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RELIABILITY OF SCFHS PROGRAMME ASSESSMENT TOOLS 7 YEARS EXPERIENCE OF QASSIM FAMILY MEDICINE DIPLOMA PROGRAMME 2009-2016

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ABSTRACT
Background: Assessment has long played a central role in medical education at all levels of training. There are likely two broad reasons for this prominence and can assure the public of acceptable levels of competence among their trainees and practitioners. Second, from an educational perspective **Objectives:** 1. To find the demographic factors influence and associations with the different methods of assessment. **Materials and Methods:** The present institutional based descriptive record review study was conducted at Al Fayziah Post graduation training centre, Buraidah, KSA, during the period from December 2016 to Feb 2017. A total of 55 individuals were selected from the all the batches of Saudi diploma family medicine students from the year 2009 to 2016. All the residents information was taken from the records. Data entered and Statistical Package for Social Sciences 21.0 version was used. Results were analysed and necessary statistical tests were applied. **Results:** Out of 55 study population, 50.9% were males and 49.1% were females. Out of 55 students, 32.7% of students were in the age group of < 30 years, 32.7% were in 30-34 years. Among 55 study residents, 18 people were in the age group of < 30 years, of which 27.8% were scored > 70 score and above 40 years residents were scored >70% was about 16.6%. But there was no statistical difference was observed between different age group of the students and Saudi Licensing Examination (SLE) Score. There was increase in pass rate (100%) was observed in 40 yrs and above age group residents. **Conclusions:** Based on the above study results, < 30 years age group people were scored good in SLE score and but at the end 88.9% were passed in final examination and whereas above 40 years age group was scored less in SLE score and final outcome of the result was 100%. Age is no bar to learn the new things or in the higher education.

KEYWORDS: Age, Sex, types of assessment, outcome of the student.

BACKGROUND
Family practice is a relatively new area of specialization. The concept of this discipline evolved in 1960s in the United Kingdom (UK) and United States of America (USA). In USA, family medicine evolved from general practice as a felt need in personal health care. In UK, the same trend has been noticed in the introduction of a general practice as a specialty of the Royal College of general practitioners with systematic training programmes on par with the MRCP and FRCS fellowships. The nature of care varies from country to country, and may even involve an active role in hospital care. Thus the nature of the curriculum of training programmes in family medicine, the time duration, and the ratio of preventive / curative care also varies from country to country. The family physician constitutes the fundamental core of the health system in the Netherlands and Spain. Family practice is also active in South Korea, Malaysia and Singapore.

Family practice is a broad speciality which builds upon a core of knowledge derived from other disciplines-drawing extensively from internal medicine, paediatrics, obstetrics and gynaecology, surgery and psychiatry, along with public health and behavioural disciplines. Family medicine recognizes the importance of

interaction between the patient and physician and its effects on patient outcomes and satisfaction. It has increased our understanding of family dynamics and how to treat individuals in the context of their families.[3]

Family physicians play a major role in integrating and coordinating care provided to patients and their families. They are responsible for the implementation of the concept of Primary Health Centre through their work in general practice. Therefore, a well-designed and effective training program in family medicine should be an essential component of medical school curriculum.[1,2]

The technology of multiple choice questions, for example, is a long standing tradition in medical education and is well tuned to determine the level of knowledge that an individual possesses with high reliability and validity presuming best practices are followed. Similarly, the Objective Structured Clinical Examination (OSCE), first introduced by Harden and Gleeson in 1979, is now over three decades old.[10] Over the past 30 years, the OSCE has been adapted to assess resident level performance in a variety of domains, and has spawned a number of specialty-based derivatives. Educators have also developed tools for the formal, structured, circumscribed assessments of performance in the clinical context; example of such a tool is the Mini-Clinical Evaluation Exercise (Mini-CEX).[4] The Mini CEX requires the trainee to interact with a real patient while being explicitly observed and assessed (with documentation of this assessment) by a clinician supervisor. Since its introduction in 1995, the Mini-CEX has gained popularity and has been adapted to evaluate specific domains and competencies such as professionalism. There are many approved methods for evaluating the under graduates and post graduate students in different medical colleges in different countries to be conducted on their own way of adopted training methods. Each method has got its own significance in evaluation process.[5]

In view of the above, I make an attempt to know Saudi License examination (SLE) score, family medicine diploma outcome in terms of pass or fail, taken to show some associations with age and sex of the family medicine residents in the areas of learning and improvement strategies in the coming future courses. The ultimate aim of this study to improve the academic performance of the family medicine residents in our province.[6,7]

OBJECTIVES

To find the demographic factors influence and associations with the outcome of assessment.

MATERIALS AND METHODS

The present institutional based descriptive record review study was conducted at Al Fayziah Post graduation training centre, Buraidah, Kingdom of Saudi Arabia, during the period from December 2016 to Feb 2017. Before collection of the data from the records, Saudi License Examination (SLE) score taken based on the written test conducted by Saudi Council for Health Specialities and this is mandatory to enter into Family medicine Diploma course. Finally Final exam score taken in terms of pass or fail criteria taken. Similarly for outcome of the examination is based on at the end of two years course completion multiple choice questions, objective structured clinical examination (OSCE) and oral examination taken for the consideration of final exam outcome. Passing the written exam is prerequisite to take up final clinical exam. A total of 55 individuals were selected from the all the batches of Saudi diploma family medicine students admitted from the year 2009 to 2016. Results were analysed with Statistical package for social sciences (SPSS) 21.0 version was used and necessary statistical tests were applied.

RESULTS

Table 1: Age and Sex wise distribution of the students.

Age	Sex		Total
	Male	Female	
< 30 yrs	7 (38.8%)	11 (61.2%)	18 (100%)
30-34 yrs	11 (61.2%)	7 (38.8%)	18 (100%)
35-39 yrs	7 (53.8%)	6 (46.2%)	13 (100%)
40 yrs and above	3 (50%)	3 (50%)	6 (100%)
Total	28 (50.9%)	27 (49.1%)	55 (100%)

X^2- 1.837, 3df, P-0.6

50.9% were males and 49.1% were females. Females were showing equally interested to pursuing the post-graduation studies.

Table 2: Age in relation to Saudi License Examination (SLE) in the study group.

Age	SLE Score			Total
	Up to 60	61-70	> 70	
< 30 yrs	7 (38.9%)	6(33.3%)	5 (27.8%)	18 (100%)
30-34 yrs	11 (61.1%)	5 (27.7%)	2 (11.2%)	18 (100%)
35-39 yrs	7 (53.9%)	6 (46.1%)	0 (0%)	13 (100%)
40 yrs and above	1 (16.6%)	4 (66.8%)	1 (16.6%)	6 (100%)
Total	26 (47.3%)	21 (38.1%)	8 (14.6%)	55 (100%)

X^2- 8.639, 6df, P-0.2

Out of 55 residents, 18 people were in the age group of < 30 years, of which 27.8% were scored > 70 score and

above 40 years residents were scored >70% was about 16.6%.

Table 3: Sex in relation to Saudi License Examination in the study group.

Sex	SLE score			Total
	Up to 60	61-70	> 70	
Male	10 (35.7%)	14 (50%)	4 (14.3%)	28 (100%)
Female	16 (59.2%)	7 (25.9%)	4 (14.9%)	27 (100%)
Total	26 (47.2%)	21 (38.2%)	8 (14.6%)	55 (100%)

X^2- 3.701, 2df, P-0.2

There was no statistically significant association was found between Saudi license Examination and sex (P>0.05). About 14.9% of females were scoring more than 70% of SLE score.

Table 4: Age group and final exam of the study population.

Age	Final exam		Total
	Pass	Not pass	
< 30 yrs	16 (88.9%)	2 (11.1%)	18 (100%)
30-34 yrs	14 (77.7%)	4 (22.3%)	18 (100%)
35-39 yrs	13 (100%)	0 (0%)	13 (100%)
40 yrs and above	6 (100%)	0 (0%)	6 (100%)
Total	49 (89%)	6 (11%)	55 (100%)

X^2- 4.698, 3df, P-0.2

There is increase in pass rate (100%) was observed in 40 yrs and above age group residents but statistically not significant.(P>0.05).

DISCUSSION

The present institutional based descriptive record review study was conducted at Al Fayziah Post graduation training centre, Buraidah, Kingdom of Saudi Arabia, during the period from December 2016 to Feb 2017 among 55 study participants. Before conducting the study problem analysis and feasibility of the study discussed with the family medicine director and also noticed that availability of students results for the last seven (7) years. Before starting the study, I have gone through the syllabus, teaching sessions and different assessment methods and other parameters to complete the family medicine diploma course.

Out of 55 residents, 50.9% were males and 49.1% were females. Females were showing equally interested to pursuing the post-graduation studies. Among the study population, 18 people were in the age group of < 30 years, of which 27.8% were scored > 70 score and above 40 years residents were scored >70% which was about 16.6%. Every country will conduct the entry level examination either into graduation level and post-graduation level examinations on their own resources and man power availability. In this study, there were many assessment methods were available for the post graduate family medicine diploma students, in this study I have taken Saudi License Examination (SLE) score and Family Medicine outcome score in terms of pass or fail taken at the end of 2 years course completion taken and observed with age and sex of the students were done due to constrains of the words for the publication and specificity of the objectivity. There was no statistically significant association was found between Saudi license Examination and sex (P>0.05). About 14.9% of females were scoring more than 70% of SLE score and males about 14.3%. This reflects the younger generation was well versed with computers and also having good language command to understand the questions on the system were observed based on the acquiring the percentage. This Saudi License examination score is prerequisite to enter the Family Medicine programme. After entry into the family medicine course, supervisors evaluation methods and different assessment methods are required to complete the said course. Then they are eligible to take up final exam.

The Saudi Diploma Family Medicine (SDFM) Program is a relatively new training program initiated in 2007 to fulfil the needs of qualified PHC providers. This postgraduate residency training program includes theoretical courses, family medicine clinic rotation and a mandatory hospital clinics rotation. The program is aimed at improving the PHC physicians' competencies, which are essentially required to improve the quality of PHC in Saudi Arabia. The program evaluation is required to assess its quality to maintain a high quality of the training processes, in the view of rapid change and an outline of principles and practice.[8,9] Since its introduction as a mode of student assessment in medical school in 1975 by Harden and Gleeson,[10] the OSCE has become a standard method of assessment for both undergraduate and postgraduate students. In addition, it has been used for both summative and formative assessment in various medical and paramedical disciplines.[11-17] The Saudi Commission for Health Specialties has only relatively recently (2007–2008 academic year) implemented OSCE as part of the final year Internal Medicine clerkship exam. Only six stations were used in the first year of its introduction to partially cover history and physical examination as part of final residency year assessment in Internal Medicine residency programs. Currently, it is composed of a circuit of twelve stations in which various tasks are asked, including three history-taking skills stations, three physical examination stations, one communication skills station, one consultation skills station, one procedure station, and three data interpretation stations.[18,19]

Another important parameter in the assessment of the family medicine residents, at the end of the final examination, written examination to be conducted with multiple choice questions score, objective structured clinical examination (80% weightage) and oral examination (20% weightage). There was increase in pass rate (100%) was observed in 40 yrs and above age group residents and where as in <30 years age group percentage of pass was 88.9% but statistically not significant (P>0.05). That means above 40 years age group individuals were slowly picking up the subject and at the end little more percentage of score gaining comparatively in the beginning. Assessment of the trainees and their follow up throughout the course program is similar to that reported in other studies. The structured learning experiences are much more likely to change students' knowledge, attitude and lead to the development of proper comprehensive clinical skills.[20,21,22] This indirectly reveals that no age is bar to learn and pursuing higher degrees. There were no similar studies conducted in the Kingdom of Saudi Arabia. As our sample is less we cannot generalize the findings in general population. But in future, this study will consider the flat form for the future studies in our study setting especially in medical education domain.

CONCLUSIONS

Based on the above study results, < 30 years age group people were scored good in SLE score and but at the end 88.9% were passed in final examination and whereas above 40 years age group was scored less in SLE score and final outcome of the result was 100%. Age is no bar to learn the new things or in the higher education. But continuous and ongoing assessment tools to be strengthened at regular intervals for the consistent improvement. The assessment provides a useful guide into areas that the students felt 'good' about, which should be reinforced and the weaker areas need improvements Main purpose of this study to improve in the areas of clinical training and supervising, capacity building and good quality primary care.

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REFERENCES

1. Al-Omar BA, Bin-Saeed KS: Factors influencing patient's utilization of primary health care provider in Saudi Arabia. Saudi J Fam and Comm Med, 1999, 5(2): 23-30.
2. Watt G: The long march: the development of academic general practice in the UK and Ireland. Eur J Gen Pract, 2004; 10(3): 98-102.
3. World Health Organization Regional Office for South-East Asia, New Delhi, October Family Medicine Report of a Regional Scientific Working Group Meeting on Core Curriculum, Colombo, Sri Lanka, July 2003; 9-13.
4. Abraham R, Ramnarayan K, Vindo P, Torke S. Students' perceptions of learning environment in an Indian medical school. BMC Med Educ, 2008; 8: 20.
5. Abdulrahman Al-mohaimeed et al perceptions of the educational environment of a new medical school, Saudi Arabia, Int. J. health sciences, 2013; (2): 150-159.
6. Khaw P. ABC of Eyes. BMJ Books. Blackwell Publishing. http://resources.bmj.com/bmj/topics/abcs.
7. Journal of Saudi Society of Community and Family Medicine http://www.ssfcm.org/ssfcm_en.
8. Green et al. 1998, Green M, Ellis C, Frémont P, Batty H. Faculty evaluation in departments of family medicine: Do our universities measure up?. Med Educ, 1998; 32(6): 597–606.
9. As Curzon Curzon LB. Teaching in further education, an outline of principles and practice, 6th. Continuum, London, 2004.
10. Harden RM, Gleeson FA. Assessment of clinical competence using an objective structured clinical examination (OSCE). Med Educ, 1979; 13(1): 41–54.
11. Zayyan M. Objective structured clinical examination: the assessment of choice. Oman Med J, 2011; 26(4): 219–222.
12. Rushforth HE, Objective structured clinical examination (OSCE): review of literature and implications for nursing education. Nurse Educ Today, 2007; 27(5): 481–490.
13. Fitzpatrick CF, Radecki SE. Use of the OSCE in residency training. Fam Med, 1994; 26(1): 5–6-49.
14. RatzmannA, Wiesmann U, Kordass B. Integration of an OSCE into the dental preliminary exams. GMS Z Med Ausbild, 2012; 29(1).
15. Zahid MA, Al-ZayedA, Ohaeri J, Varghese R. Introducing the OSCE in the under- graduate psychiatric curriculum: evaluation after one year. Acad Psychiatry: J Am Assoc Dir Psychiatr Resid Train Assoc Acad Psychiatry, 2011; 35(6): 365–369.
16. Carraccio C, Englander R. The OSCE: a step in the direction of competency-based S. Alaidarous et al. / Health Professions Education, 2016; 2: 121–129. Evaluation Arch Pediatr Adolesc Med, 2000; 154(7): 736–741.
17. Townsend AH, Mc Llvenny S, Miller CJ, Dunn EV. The use of an OSCE for formative and summative assessment in a general practice clinical attachment and its relationship to final medical school examination performance. Med Educ, 2001; 35(9): 841–846.
18. Newble DI. Eightyears' experience with a structured clinical examination. Med Educ, 1988; 22(3): 200–204.
19. Griesser M J, Beran M C, Flanigan D C, Quackenbush M, Van Hoff C, BishopJY. Implementation of OSCE into orthopedic surgery

residency training. J Surg Educ, 2012; 69(2): 180–189.
20. Guyatt G, Nishikawa J: A proposal for enhancing the quality of clinical teaching. Med Teach, 1993; 15: 147-161.
21. Price AD, Mitcholl CA: A model for clinical teaching and learning. Med Educ, 1993; 27: 62-8.
22. Al-Gelban KS, Al-khaldi YM, Diab MM. Family Medicine A Practical Approach. Jarir Publishing, 2007.