Using patient narratives as effective learning tools for patient safety in interprofessional healthcare education

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Background: Healthcare workforce education is a key component of any strategy to improve patient safety attitudes amongst staff. Historically the patient’s perspective has not featured strongly in such educational endeavours. This project aimed to explore the potential of using patient narratives as a patient safety educational resource in an undergraduate interprofessional setting.

Summary of Work: Medical, nursing and pharmacy students were invited to participate from respective courses at two separate UK Universities. One of three separate interprofessional learning (IPL) sets were attended by a total of 21 students during which they watched a narrative describing the death of a patient following a prescribing error, which was told by the patient’s partner. Subsequent discussion, facilitated using a pre-specified framework, was recorded and transcribed for thematic analysis. A questionnaire was completed before and after the session to assess views towards IPL and this type of educational resource.

Summary of Results: Six main themes emerged, namely error, outcomes, roles and responsibilities, interprofessional relationships, support, and organisational issues. Students wished to understand how errors arose, how to prevent such events, and described a greater understanding of colleagues’ roles and responsibilities. Further development of interprofessional learning based on patient narratives was supported strongly.

Discussion and Conclusions: Patient narratives offer a useful educational resource for the IPL setting. A facilitator framework is important, and the mix of participating student disciplines should guide the choice of the patient narrative according to its core themes.

Take-home messages: Patient narratives are an effective IPL educational resource.

Inter-professional education as an alternative approach to analyzing medication errors in primary health care in Spain

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Background: Medication errors are unintentional failures in the process of prescribing, dispensing, or administering medication that involve multiple healthcare team members as well as patients who consume prescription drugs. One of the primary causes of medication errors is due to lack of communication, both between healthcare professionals and the patient, and between various healthcare professionals themselves. To mitigate the latter type of error, an intervention strategy with the aim of reducing medication errors and, thereby, ensuring the safety of the patient is proposed. Indeed, inter-professional education can be viewed as an opportunity for future health professionals to work together, aiming at minimizing the number of medication errors and augmenting the effectiveness of pharmacological treatments.

Summary of Work: Professors and students from several Health Science undergraduate degrees at the European University of Madrid will participate in the resolution of activities and clinical cases to help optimize health care quality through learning proper communication and inter-professional collaboration strategies.

Summary of Results: The biomedical undergraduate student is expected to develop effective communication strategies with other professionals in healthcare teams and realize that the result of this interaction affects the correct pharmacotherapy monitoring of the patient.

Discussion and Conclusions: It is fundamental to motivate future health professionals about the urgent need for adequate inter-professional communication. Introducing these types of active learning activities can help promote coordination between various professionals in primary health care and assure the implementation of effective and safe treatments

Take-home messages: Health Science schools should include inter-professional activities to promote collaborative work between different healthcare professionals.
Improving patient safety: undergraduate interprofessional education with high-fidelity simulation to highlight the human factors in medical errors

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Background: In 2009 the Department of Health introduced a ‘Never Events’ (NEs) policy, aiming to reduce error within the NHS. Ineffective teamwork and interprofessional communication is a well-recognised cause of medical error. The aim of this project was to establish if inter-professional undergraduate simulation training can raise awareness of medical error.

Summary of Work: Three high-fidelity simulation scenarios, incorporating six NEs and each containing two patients, were delivered to final year medical (n=30) and nursing (n=21) students over 6 sessions. Scenarios addressed the effect of human factors on medical errors. Debriefs covered important technical and non-technical learning points. Following the session participants completed a questionnaire using Likert scales and free text boxes.

Summary of Results: A statistically significant improvement in awareness of NEs (p value <0.0001) was seen, with a mean awareness after the session 9.9/10. Students felt the teaching improved communication, teamwork and clinical judgment skills, each with a mean score of 9.0/10. Additionally, students felt the teaching improved their awareness of other health professionals’ roles, (p value <0.0001). Feedback identified several common themes: teaching improved confidence in communicating relevant information, it helped understand why medical errors occur; moreover all students wanted further inter-professional simulation training opportunities.

Discussion and Conclusions: Simulation demonstrated a statistically significant increase in awareness of the human factors in error as well as technical and non-technical skills in the study group.

Take-home messages: Inter-professional education can help nursing and medical undergraduates learn technical and non-technical skills effectively.
Innovative Multiprofessional Simulation Training in Obstetrics

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Background: Emergency drills are an integral part of training for all staff working in the labour ward. At existing courses (eg ALSO, MOET) individuals are trained in emergency management. Traditionally, team roles are assigned randomly to the group regardless of experience or clinical role. This is stressful and distracting as participants have to think what another would do in a situation instead of practising what they themselves would do. Therefore, we decided to develop an obstetric simulation course for multiprofessionals.

Summary of Work: Two groups of professionals comprising a senior, junior and foundation obstetric trainee, an anaesthetic trainee and 2 midwives took part. Each group participated in a scenario with the other group observing. After feedback, the groups swapped and another clinical scenario was played out. Real equipment, a mannequin and simulated drugs were required. Scenarios were haemorrhage and eclampsia.

Summary of Results: The participants practised their usual role within the team. The teams observed the importance of good communication between members and strong leadership was necessary to manage emergencies well. They found there needed to be greater direction from the team leader so that no clinical tasks were missed out.

Discussion and Conclusions: In the future, we intend to include consultant and clinical support staff in our courses. We will also add different types of scenarios so that there may be more emphasis on anaesthetic or midwifery complications. It is also important to practice scenarios that are infrequent but have important consequences, such as amniotic fluid embolism.

Take-home messages: Emergencies are managed better when the team has trained together.

Chinese Whispers in clinical practice; can interprofessional simulation improve handover and team working skills of final year medical and nursing students?

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Background: Effective handover skills are essential for both doctors and nurses to acquire. Within the NHS a patient can be cared for by multiple healthcare teams in several departments. Within a single ‘patient journey’ ineffective handover leads to loss of essential information, which can compromise patient safety. It is therefore crucial that handover between healthcare workers – whether inter- or intraprofessional – is flawless from day one of their practice.

Summary of Work: Our aim was to investigate whether simulation can be used as an effective tool to improve medical and nursing students’ handover reliability, communication and teamwork skills. Final year students based at GRH participated in a series of multidisciplinary simulation sessions using patient-actors, based around a ‘patient journey’. The reliability of the handover was assessed against an ‘ideal’ handover item list, based on NICE Clinical Guideline 50. Participants’ confidence with interprofessional communication and team working skills were assessed using validated surveys and observation tools.

Summary of Results: We found that this interprofessional simulation session has significantly improved students’ handover reliability. The students’ confidence in their interprofessional communication and team working skills were also improved.

Discussion and Conclusions: Handover skills are essential for medical and nursing students to acquire prior to registration. This project gave students an unprecedented opportunity to participate in an interprofessional simulation session aimed at improving multidisciplinary handover skills. The results favour introduction of similar projects into medical and nursing schools’ curricula.

Take-home messages: Interprofessional simulated sessions can improve medical and nursing students’ handover reliability, as well as communication and team work skills.
One session. The consensus-building in each case was simulated conferences using three complicated cases per Complexity Assessment Method (MCAC). We held three cases were analyzed using the Minnesota recorders. Six researchers analyzed the process about consensus-building and objectives-setting. Our findings indicated the necessity of a skilled interprofessional facilitator.

Background: Interprofessional collaborative practice is needed to deal with healthcare issues which have become complicated in recent years. However, the understanding of complicated cases has not been sufficiently elucidated. Therefore, this study aimed to clarify how healthcare professionals build a consensus and set objectives in complicated case involving multi-professionals.

Summary of Work: The participants were doctors, nurses, pharmacists, therapists, social workers, dentists, dental hygienists, and other professionals, who were divided into groups of five to six subjects, each composed of different professionals. Three cases were analyzed using the Minnesota Complexity Assessment Method (MCAC). We held simulated conferences using three complicated cases per one session. The consensus-building in each case was recorded using video and IC recorders. Six researchers analyzed the process about consensus-building and objectives-setting.

Summary of Results: Study participants were a total of 41 people consisting 8 groups. In the context of consensus building, the path from collecting information to solving the problem became less clear as the case got more complex; however, we could observe that a particular professionals who had already experienced similar cases led the discussion on his/her own initiative. In objectives-setting, all professional groups considered the one issue in the “Simple” case to be the most urgent, whereas participants tended to check background information for the “Complicated” case. In the “Complex” case, participants tended to feel confused, where medical and welfare sector sometimes stood in opposition against each other, and they set goals in a different manner.

Discussion and Conclusions: As a case became more complicated, participants became more perplexed during consensus-building and objectives-setting. Our findings highlight the necessity of facilitators who are responsible for promoting interprofessional cooperation in more complex cases.

Take-home messages: More complicated case might indicate the necessity of a skilled interprofessional facilitator.

#7DD07 (26695)
How does the complexity of cases influence the consensus-building and objective-setting in multi-professional case conferences?

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#7DD08 (27311)
Intercultural Collaborative Practice; Modelling a way forward

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Background: This presentation describes a model of interprofessional, intercultural experiential learning in a developing country. The model was developed by the School of Health & Rehabilitation Sciences at The University of Queensland (UQ), Australia. Students from the professions of physiotherapy, occupational therapy and speech pathology, supervised by a interprofessional clinical education team undertake a three phase learning activity (Preparation prior to placement, Participation in-country & Consolidation post-placement) as an assessed component of their professional programs. Students work in interprofessional teams with our in-country partners to identify and deliver sustainable strategies in the provision of rehabilitation interventions for communities in Vietnam and Timor Leste.

Summary of Work: Implemented in 2011 in Vietnam the model was expanded in 2014 to incorporate Timor Leste. To date, 42 students, approximately 75 local staff and volunteers, and more than 200 clients and their families spanning urban and rural communities have participated. The presentation describes the development and implementation of the model, community and student learning outcomes, lessons learned and future recommendations.

Summary of Results: A range of evaluation strategies seek to investigate outcomes and refine the model, exploring perspectives from the student, educator, and in-country partners. An analysis of outcomes with respect to interprofessional learning, cultural competence and impact on local communities will be presented.

Discussion and Conclusions: Experiential learning within the presented model allows students to experience diversity of health care demands, promote a model of interprofessional service delivery in communities where health care professions are underrepresented, and experience intercultural learning across a range of populations. This model has potential application for other health and education professions seeking to establish in-country partnerships to support local communities.

Take-home messages: Interprofessional and intercultural learning can be challenging. Success requires student and educator preparation and ongoing facilitation. This presentation provides a model for successful learning and sustainable partner relationships.
Development of an interprofessional education facilitation program for health professionals using instructional design

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Background: There is a growing need for facilitation skills in interprofessional education (IPE) for health professionals in various settings, but effective education programs are not provided adequately in Japan. We developed an IPE facilitation program using principles of instructional design.

Summary of Work: We designed a two-day program of IPE facilitation where participants watched video cases before discussing both the barriers to and competencies for effective interprofessional collaboration (IPC), applied those intellectual skills to analyze their own situation, and practiced IPE facilitation skills in a mock workshop. Each step of the design was conducted according to the ADDIE model of instructional design.

Summary of Results: After conducting several pilots, the final version of the program was held over two days during January and February 2015 with 14 health professionals. They were assessed by their IPC analysis worksheet descriptions based on rubric criteria, and pre- and post-questionnaires using the interprofessional facilitation scale (IPFS). Thirteen participants passed the criteria of IPC analysis. The average of IPFS scores improved from 19.9 to 38.1 (p<0.01).

Discussion and Conclusions: Our program was effective in improving health professionals’ abilities in analyzing the barriers to and competencies for IPC of in their own situation, and in interprofessional facilitation skills. According to the ARCS model, program strengths included making the learning content relevant by having participants analyze their own situations, and making learners confident in IPE facilitation through the mock workshop and tutor feedback.

Take-home messages: IPE facilitation competencies can be learned effectively through a program developed by instructional design.

Attitudes towards interprofessional learning in an online Masters programme in primary care ophthalmology: Comparing postgraduate students from optometry, medical & other eye care professions

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Background: In 2014, an innovative three-year part-time online Master’s degree programme (MSc) in Primary Care Ophthalmology was launched, providing flexible learning for post-registration optometrists, medics and other eye health care professionals. Shared, common content was delivered utilising a bespoke virtual learning environment and a clinical, problem-based approach with illustrative multi-media, ophthalmic case scenarios.

Summary of Work: Measured the readiness of postgraduate health care professionals enrolled on the programme to engage in interprofessional learning (IPL) by surveying their attitudes to interacting in shared learning of common ophthalmic content.

Summary of Results: 24 postgraduate students from 9 countries were surveyed at the beginning of their second semester in Year 1. 15 of the 24 (62.5%) students were optometrists; 6 (25.0%) students were early career medical trainees; one (4.1%) was in a GP training programme (ST1). One student was an ophthalmic nurse (4.1%) and one (4.1%) was an orthoptist. Results of the survey will be presented.

Discussion and Conclusions: Students reported benefiting from interprofessional, shared learning of common content both academically and in the workplace. Students interactively engaged with interprofessional learning and developed a greater understanding of other health professionals’ roles and responsibilities in UK and international eye health care systems.

Take-home messages: Shared, common postgraduate educational content in primary care ophthalmology can be successfully delivered by online interprofessional learning to health care professionals working in the UK and internationally with the potential to help break down structural and attitudinal barriers between primary eye care and hospital eye services.
#7DD11 (26827)
Narrative learning for interprofessional education in laboratory medicine: a pilot curricular study in a medical center in Taiwan

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Background: Laboratory medicine plays a important role in modern multi-professional healthcare system. System based practice and mutual understanding of each clinical profession are important to interprofessional collaboration and quality healthcare services. However, hospital education medical technicians usually put the focus on laboratory works and rarely would extend to events in the clinical patient care units. Therefore, medical technicians’ ability of interprofessional collaboration and the understanding of their own roles in the healthcare system would be very limited. In order to create coherent and meaningful understanding of interprofessional collaboration in healthcare system, we designed an innovative educational program for medical technicians that is based on narrative learning.

Summary of Work: Medical technicians were assigned to write a first person perspective narrative about how a specimen (e.g. blood) from a patient would meet to create a coherent experiences and meaningful healthcare service. They also developed a better understanding of laboratory medicine's role in healthcare system.

Summary of Results: Through guideline and example, medical technicians were able to write a narrative of how laboratory medicine department and clinical departments would collaborate in patient care services. They also developed a better understanding of laboratory medicine’s role in healthcare system.

Discussion and Conclusions: Narrative learning would help to create a coherent experiences and meaningful understandings of how laboratory medicine department plays its role to provide effective healthcare service.

Take-home messages: Narrative learning would help to create a coherent experiences and meaningful understanding in laboratory medicine.

#7DD12 (24668)
The creation of an educational model for structured demonstration of Interprofessional practice in teaching hospital: Experience from Kaohsiung Medical University Hospital

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Background: Although deeply embedded in our daily hospital practice, interprofessional collaboration remains invisible to most of the young clinical students. The lack of formal clinical roles and relatively peripheral involvement of clinical students have led to insufficient opportunities for learning of interprofessional interaction. An education model should be created to provide available opportunities for observation of interprofessional collaborative practice in teaching hospital.

Summary of Work: In Kaohsiung Medical University hospital, we established a model that would allow multi-professional teams to apply to their interprofessional educational activities. With structured case demonstration, clinical teachers and students are able to observe the dynamics among the interaction between different healthcare professions. Each activity contains two major sections: structured demonstration and educational discussion. The demonstration of patient-centered and problem-focused case discussion is performed by clinical staffs in a multi-professional team. Meanwhile, an educational modulator will facilitate the educational discussion to highlight important learning issues. Guidelines for structured demonstration and educational discussion were provided to facilitate the discussion between attended clinical teachers and students.

Summary of Results: Five educational demonstrations were performed in 6 months. Surveillance showed that participants were able to define the learning objectives in demonstrations and were satisfied with the learning experiences. Most participants agreed that structured demonstration had provided observable interactions that would help with the learning of interprofessional collaborations.

Discussion and Conclusions: Our model provided regular demonstration with increased learning opportunities, and more observable interprofessional interaction that were previously hidden.

Take-home messages: Structured demonstration is an effective approach to the hospital education of interprofessional collaborative practice.
Interprofessional Collaboration as a Strategy to Improve the Quality of Antenatal Care: A lesson from Nusantara Health Collaborative, Indonesia

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Background: Nusantara Health Collaborative was an event hosted by a collaboration of (Indonesian) health-care students from various disciplines combining a variety of learning methods. Projects supported by the Directorate General of Higher Education HPEQ Ministry of education and culture of the Republic of Indonesia.

Summary of Work: The participants were health-care professionals and health-care students from various disciplines. Expert lectures on interprofessional education and practice, video training and case-based group discussions were conducted on day one. On day two, participants took part in simulation training. A pretest and posttest were used to evaluate the program.

Summary of Results: More than 90% of participants perceived the advantages of the program. A model for inter-professional practice in antenatal care service was also the product of this program.

Discussion and Conclusions: NHC was a helpful learning model for enhance both skills and knowledge in antenatal care service. By using an inter-professional approach, the outcome of health services can be improved greatly. It is hoped that this approach can serve as a method to enhance both skills and knowledge in antenatal care service through inter-professional practice.

Take-home messages: The products of this collaborative program should be followed up and developed further to gain even better results. Thus, further support for program development is required. Participants felt satisfied and hoped the same program could be conducted every year with some improvements.

Striking a balance – managing team efficiency and applicability to enhance interprofessional learning (IPL)

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Background: IPL is integral to promoting effective interprofessional collaboration among healthcare practitioners. Some barriers to IPL among academic administrators identified in earlier studies include scheduling problems, rigid curriculum and lack of perceived value. We aimed to ascertain attitudes and barriers to IPL among interprofessional healthcare practitioners in a non-academic setting.

Summary of Work: We surveyed 34 staff using the Attitudes towards Interprofessional Health Care Teams Scale (ATHCTS); Modified Readiness for Interprofessional Learning Scale (RIPLS); and Attitudes towards Interprofessional Learning in the Academic Setting Scale (IPLAS) to study staff’s attitudes towards different aspects of IPL. Exploratory factor analysis yielded six factors: team value/team efficiency (ATHCTS); expertise/professional identity (RIPLS); and administrative support/interprofessional culture (IPLAS). Total and factor mean scores were computed for comparison.

Summary of Results: IPLAS had lower total mean (3.55 on 5-point Likert scale; p=0.0002) and moderate correlation (r=0.38 to 0.41) compared with ATHCTS (mean=3.81) and RIPLS (mean=4.02). For factor scores, respondents endorsed lower scores on items relating to “team efficiency” (mean=2.35 to 2.88), such as IPL being time consuming and logistically difficult. Correlation analyses further confirmed that the “team efficiency” factor on the ATHCTS correlated poorly with other factors (r=−0.05 to 0.49).

Discussion and Conclusions: Healthcare practitioners generally held positive attitudes towards IPL. However, they viewed that IPL could compromise team efficiency which may impact patient care. Additionally, IPL in academic setting was perceived to have less applicability to healthcare institutions.

Take-home messages: Perceived lower efficiency and applicability may be potential barriers to IPL among non-academic healthcare practitioners.
#7DD15 (27296)

Inter-professional Education Program for Junior Interns: Pharmacist Shadowing

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**Background:** Health care need to integrate all of the professional, not only the division of labor was even more inter-disciplinary cooperation for best patient’s care. Therefore, we designed the program of one-day pharmacist shadowing, we would like to achieve the goals of enhancing mutual understanding between professionals and cooperation.

**Summary of Work:** Before the internship starting their clinical learning in the hospital, they are assigned to the “one-day pharmacist shadowing” program. On the beginning and at the end of the pharmacist shadowing, interns shall complete the pre-and the post-test questionnaires (one each). We designed eight items in our questionnaires, explanation the pharmacy provided services in clinical, Statistical analysis was conducted using SPSS predictive analysis software (version 17) Significance was set at p< 0.05.

**Summary of Results:** A total of 36 valid questionnaires after the questionnaire by the recovery and consolidation. The results of junior interns understand for professional of pharmacy the top 3 items scores of the-end program were “providing drug information to doctor”, “prescription evaluation and medication error management” and “the role of pharmacy in discharge planning services”, the average score is 4.53±0.56, 4.42±0.60 and 4.36±0.64, respectively. All of items p< 0.05.

**Discussion and Conclusions:** Through mutual understanding between the professional and strengthen partnerships, more practice patient-centered medical care, and pharmacists could also be learning between different grades, and have the opportunity to own reflection clinical value and location.

**Take-home messages:** Through inter-professional education (IPE) concept formation team, the team could develop training and learning model, interdisciplinary coordination between cooperation and communication.

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#7DD16 (26611)

Introducing Interprofessional Simulation Training in Obstetric Emergencies in a Tertiary Hospital in Singapore

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**Background:** As obstetric emergencies may occur infrequently, simulation has been introduced to train staff with the aim of reducing maternal and neonatal morbidity.

**Summary of Work:** The PROMPT (Practical Obstetric Multiprofessional Training) workshop is an evidence based training package. Its implementation in the UK had shown significant improvement across a range of perinatal and maternal outcomes therefore our hospital decided to adopt it. Trainees in Obstetrics & Gynaecology, Anaesthesia and Family Medicine train alongside midwives and nurses. The programme emphasizes human factors such as effective communication and situational awareness. High fidelity simulators (SimMom, Laerdal and Noelle, Gaumard) are used for scenarios such as eclamptic seizure and postpartum haemorrhage. Participants are debriefed on decision making, roles and responsibilities and teamwork during crisis management.

**Summary of Results:** We have trained 183 participants in 8 workshops since the first course in February 2013. Evaluation by participants reveals a high level of satisfaction. The majority agreed that the lectures introduced useful concepts in obstetrics crisis management, the simulation session identified gaps in their knowledge and overall attending the course reinforced their confidence & skills in crisis management.

**Discussion and Conclusions:** Participants especially appreciate the opportunity to train in interdisciplinary teams, feeling that this improves their communication skills. Interprofessional simulation training in obstetric emergencies improves communication between the key personnel involved in the care of our patients.

**Take-home messages:** Patient safety can be improved as we learn to function well as a team.
Use of multidisciplinary simulation to improve acute management of paediatric retrievals and emergencies at district general hospital: follow up

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Background: Croydon University Hospital has one of the highest paediatric retrieval rates in the South West London. Croydon not only has the highest in number, they are often sicker than the average paediatric patient. There have been a number of critical incidences involving paediatric retrievals and emergencies highlighting a need to develop multidisciplinary teams to improve the management of these patients.

Summary of Work: The Paediatric Retrieval and Acute Multi-disciplinary Simulation (PRAMS) course was developed in association with the South London Retrieval Service to improve knowledge, skills and team-working for inter-professional paediatric retrieval team functioning. This proved to be valuable in breaking down barriers between specialties and enhancing morale. Addressing learning needs for a disparate group of professionals caring for sick children. Such as, theatre staff and emergency department nurses.

Summary of Results: The follow up programme looked to show how the participants’ objectives from different backgrounds were being met by the original courses. It created a realistic environment and encouraged inter-professional learning and understanding. Staff reported that the course had a positive impact on their subsequent retrievals and emergency experience.

Discussion and Conclusions: This course was important to develop due to the high number of sick paediatric cases. The course facilitated in improving and maintaining skills needed for safe paediatric management in a DGH prior to transfer to a tertiary centre. It bridged the gap in care of sick children between hospitals.

Take-home messages: Simulation proved instrumental in creating and nurturing multidisciplinary teams within the organisation and improved team morale, which in turn enhanced paediatric patient care and safety.

Are Role Perceptions of Residents and Nurses Translated into Action? A Mixed-Methods Study in Internal Medicine

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Background: Studies on interprofessional collaboration mostly focus on role perceptions or actions, but less on their association. We aimed at analyzing the association between residents’ and nurses’ role perceptions and their translation into action.

Summary of Work: 14 residents and 14 nurses from a General Internal Medicine Division were individually interviewed about their own role perceptions, and then randomly paired to manage two simulated clinical cases. We used descriptive and kappa statistics to assess general concordance between participants’ perceptions and actions and we explored their meaning with a qualitative approach.

Summary of Results: Overall, there is a weak correlation between themes mentioned in role perception and their translation into action for residents (kappa 0.20, p=0.007) and nurses (kappa 0.27, p<0.001). More themes were present in action than during interviews, for residents (p=0.011) and nurses (p<0.001), especially for themes such as “common objectives”, “verification”, or “help, availability”. Some themes were equally mentioned and performed (e.g. “technical information sharing”), but others appeared more frequently in interviews (e.g. “dependence” on the other professional, “feedback”, “team building”), with variations depending on the profession.

Discussion and Conclusions: Some themes present in action may not be explicitly part of nurses’ and residents’ role perceptions, while some perceptions may be difficult to translate into practice, for reasons to be further explored. There are therefore discordances between residents’ and nurses’ role perceptions and their translation into action.

Take-home messages: Themes for which residents’ and nurses’ actions do not match their role perceptions may represent topics for better role clarification and training.
Outcomes of a structured inter-professional Ultrasound Guided Vascular Access Workshop: A retrospective review analyzing structure, participation and satisfaction

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Background: Ultrasound guided vascular access is an increasing need in highly complex hospitals, with different specialties and disciplines interested in learning these skills. A need assessment performed in our institution concluded that a formal training opportunity was needed. A half day workshop called was designed, developed and implemented.

Summary of Work: We retrospectively reviewed our experience in the past 18 months performing this workshop. It was widely advertised in our organization and acceptance was on a first come first serve basis. An on-line teaching module and pre course reading material were delivered to the participants as a pre-requisite. The workshop was structured with didactic lectures (ultrasound technologist, interventional radiologist and vascular access nurse) and simulation based learning in task trainers. Time was given for deliberate practice and final debriefing. Satisfaction was measured by a Likert scale (1 to 5).

Summary of Results: A total of 30 participants have registered in the workshop since January 2014. Intensive care (27%) and Radiology (23%) represented the majority of participants. Other disciplines that participated included general surgery, emergency medicine and anesthesia. 50 % was Staff and 50 % trainees. There were high levels of satisfaction with the sessions with an overall satisfaction rated as 4 or 5 by all participants.

Discussion and Conclusions: A successful Ultrasound guided vascular access workshop was created using and inter-professional approach and different teaching modalities. There were high levels of satisfaction and a variety of specialties and disciplines interested. The workshop was equally attractive to staff and trainees.

Take-home messages: An inter-professional ultrasound guided vascular access workshop is an effective and engaging learning experience.
**Interprofessional training activity in pre-hospital emergency**

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**Background:** To act in emergencies it is important that health professionals develop specific and differentiated skills. So undergraduate courses in medicine and nursing should encourage the development of these skills and abilities. The aim of the present study is to analyze the core competencies in basic and advanced life support and its implementation process in medical and nursing courses in a public university of Brazil.

**Summary of Work:** This is an exploratory descriptive study, with medical and nursing graduates of last year undergraduate, who performed theoretical and practical training in pre-hospital emergency care, and participated in Objective Structured Clinical Evaluation stations in laboratory Skills.

**Summary of Results:** 24 students participated in the activity. Weekly classes were conducted theoretical and practical for one school semester, taught by doctors and nurses of the EMS. Topics covered included: basic and advanced life support, safe transport in clinical emergencies, trauma, gynecological, obstetric, Pediatric and psychiatric diseases. Practice activity was performed in the ambulances. Students were encouraged to critical-reflexive reasoning and on the importance of integration between doctors and nurses. Was performed pre-test, post-test and OSCE. It was observed that 88% of students showed increased score compared to the pre-test.

**Discussion and Conclusions:** The study contributed to organize practical stations, identifying the basic clinical skills. It is suggested that an integrated discipline is made possible in both undergraduate courses.

**Take-home messages:** The EMS requires rapid decision-making, being fundamental an articulation between doctor and nurse. The interprofessional formation in emergency it is important for future safe practice.

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**Interprofessional Simulation**

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**Background:** This work takes place five years ago in the training of health professionals in the Universidade Potiguar (UnP), reaching about 800 students per semester.

**Summary of Work:** Health professional education should enhance the performance of health systems to meet the needs of patients and populations of a fairly and efficiently. The WHO (2010), Interprofessional Education (IPE) are proposed as an innovative strategy that will play an important role in the health workforce. By following these guidelines, the UnP, has deployed to all school health courses a strong academic model based on curricular integration and interprofessional education.

Although simple in concept, the IPE can be challenging to be implemented. The UnP actions were designed within the spaces of extension, research, Post-graduate and Graduate, finding in the simulation a strong ally for the development of interprofessional competencies.

**Summary of Results:**
- Ownership and experience of acting within the interprofessional
- Clarity on the role of the interprofessional faculty.
- Range of student cognitive levels and the possibility of transposing the experience for the actual practice.

**Discussion and Conclusions:** According to Thistlethwaite (2013), as IPE has been undertaken learning environments since the 1960s and the decision on the activities should be based on the needs of the defined learning outcomes and these should include reflection and discussion. On this premise, the renowned simulation Araújo and Quilici (2012) as a method replicating near real scenarios, creating greater integrity in the processes, skills and attitudes for the moment that the students face the reality with the patient and reflexion. In this context, presenting itself as a promoter methodology of interprofessional education.

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**Interprofessional Training Activity in Pre-Hospital Emergency**

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**Background:** To act in emergencies it is important that health professionals develop specific and differentiated skills. So undergraduate courses in medicine and nursing should encourage the development of these skills and abilities. The aim of the present study is to analyze the core competencies in basic and advanced life support and its implementation process in medical and nursing courses in a public university of Brazil.

**Summary of Work:** This is an exploratory descriptive study, with medical and nursing graduates of last year undergraduate, who performed theoretical and practical training in pre-hospital emergency care, and participated in Objective Structured Clinical Evaluation stations in laboratory Skills.

**Summary of Results:** 24 students participated in the activity. Weekly classes were conducted theoretical and practical for one school semester, taught by doctors and nurses of the EMS. Topics covered included: basic and advanced life support, safe transport in clinical emergencies, trauma, gynecological, obstetric, Pediatric and psychiatric diseases. Practice activity was performed in the ambulances. Students were encouraged to critical-reflexive reasoning and on the importance of integration between doctors and nurses. Was performed pre-test, post-test and OSCE. It was observed that 88% of students showed increased score compared to the pre-test.

**Discussion and Conclusions:** The study contributed to organize practical stations, identifying the basic clinical skills. It is suggested that an integrated discipline is made possible in both undergraduate courses.

**Take-home messages:** The EMS requires rapid decision-making, being fundamental an articulation between doctor and nurse. The interprofessional formation in emergency it is important for future safe practice.
Using Simulation to Promote Collaborative Working in Mental Healthcare

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Background: Interprofessional working in mental healthcare is paramount. Many serious untoward incidents occur because of problems with effective collaboration. Evidence suggests that by training multidisciplinary teams together, individuals are more likely to take advantage of the knowledge and skills of their colleagues in clinical practice. We developed a series of interprofessional simulation courses to address this.

Summary of Work: The courses focus on clinical topics at the mental-physical interface including children with mental health difficulties in acute hospitals; perinatal mental healthcare; and managing challenging patients in the Emergency Department. The scenarios involve multiple participants in tasks focussed on collaboration. The debriefs promote reflection on colleagues’ perspectives and promoting better awareness of roles and responsibilities.

Summary of Results: Questionnaires before and after the courses revealed improvements in attitudes towards collaborative working. For example, participants felt more able to ask for necessary assistance and information from colleagues than they had beforehand.

Qualitative data from the debriefs, discussions and focus groups was analysed. It suggested the courses promote positive attitudes towards multiagency working such as delegates being more likely to involve other teams earlier.

Discussion and Conclusions: The results suggest that these courses are useful in changing attitudes towards collaborative working. The data collection tools used need to be adapted to draw out these changes more clearly. We hope to analyse the impact of the courses on patient outcomes.

Take-home messages: Interprofessional simulation courses are useful in fostering a more effective collaborative working environment in the care of individuals with mental health difficulties – particularly across historic divides such as health and social care.