

ORIGINAL ARTICLE

Assessing Competency in Distant Learning Master Programs in Medical Education: A Qualitative Analysis

Rehan Ahmed Khan¹, Omer Awwab Khan², Madiha Sajjad³

ABSTRACT

Objectives:

- To investigate the assessment tools and processes used to assess students of MHPE programs in Pakistan for achieving the learning outcomes of the program.
- To Compare this process in developed (United Kingdom) and developing country (Pakistan).

Study Design: It is a qualitative archival study designed to provide an insight into the type and level of assessment tools used in MHPE programs.

Place and Duration of Study: The study was conducted in IIMC from 1st October 2013 to 30th July 2014.

Materials and Methods: The study method chosen was archival research. The data was collected from the official websites of the program. Purposive and convenient sampling method was used to select 08 programs, 04 each from United Kingdom and Pakistan. As programs in Pakistan offer only blended programs, hence only blended programs were included in the study. Manifest conventional content analysis of the data was done using NVIVO 10.

Results: Common assessment tools used to assess competence were assignments and dissertation submission in all the programs. Programs in UK also used portfolios whereas in comparison only summative examination using MCQ, SEQ's and OSTE was employed in Pakistan. All programs in the study assessed student at 'shows how' level except 02 programs in UK, which assessed Meta competency (Does level).

Conclusion: Distant learning blended programs in HPE assess competency at different levels of competence. This results in variability of level of assessment and hence affects the eventual outcome. A uniform method of assessment should exist for master programs in health professions education to ensure uniform learning and outcome.

Key Words: *Assessment Tools, Distant Learning Programs, Health Professions Education, level of Assessment.*

Introduction

MHPE programs aim to produce effective leaders in medical education.¹⁻⁴ These programs are an emerging field and mushrooming at a fast pace. The reason for this surge is understandable. However what needs to be ascertained is the professionalization of these programs. Professionalization is defined as the process of giving a professional character, identity, or status to 'Health Professions Education' as a profession. It involves establishing a suitable and accreditable qualification,

satisfying both national and international needs of medical education.⁵ As we know that 'Assessment drives learning'^{6,7}, implementation of the learning outcomes of the MHPE programs have direct relationship to the type and level of assessment that is being employed in these programs. The main objectives of this study were:

- To investigate the assessment tools and processes used to assess students of MHPE programs in Pakistan for achieving the learning outcomes of the program.
- Compare this process in developed (United Kingdom) and developing countries (Pakistan).

Materials and Methods

It is a Qualitative archival study in which archival method of research has been used. In archival research, the researcher collects data stored in archives. The archives can be in the forms of newspapers, articles of journals, books or websites. The reason for choosing archival research was its simplicity, ease of gathering data and easy

¹Department of Surgery/ Medicine²/ Pathology³
Islamic International Medical College
Riphah International University, Islamabad

Correspondence:

Dr. Omer Awwab Khan
Associate Professor, Medicine
Islamic International Medical College
Riphah International University, Islamabad
E-Mail: omer.awab@riphah.edu.pk

Funding Source: NIL ; Conflict of Interest: NIL
Received: Feb 25, 2016; Revised: Apr 15, 2016;
Accepted: May 06, 2016

availability of the archives. More over because of the type of objectives of the study the data required to analyze was present in the archives available via internet and did not require to collect data through other methods as questionnaires, interviews or emails.⁸

To collect data, first the website of the program was found through www.google.com. The next step was to locate the information provided about the program. The data about the MHPE program was either present in pdf format or information given on the webpages itself. All the concerned pdf files and webpages were downloaded and opened in NVIVO. Convenience and Purposive sampling technique was used.^{9,10} Eight MHPE programs were selected. Out of these, four programs were from Pakistan (developing country) and four were from the United Kingdom (developed country). Eight programs were included in the study as they yielded enough data to ensure validity and reliability in a qualitative study. It was also taken into consideration that data from 08 programs had to be transcribed and coded into themes. In qualitative case studies, handling this amount of data requires considerable time and work. The programs were selected each from well-established and newly established institutes running these programs.

Results

All programs in UK and Pakistan used assignments at the end of a module or a semester. All programs included in the study from UK required dissertation for the award of master's program except one university. Two universities from UK used portfolio as their tool of assessment. All programs in Pakistan used written assignments and dissertation for assessment purposes. However, two universities also had a summative exit assessment. The detailed results are reported below:

Discussion

The global distribution of MHPE programs is not uniform. The reported number of MHPE programs was 121 Up to 2013. The maximum number of programs are offered in USA (32) followed by UK (31).¹¹ The number of programs in Pakistan was only two until 2012¹² however it has increased to 6 now. All these HPE programs share many features in common but they have a lot of differences as well.

Table I: Duration and mode of delivery of the content (UK= United Kingdom, we=Well Established, ne= newly established, PK= Pakistan)

Program	Duration	Mode of delivery of the Content
UKwe1	1 year for on campus and flexible for DL	On campus ,Blended/Complete Distant learning (DL)
UKwe2	1 – 3 years	On campus , Blended Distant learning
UKne1	1 - 5 years	On campus , Blended Distant learning
UKne2	3-5 years	On campus ,Blended Distant learning
PKwe1	2 years	Blended Distant learning
PKwe2	2 years 6 months	Blended Distant learning
PKne1	2-5 years	Blended Distant learning
PKne2	2-3 years	Blended Distant learning

Table II: Type and duration of contact session

Program	Type of contact session in distant learning
UKwe1	On campus Flexible Face to face/ Completely online
UKwe2	Face to face online/on campus once a week
UKne1	Flexible on campus session 1-4 days per semester
UKne2	18 tutored hours per 15 credits
PKwe1	Face to Face on campus 10 days session 6 times
PKwe2	Face to face on campus for 1-2 weeks. Total contact time 12 weeks
PKne1	Face to face 8 contact sessions, each of 1-2 weeks
PKne2	04 contacts sessions, each of maximum 02 weeks

Table III: Exits in the program

Program	Exits in the program
UKwe1	Certificate, Diploma , Masters
UKwe2	Certificate, Diploma , Masters, PhD
UKne1	Certificate, Diploma , Masters
UKne2	Certificate, Diploma , Masters
PKwe1	Masters
PKwe2	Masters
PKne1	Certificate, Diploma , Masters
PKne2	Masters

Table IV: Details of Assessment tools used

Program	Assessment tools
UKwe1	1-4 summative assessment for each module in the form of written responses, presentation, practical exercises, Dissertation
UKwe2	Portfolios comprising of assignments , Dissertation
UKne1	Portfolios comprising of written assignments, effective use of audio-visual material, exercises in teaching, plan for acting on the feedback of students and peers , critical reflection on videotaped sessions, Dissertation
UKne2	Written assignments, presentations, posters, coursework
PKwe1	Assignments , Objectively structured teaching exercise, Dissertation (written and oral defence)
PKwe2	Assignments , End of year summative examination , Dissertation
PKne1	Assignments , Dissertation defence
PKne2	Assignments , Dissertation

Table V: Classification of assessment tools according to Miller's Pyramid

Program	Level
UKwe1	Shows how (Competence)
UKwe2	Does (Performance/Capability)
UKne1	Does (Performance/Capability)
UKne2	Shows how (Competence)
PKwe1	Shows how (Competence)
PKwe2	Shows how (Competence)
PKne1	Shows how (Competence)
PKne2	Shows how (Competence)

The flexibility of a program is evident from the optional modules it offers to its students. The optional modules are only offered in UK programs which give the students freedom to choose from topics of their interest. Programs have options for surgeons, anesthetists and gynecologists. A lot of emphasis in these programs is on the impact of medical education in clinical training. This is lacking in Pakistani programs where only one program offers options of electives. Flexibility is further enhanced in UK programs by offering exit at multiple levels. Duration of these program is variable extending from 1 to 5 years. The mode of delivery varies from complete distant learning (DL) to distant learning with contact sessions. Contact sessions are offered in

different formats including contacts sessions using web boards, Skype, Adobe connect, and physical face to face contact sessions.^{1-4,13-15}

In UK, the MHPE programs offered by Universities are either on campus, blended or complete distance learning. In Pakistan the programs are only blended, which includes an average of 6-8 weeks of contact session, which offers very little flexibility to the students. In authors observation, one of the main reason for the difference in flexibility of these programs is that complete distance learning programs are still not recognized by the accreditation body in Pakistan.

Learning outcomes in masters in Health professions education are assessed by variety of assessment tools. Most of the programs use both formative and summative assessment methods.

The tools used are pen and paper methods; OSCE, OSTE, Short Essay Questions (SEQ's), Multiple choice questions (MCQ's), portfolios, assignments and oral defense of thesis.^{11,12} These tools assess 'shows how', to assessment strategies that evaluate 'Does' of the Miller's Pyramid. All programs have aligned learning outcomes and learning strategies with assessment tools to achieve the desired outcomes.

Programs in United Kingdom are more flexible as they offer exits at different levels, optional and specialized modules to study and different modes (complete distant learning, blended and on campus) of program to choose from. They also aim to produce capable medical educationists (at the 'does' level), who can perform in real life situations. Programs in Pakistan are in their infancy, however their learning outcomes, assessment and learning strategies share a lot of features in common with programs in UK. The main contrasting feature though is minimal flexibility and assessment at the 'shows how' level.

Conclusion

Distant learning blended programs in HPE assess competency at different levels of competence. This results in variability of level of assessment and hence affects the eventual outcome. Guidelines and standards from Regulatory and Accrediting authorities should stress on uniform method of assessment for master programs in Health Professionals Education to ensure uniform learning and outcome throughout world.

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