INTRODUCTION

"Professionalism", is emerging as a fundamental, central theme in both undergraduate and postgraduate education. Assessment of professionalism is not straightforward as the learning outcome focus upon subjective attributes related to humanism, accountability, altruism, and excellence.1,2 Some of the relevant learning outcomes (LO's) and competences have been suggested by General Medical Council (GMC) recommendations in 'Tomorrow’s Doctors',3 but the evidence about validity, reliability, and standardization of the assessment of professionalism is not yet fully understood. A working group on assessment of professionalism in the Ottawa Conference in 2010 developed a multi-dimensional, multi-paradigmatic approach to the assessment using three main levels: individual, inter-personal and societal-institutional.4 Due to its subjective nature, objective methods of assessment are not necessarily the most appropriate tools for assessing professionalism. This underscores the importance of subjective tools for assessment, one of which is the reflective writing, as it closes the gap between theory and practice, and therefore, may produce better clinical and professional doctors.5 On the other hand, the reliability of the subjective assessment instruments is difficult to establish and may have the inter-rater marking bias, which can affect the grading of the students. Hence, combinations of assessment instruments are required to assess professionalism.6 The World Federation for Medical Education promotes learning by keeping a balance between formative and summative assessments, written and oral examinations, normative and criterion referenced judgements.7 It encourages medical schools to develop students as a person and as a professional. This can be achieved through the use of peer/self-assessment, OSCEs and written examinations.8 However, there are still some gaps where existing assessment instruments lack the ability to measure some aspects of professionalism such as "reflectiveness, advocacy, lifelong learning, dealing with uncertainty, balancing availability to others with care for oneself, and, seeking and responding to result of an audit".6 The aim of this study was to establish the present position of the role that faculty members have with respect to curriculum design and implementation, and assessment of professionalism in a typical world-class medical school.

METHODOLOGY

A constructivist qualitative study approach was used to determine the evidence for the emerging concepts and
relationships. It provided several open-ended strategies for conducting emergent inquiry. This approach built up a central question for the study, and, new questions emerged which helped to generate a list of further questions. Selective, axial and open coding techniques were applied. The constructivist approach was employed, which had an advantage of providing a multiple range of opinions from both respondents and the researcher’s point of view. Their professional experiences highlighted the relevant issues in the assessment of professionalism.

The study was conducted in School of Medicine, University of Glasgow, UK in 2011. The teaching faculty members were the population of the study, and the individuals were identified based on their designation as curriculum managers. A purposive sampling technique was used to facilitate the identification of the respondents and the sample size was estimated by identifying the medical faculty members who deal with the assessment of professionalism, and therefore, only eight faculty members were selected as respondents. The data was collected through semi-structured interviews, audio recorded with ‘Dictaphone’, and transcribed. The transcriptions were sent back to the interviewees for validation.

The semi-structured interview with a researcher control consisted of 14 open-ended questions. The questions were arranged according to the themes that were identified from the literature.

A pilot semi-structured interview was conducted with a senior faculty member from the School of Medicine before the actual interviews to improve the quality, structure and sequence of questions.

A thematic analysis of the data was completed using NVivo software and by manual analysis of the data. Open codes were used to identify the themes. Axial codes were used at places to depict the relationship between the themes and to recognise new emergent themes from the data. Sub-categories were made by the amalgamation of the open and axial codes and arranged under a core category. The hierarchy of themes and their relationships are shown in Figure 1.

The technique of triangulation was used for credibility (internal validity) and conformability of the information given by the respondents. The initial transcription was sent to each respondent for verification and authentication. Respondents were allowed to edit the content in accordance with their opinions. The content of the interviews was then compared and analysed. The interviews were compared with each other and with the results given by the software. The interviews were further triangulated with the literature and course documents. The use of triangulation technique is shown in Figure 2.

**RESULTS**

The respondents were asked for their views about the instruments used for assessing professionalism, both formative as well as summative, and about their validity, reliability, standardization, fairness, marking and frequency. The participants were of the view that assessment of professionalism may be difficult to undertake. In
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Vocational Studies (years 1 to 3), the tutors give a one to one feedback to the student about their professional behaviour on continuous basis, i.e. during the communication skills tutorials, the GP placement, and for personal professional development (PPD) portfolios. In the clinical skills, students receive feedback in the form of peer assessment, and in the MOCK exam, in addition to the response from the tutors during the practice sessions. The students are also formatively assessed at the end of each five-week block (years 1 to 5) while the summative assessment takes place in the OSCE’s and the written papers.

The respondents reported that there is no specific instrument for assessing professionalism. There are some assessment tools which can assess professionalism besides measuring the other LOs. The assessment instruments are used formatively as well as summatively in the form of written examinations and practical. The formative assessment include formative feedbacks at the end of the clinical attachments, direct observation of procedural skills (DOPS), mini-CEX, case based discussion (CBD), situational judgement test (SJT) and peer assessment. The summative assessment includes history taking and examination of a patient, OSCEs', reflective portfolio, modified essay questions (MEQ), long case essays and reviews, multiple ranking tests and longitudinal care project (LCP).

A 'blueprinting' exercise, involving the assessment of the students in terms of all the learning objectives, has not been fully accomplished yet. However, all learning outcomes are standardised for assessment, using the modified Angoff procedure but LOs are not necessarily standardized specifically for “professionalism” and standard setting for the portfolios is difficult due to the variations in the responses from the students.

The students are expected to achieve levels of competencies that are set against pre-existing standards. When a student is at the borderline of the standard, a decision is made to see if enough evidence has been gathered about the satisfactory performance of the student, and if not, then a re-test or re-sit may be organised. A 'mock' examination is normally conducted to prepare the students for the examination, and a formative feedback is given on their performances. The students are also guided and helped by the senior students, foundation doctors and the teaching faculty as a usual part for their exam preparation.

Validation and specificity are dependent on local and national standards. The assessment committee takes great care in handling an assessment blueprint to ensure that there is the capacity to assess all the outcomes across the medical curriculum. There is a system of external examiners who visit medical schools and in their opinion, confirm that the standards required by this medical school are appropriate for clinical practice. So there is a triangulation of evidence taken from the quality assurance processes for setting up the examination.

The students are assessed frequently for professionalism from the beginning of year 1, both formatively and summatively, throughout the undergraduate course. In the first three years, it is more formal and is included in Vocational Studies. In the clinical years 4 and 5, professionalism is explicitly assessed mainly through Mini-CEX and DOPS, usually one per week. However, tutors monitor the students' professionalism continuously, as part of the training for clinical practice.

**DISCUSSION**

Professionalism is a complex component of the undergraduate curriculum and presents a tension between the explicit curriculum and the implicit (hidden) curriculum. Its assessment is a challenge for both students and examiners simply because the distinction between objective and subjective facets is hard to define. Consequently, the standards of competence and performance are not easy to quality assure, describe and communicate within a large medical school. The relation of the topic with knowledge, skills and attitudes of professional doctors requires multiple assessment instruments to assess it from all angles, including assessment by faculty, students, patients and multi-perspective. The preferred managerial response is to focus the core responsibility for development of teaching and assessment to a limited, but well prepared group of teachers, who are able to inculcate a core of attributes, within the students. One favourable consequence of bringing a focused purpose into the curriculum is the quality of interaction between staff and their colleagues, staff and students, and student-peer interactions. Whilst the interactions are about 'professionalism', they are also conducted in a professional manner and driven by professional intentions and outcomes, and therefore, model some aspects of professionalism itself.

Professionalism within a curriculum is dynamic. The curriculum managers have to respond to local and national changes that arise in professional training, as well as in nature of health-care delivery, legislation and social values. Ultimately, a medical school that attends to professionalism in an educationally professional manner inculcates an ethos into the students through good role modelling. The aim is to make a deep and lasting impression on the students' professional conduct, which in turn leads to high quality patient care and a profession that is characterised by its integrity. The development of professionalism in medical students is an important part of their learning and grooming, though teaching and monitoring of professionalism is a
time consuming task. The goals of the undergraduate medical programme can be achieved through clear and explicit learning objectives based on professional behaviours which are required from the students.18

The 'assessment for learning' technique can be used to assess professionalism on a continuous basis to enhance students' learning experience19 and to encourage 'deep professionalism'.20 The authors acknowledge that most UK medical schools recognise much of what has been described, but they are aware of the fact that schools in other countries, who are evolving from a traditional curriculum, with a bias towards pre-clinical and clinical science would benefit by incorporating 'professionalism' as a central component of their curriculum development.

CONCLUSION
This study provides evidences that professionalism is a significant core component of an undergraduate curriculum, and a foundation for postgraduate training.

REFERENCES