roles of other team members in the face of challenging circumstances.

The first recommendation of the Department of Health's Framework for Technology Enhanced Learning (DH 2011a) states: 'As part of a managed learning process and where appropriate, healthcare professionals should learn skills in a simulation environment and using other technologies before undertaking them in supervised clinical practice.'

The undergraduate nurse training curriculum at most higher education institutions in the UK have simulation facilities and equipment that could be used to develop scenarios for mental health inpatient or community settings. However, there is little evidence that many have considered the possibility of developing such scenarios, with the exception of pockets of excellent work occurring at a few institutions (Unsworth *et al* 2012, Thompson *et al* 2013).

There is no clear mechanism to bring mental health nurses and simulation training together. This is not a problem limited to postgraduate nursing: postgraduate psychiatric medical training has begun to explore the use of simulation in a number of settings, such as communication skills and teamwork training, but has not yet

developed this widely in other aspects of care, and the development of interprofessional training packages is not widespread (DH 2011b). The lack of interprofessional training is recognised at national level: Patrick Mitchell, director of the Health Education England's Better Training, Better Care programme, states: 'We have trained for far too long without including aspects of interprofessionalism. We work together, why don't we train together?' (Mitchell 2013).

The RAMPPS programme (Recognition and Assessment of Medical Problems in Psychiatric Settings) was developed in the UK to address some of these issues, with an explicit interprofessional approach promoting a simulation-based team working and using technology to enhance patient experience and improve patient safety.

Proposal

In 2008, The NHS Yorkshire and the Humber Strategic Health Authority (YHSHA) commissioned the Montagu Simulation Centre (Mexborough, South Yorkshire, UK) to carry out a mapping exercise to assess all clinical skills and simulation training across the region (Barrott and Strachan 2009). The report spoke of equity of provision and the accessibility to clinical skills and simulation training for medical, nursing and support staff. The centre assessed the requirements of different professional groups, looking specifically at the training facilities and equipment available to each. The report demonstrated disproportionate distribution of resources across the region, with little sharing of training or equipment. Subsequently, YHSHA made a considerable financial investment in creating simulation centres to provide high-fidelity simulation equipment and create a dedicated team to address the situation and oversee the implementation of a regional clinical skills and simulation strategy (YHSHA 2010). A clinical skills network executive board was established, combined with development of a regional clinical skills network, with a remit to advise and make recommendations to the executive. To further enhance the newly created mechanism, the role of clinical skills project worker was established.

This unique and diverse team would support, oversee and develop all of the strategy's main objectives, including collaborative working, creating partnerships, quality assurance of implementation and encouragement of innovation, and would report on return on investment and provide an insight to how the region is meeting the objectives and improving patient care and safety.

In the past three years, the NHS has gone through considerable restructuring and the body now responsible for the implementation of the strategy is Health Education Yorkshire and the Humber, more commonly known as the local education training board. The board continues to support the project thorough Leeds Metropolitan University, which remains the project's hosting organisation, with a rebranding of the clinical skills project worker to SCSA. The team consists of six advisers and a manager, located throughout the region, to ensure that each area is covered by a local representative, with the intention of making the project cost effective.

The professional background of team members covers several fields of expertise, including midwifery, paediatrics, allied health professionals, community nursing and mental health (Health Education Yorkshire and the Humber 2013). The SCSAs have a number of responsibilities to the strategy as a whole but, in tandem with this, individual advisers also lead on specialist projects - the physical health agenda in mental health and learning disabilities being one such example. The aim of the project is to improve the physical health of all people with mental health problems and learning disabilities, not just the subgroup identified as severe mental illness. This includes recognising areas where professionals require improvement, including clinical procedures and a functional knowledge of long-term conditions.

The excess morbidity and mortality of people with mental health problems is well documented, and the difficulty with implementing effective interventions to address this is equally acknowledged (Phelan et al 2001, Rethink 2005, Shuel et al 2010, DH 2011c). Good practice is sometimes not shared and those with mental health problems can struggle to get a fair share of the necessary resources. The Royal College of Psychiatrists (2010) has led a campaign to address this and achieve 'parity of esteem' for mental and physical health, recognising good physical health as an integral part of good mental health. This agenda has been supported in Yorkshire and the Humber through a range of events and developments intended to highlight the issues, such as conferences.

Promoting the agenda

In 2011 the skills advisers held their first regional conference, Harmonisation Working Day for Mental Health and Learning Disabilities, to promote the physical health agenda in each of the region's healthcare organisations and trusts. Evaluation of the event was positive (Health Education Yorkshire and the Humber 2014) and produced a regional action plan developed through focus groups chaired by the SCSAs on the day (Jordan 2011). The aim of these groups

was to create a roadmap of innovations to promote standardised physical health care for the region, which every organisation would be able to work towards.

The work has continued over the past three years with two further physical health agenda conferences focusing on some of the inspiring work carried out across the region. This has enabled organisations to showcase their own work, create working partnerships and collaborations and, crucially, avoid duplication of work.

The challenge

The SCSA team attends simulation conferences nationally, and at every opportunity have asked the question why mental health seemed to have no involvement with the use of simulation training. Other disciplines that have being using simulation for some time responded with surprise that mental health was interested in clinical skills, reflecting perhaps some of the stigma experienced by patients. The team realised quickly that if we wanted simulation training for mental health, then we needed to develop it ourselves.

The team grasped the challenge. Initially only a small group of interested parties became involved in the development meetings, with progress occurring at a very slow rate. Things advanced more quickly when the group made contact with the head of the school of psychiatry for the region, who had a remit to develop simulation training for the postgraduate medical education of psychiatrists. From this contact a development day in November 2011 was organised, and was attended by a mixture of consultant psychiatrists, higher trainees (or specialist registrars), mental health nurses, simulation leads and educationalists, creating an interprofessional team with shared common objectives, who needed to work collaboratively to achieve their goals (Bailey 2012). This set the tone for the RAMPPS programme as a whole. The aim was to write and refine a set of draft clinical simulation scenarios and to discuss the practicalities of delivering a RAMPPS programme, thus creating an interprofessional faculty that would be able to support the running of scenarios and their subsequent debrief.

One main outcome was the organisation of a pilot day to test the scenarios and other aspects of the RAMPPS design. Senior doctors and nurses took on the role of facilitators, and 30 delegates were invited to participate. The delegates were a mixture of junior doctors in psychiatry (core trainees, levels one to three) and mental health nurses. Each scenario was run for 10-15 minutes, with 35-45 minutes allocated for debriefing. At the end of one scenario the group

would move on to the next in an observed structured clinical examination style rotation, where delegates would take turns to actively participate in the simulation.

Verbal feedback from participants and faculty members was encouraging, with a strong suggestion that everyone would benefit from participating. It was clear that participants had started to enjoy the day, after initial anxiety. Delegates and faculty members commented that the use of live actors greatly enhanced the simulation and made the experience 'real'. The pilot emphasised to everyone connected to the programme's development that we are at the beginning of mental health care's journey with simulation and have a lot to learn from experts in the discipline, as well as from our own experiences. On reflection, it also became apparent that when it comes to development of scenarios, we are only limited by our own imaginations. There is significant scope for creativity in the environments in which we deliver RAMPPS; we need not be limited to simulation centres, and there remains the opportunity to deliver the experience in situ, on inpatient wards or in community settings.

Health Education Yorkshire and the Humber has supported the establishment of the post of 'Fellow in Clinical Simulation' in other medical and surgical disciplines, allowing higher trainees to broaden their experience of development and research specifically into simulation. The head of the school of psychiatry was able to establish for the first time a similar role for psychiatry, and this was of significant benefit to the RAMPPS project as a whole. The new role involves close collaboration with the mental health specialist SCSA to further develop and refine the concept, which reinforced the interprofessionalism at the heart of RAMPPS with an explicitly interprofessional team supporting interprofessional faculties for an interprofessional group of learners.

Through this collaboration, progress has been made to identify appropriate venues, for example a trust's own training department or a local simulation centre; design and production of the necessary props, such as trust-specific clinical notes, observation charts, prescription charts; development and support of local faculty teams to deliver courses; leading the debriefing process and identification and briefing of delegates to attend courses.

Technical support is provided by the simulation centre's own technicians who can programme the manikins and arrange for part-task training equipment if needed. Furthermore, all facilitators are supplied with a workbook describing the entire scenario details, including the equipment required. This resource is not shared with delegates, as this would be likely to reduce

the effect of the learning experience. The SCSA and simulation fellow team designed pre- and post-course questionnaires, with the aim of demonstrating improvements in confidence in a number of domains as a result of taking part in RAMPPS. These domains. including aspects of team working, communication and decision making, are taken from relevant professional curricula. These are the RCN's First Steps for Health Care Assistants, Competence Checklist (RCN 2011), the Nursing and Midwifery Council's essential skills clusters (NMC 2010) and the Royal College of Psychiatrists' core training curriculum (RCP 2010). Scenario flowcharts further aid the faculty's ability to assess and debrief effectively, demonstrating the path of a scenario and identifying the shared learning objectives.

Scenarios

The workbook contains ten completed scenarios. These have all been taken from serious untoward incidents that have been investigated around the region. Some represent relatively rare incidents, which means that staff members might not have the opportunity to manage them when significant supervision is available. The first time a member of staff sees neuroleptic malignant syndrome may well be in the small hours of the morning when not much support is at hand. Other scenarios reflect common clinical conditions that will occur frequently (Box 1).

Other scenarios under development include asthma and falls. At every opportunity we encourage other professionals to create additional scenarios from their own experience to add to an ever-growing repository. All scenarios can be tailored to each trust or organisation by incorporating their particular policies, guidelines and pathways, and by using pertinent resources such as local observation charts or electronic case-note systems. Pre- and post-course questionnaires allow quantitative and qualitative evaluation of the course. Further support is provided by the simulation technicians who set up and run the technical aspects of the programme. They also

Box 1 Ten simulations

Scenario 1: Brain tumour

Scenario 2: Chest infection

Scenario 3: Hypoglycaemia

Scenario 4: Substance misuse, respiratory depression

Scenario 5: Complications of rapid tranquillisation

Scenario 6: Neuroleptic malignant syndrome

Scenario 7: Wernicke's encephalopathy

Scenario 8: Venous thrombosis

Scenario 9: Attempted suicide by hanging

Scenario 10: Bowel obstruction (clozapine induced)

assist the faculty team who manage the scenarios and debriefing, with the aid of scenario flowcharts. These charts set out an expected timescale of events incorporating specific physiological measurements and readings attributed to the patient. The charts outline the expected course of events and emphasise the learning objectives, such as using clinical tools with or approaches to: Airway, Breathing, Circulation, Disability, Exposure (ABCDE), Situation-Background-Assessment-Recommendation-Decision (SBARD) and Alert-Verbal-Pain-Unresponsive (AVPU) (American College of Surgeons 1997, Leonard et al.) 2004, Thim et al 2010). These are crucial for accurate evaluation of a situation, and provide a structure for effective handover of information in and between teams.

Far from teaching complex or irrelevant skills, RAMPPS aims to reinforce fundamental principles of patient care, such as:

- Clear, considered communication with patients.
- Unconsciousness competence with ABCDE, SBARD and AVPU.
- Appropriate physical monitoring, such as blood pressure, temperature, pulse, respiration, blood monitoring.
- Use of local early warning scores (or national early warning scores (McGinley and Pearse 2012) and appropriate escalation.
- A working knowledge of physical health conditions and the physical health needs of patients.
- Knowledge of medication management and potential side effects.
- Clear, considered communication between all involved professionals in a team.
- Understanding and appreciation of the role of other team members.

Steering committee

The RAMPPS programme is underpinned by the Yorkshire and the Humber Quality Management System (Health Education Yorkshire and the Humber 2013) adopted by most of the region's trusts' training departments, and all of the independent simulation centres in the Yorkshire and the Humber region are also signed up to the system. A repository of scenarios exists and will continue to expand, so trusts can choose the most appropriate scenarios for their local needs. Where scenarios do not exist, new scenarios can be constructed, using a designed Scenario Development Framework (Nicklin 2012). Once this has been added to the repository, others using RAMPPS would be able to benefit.

Central to the sustainability of RAMPPS is the creation of a regional steering committee with

representatives from across the region who will take overall responsibility for the programme. The committee will report directly to Health Education Yorkshire and the Humber on the development of the programme and quality of any new scenarios to be included in a repository. It will have responsibility for rolling out the programme nationally and internationally, directing the SCSA and simulation fellow partnerships to further development of a wider scope of scenarios to include other areas, such as learning difficulties and dementia. Some of the main priorities of the committee include to:

- Encourage further roll out of the programme in the region.
- Enable faculty development in areas that require more support.
- Collate a comprehensive resource accessible to involved parties, enabling them to develop RAMPPS programmes in their own areas, consulting with the RAMPPS partnership in an advisory role.
- Establish pre-course e-learning modules.
- Continue promoting RAMPPS at national and international forums.

The above has been condensed into a strategy workbook available online this spring (www. montagusimulation.co.uk). This will be available for other regions to plan and shape their own mental health simulation training. Much of this has been written retrospectively, largely as a result of the development group's inexperience in using simulation. This was in keeping with Burch's model of learning a new skill: 'We didn't know what we didn't know' (Gordon Training 2014). However, as with simulation training in general, our method has been very much trial and error, continuing to adapt as we learned from our own experiences.

The development of RAMPPS demonstrates concepts that appear to hold true on a naive-intuitive level yet are often absent from reality: when people with a common goal are able to work across those traditional trust, regional and professional boundaries, the work that is produced can be truly inclusive and collaborative, and greater than the sum of its parts. Naturally, the acid test for this will be to demonstrate benefits for the patients we serve, particularly in terms of improved patient outcomes such as experience of health care and reduced mortality (DH 2012).

Benefits

As simulation training in the health service continues to grow, there is no reason why professionals working in mental health should miss out on such a worthwhile education learning style. Lewis *et al* (2013) discuss the benefits of

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role play at undergraduate level and recognise that the concept instils anxiety as participants are expected to play roles they are not familiar with. To circumnavigate this problem they trained higher-level students to play specific roles, with some success.

Simulation is not role play but the fears do not abate because of this. Roberts and Greene (2011) also recognise the anxiety of students participating in simulation, but suggest that this is 'fear of technology' as opposed to the anxiety of participating in a simulation scenario. Participants are soon immersed in a situation that is as close to real life as possible, with the intention that they act as they would in reality. Through detailed, shared debriefing, participants can then openly discuss areas of good practice, how things could have been done differently and where further development or training is required.

Conclusion

RAMPPS enables interprofessional teams to practise their assessment, recognition and initial management of deteriorating physical health in

a client in a safe setting. It establishes a debriefing forum for team members to learn about each other's roles, share elements of good practice and identify individual or team learning needs. It encapsulates human factors and aims to reduce the frequency and impact of situations that arise from poor communication in and between teams. An enhancement is already in development in the form of a pre-course e-learning package about ABCDE and SBAR, with all attendees expected to complete the short programmes before attending the full RAMPPS course.

Although we have come a long way with the help of many people over the past two years, especially the past 12 months, we are still at the beginning of our journey. The course has changed in many ways since its inception, and continues to develop. We need to continue our work, not only developing RAMPPS in Yorkshire and the Humber, but also encouraging its use in other areas where RAMPPS can benefit a greater number of staff and patients and benefit from their contributions. We are, after all, only limited by the limitations of our own imagination.

Online archive

For related information, visit our online archive and search using the keywords

Conflict of interest None declared

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