Background

OSPEs (organized structured practical examination) are common in clinical education. In recent years they have been adopted into honours year Medical Science and Sport & Exercise Science teaching at the University of Aberdeen and have proven useful to develop specific skills linked to personal time management and interaction with patients or volunteers. Student perceive this type of examination as challenging though they admit that it develops these skills.

Particular the “role play” component of some examinations involving human subjects such as phlebotomy or ECG produces anxieties and insecurity in students. Interaction with volunteers is particularly important in Sport and Exercise Science, because recruitment and interaction with volunteers is often an integral part of laboratory based honours projects. Therefore a simplified version of an OSPE component to measure volunteer’s blood pressures has been introduced in third year Sport Science teaching to give students more and earlier exposure to this type of examinations.

SM 3003 Practical Skills: Blood pressure measurement: “mini OSPE”

Students get an 30 minute introduction tutorial into blood pressure measurements and are given links to resources of the British and Irish Hypertension Society (BIHS) y for self-study.

The resources include guidelines, training videos and publications on recommended procedures for professional and accurate blood pressure measurements for Health Care professional. In addition to the provided introduction students are asked to study the provided information. Students are also clearly informed about the assessment procedure and its role-play nature and that they are expected to be able to take each others blood pressure like a health care professional would.

Two weeks later students come to the practical and get an hour to practice taking blood pressure in pairs.

Workflow chart of mini OSPE practical skills assessment

After this familiarisation, students are assessed taking blood pressure on each other utilising a simple tick-box scoring system. Proper technique, interaction with the “volunteer” and professionalism are the main scoring criteria. The marking sheet is also used to provide direct feedback in those categories.

Students still find the “role-play” component irritating at first but normally loose anxieties quickly during the procedure. One aspect, reducing the intensity of the exercise is that there are no time constraints applied, that are normal part of an OSPE. It has become apparent that a detailed explanation of the purpose of the practical and contextualisation is important. The importance of communication skills and interaction with human volunteers for Sport Science students needs to be emphasized.

Also, the link to honours year Medical Science OSPE practicals needs to be highlighted to ensure full student engagement. Student feedback from SCEF course feedback questionnaires shows that the mini OSPE is effective in developing students’ skills (effectiveness of teaching and development of skill assessed on a 5-point agreement scale, 94% of ratings in 5: “totally agree”, 4: “Agree” or 3: “neutral”, n=27 over 2 years).

Student comments also illustrate that despite initial concerns and anxieties, the exercise is perceived as useful and helps to build confidence interacting with people.

Some students (class reg fed-back at staff student liaison committee meeting) asked to incorporate more exercises like that into the curriculum. Sport & Exercise Science Honours students who participated in the BP pressure mini OSPE before doing the full Medical Science OSPE in forth year reported that it was a useful preparation and made them feel less anxious and more confident about it (direct communication with staff “Was the 3rd year mini OSPE beneficial for doing the OSPEs in year 4”, n=11).

Conclusion and further implications

In conclusion, the “mini OSPE” is a useful teaching tool to build students confidence to interact with human subjects and improve communication skills to facilitate the development of graduate attributes.

Currently, ways to use iPads for the marking process are explored. This will further streamline the process and will make processing of marks and delivery of feedback quicker and easier. Similar procedures are in use for the Human Physiology Honours year OSPEs. Student feedback indicates an interest in this type of practical and examination and further human subject related practical skills relevant for Sport & Exercise Science students are currently evaluated.