Kuram ve Uygulamada Eğitim Bilimleri • Educational Sciences: Theory & Practice - 11(4) • Autumn • 2001-2004

How Do Medical Specialty Training Educators and Trainees Perceive Medical Specialty Selection Examination (TUS)*

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Abstract

In this study, it was aimed to explore whether a single-step examination is adequate for ranking the medical graduates for specialty training in medicine which is practically similar to doctoral training (PhD) in other disciplines. For this purpose, a semi-structured interview-based qualitative research was carried out at a university medical center to identify the outlook of educators and the trainees to TUS system. Using systematic cluster sampling, 14 faculty members and 27 residents were interviewed face to face. Evaluating the study results, a great majority of the participants emphasized that a centralized examination system is mandatory; however, the critical themes were condensed on the necessity of modifications such as multi-step testing, improvement of test contents to be more specific for the needs of particular medical specialties and adjustments to justify the importance of undergraduate medical education

Key Words

Medical Specialty Selection Examination, Medical Education, Vocational Counseling.

In Turkey, following a six-year undergraduate medical education, medical school graduates who receive a 'Medical Doctor' degree target entering a medical specialty programme to be a specialist. The only way to enter a specialty programme is to succeed on Medical Specialty Selection Examination, TUS, a centralized multiple choice test, held by the Student Selection and Placement Center (ÖSYM) biannually since 1986. TUS examination is constituted of 100 multiple choice questions in basic and clinical sessions on a single day (Güner, 2004). The attendants are ranked by their TUS scores and centralized placement of the physicians is made by ÖSYM according to their grades, listed positions and their choices ÖSYM (2009). However, this placement is restricted by the number of positions listed, especially in popular residencies and large numbers of attendees, therefore, mismatches or no placements are frequent. Physicians who could not match their desired residency positions and who could not enter a residency programme may take the TUS examination again and again and the number of participants increases year by year due to this cumulative effect with increasing number new medical schools and new graduates. However no significant modification was made in TUS system since 1986.

As medical specialists have a direct impact in patient care, accurate selection of medical specialty students has a high importance and practical impacts on the quality of healthcare system. Mismatches and selecting wrong candidates for particular medical specialties may have direct effects on human health and efficacy of healthcare organizations (Tunç & Özen Kutanis, 2009).

* Presented in 7th International Knowledge, Economy and Management Congress.

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Although Turkish Ministry of Health tries to put the general practitioners and primary care physicians in a more centralized role in healthcare system, currently the medical specialists are still in the core of Turkish healthcare system. Medical specialty training already has its own problems and mismatched students and TUS system seems to be one aspect of these problems (Asan, 2007).

Medical specialty training is practically similar to doctoral training (PhD) in other disciplines, whereas several steps including an oral examination and interview is integrated in PhD selection, TUS remains the single and only step in medical specialty placement, moreover no reformative modifications were settled in TUS examination and ranking system (Şahin, Batı, & Karabilgin, 2003). Interestingly some investigators recommend TUS system for PhD selection as well (Gözler, 2005).

World Federation for Medical Education defined the main purpose of medical education as to provide good clinical practice to provide a healthy life for human; therefore it is critical to choose correct physicians for correct specialties according to the needs of the specialization (Saçaklıoğlu, 1997).

As new medical schools are established nationwide in recent years there are inequalities in medical undergraduate programs between the older experienced and newly built medical schools, TUS examination questions are prepared mostly by major is not homogenized in medical schools, medical school graduates and demand for specialty programs increase constantly but the number of open positions does not increase at the same pace so these make the TUS system highly competitive and private medical preparation courses are established nationwide to cover this demand (Aygün, 2008). However, this develops a threat for classical medical education as medical students concentrate on TUS preparation learning to deal with multiple choice test technique starting from their early undergraduate level instead of their classical medical education, and learning the patient-physician interaction (Yıldız et al., 2008).

Unlike Turkey, Medical Specialty Selection is a complex, multi-level process in other OECD countries such as Germany, USA, Austria, Brazil, France and Japan (Birolini, Ferreira, & Rasslan, 2002; Flierl, 2008; Green, Jones, & Thomas, 2009; Kozu, 2006; Segouin et al., 2007; Spiegel, Haoula, Schneider, & Maier, 2004).

The purpose of this study is to explore the perceptions of faculty giving the medical specialty education and residents receiving specialty education in the context of TUS as a centralized single step selection tool in medical specialty placement.

Method

Research Model

Semi-structured interview-based qualitative case-control research method was used in the study. Face to face interviews were performed by faculty members and medical specialty students at a University Hospital to identify the perceptions of TUS examination system in residency selection.

Participants

4 professors, 5 associate professors, 5 assistant professors and 27 residents (medical specialty students) who were randomly chosen by 1/7 systematic cluster sampling (Baykul, 1999; Gökçe, 1988) from various medical specialties (Basic Medical Sciences, Internal Medical Sciences and Surgical Medical Sciences) at a single University Hospital were included in our case study.

Data Collection

The data in this study were collected by an interview form including open-ended questions to reveal the perceptions of TUS system and close-ended questions on demographics data of the participants. Main themes of these perceptions include:

1. General perceptions of TUS examination,
2. Professional and practical consequences of TUS system,
3. Thoughts on an ideal system for medical specialty selection.
4. Perceptions of PhD selection systems in other disciplines.

Data Analysis

Content analysis was used to analyze the data obtained by the interviews (Yıldırım & Şimşek, 2005). In order to increase the internal validity and reliability participants' frequent referrals were made to the participants' expressions.

Results

The findings of the research are as the followings:

1. Among 27 residents, 5 were in a medical specialty in basic medical sciences, 11 in each were in internal medical sciences and surgical medical sciences. 15 residents were male and 12 female. 14 of 27 residents have entered TUS examination more than twice or previously mismatched to an unwanted specialty and quit from their specialty education programmes before matching to their current position.
2. General perception of TUS system was positive by both the educators and medical specialty trainees as a centralized examination minimize favoritism and injustice between participants which is quite common in Turkey.
3. General negative perceptions of TUS were condensed on constitution and content of TUS examination, as TUS is not really selective but ranking. TUS lacks to measure the ability and practical skills of the participants for a particular medical specialty.
4. Perceptions of both the faculty members and medical specialty students on the quality and measurability of TUS examination were generally negative and most of them declared that modifications were necessary in constitution of TUS examination.
5. Regarding the professional, vocational and practical impacts of TUS half of the participants who were placed in their current medical specialty training programme declared that they were not happy with their current specialty and considering to change their specialty areas by re-entering the TUS examination.
6. TUS preparation courses increased in number, were seen as a threat for undergraduate medical education by both the students and the faculty members.
7. When their thoughts for an ideal selection method was asked, the majority of the students and faculty members declared that a centralized examination is a must but the examination and selection style should be modified.
8. Medical specialty students and faculty members were found unaware of PhD selection methods in other disciplines to make a comparison with TUS system.

Conclusion

When we evaluate the general perceptions of TUS system in Turkey, despite the negative thoughts on the examination style and constitution of TUS, the feelings of justice and prevention of favoritism were prominently put forward by the participants of the study. Therefore most of the participants have ambivalent feelings on TUS system. The justice emphasis dominates over the negative aspects of TUS.

In parallel with a previous study (Çiçek & Terzi, 2006) our findings support that TUS is inadequate to measure individual ability and skills for certain specialties. The participants recommend modifications such as multi-step examination, increasing the number of questions and customized specialty oriented questions as well as a centralized measurement of ability for a certain specialty however they constantly oppose an interview-based selection method.

Placement in an unwanted specialty and re-entering the competitive TUS examination may develop stress and anxiety as supported by our findings. 14 of our 27 students had such an experience and they declared social pressure and stress due to their position. Preparation for the exam while they needed to perform their custom duties in their unwanted medical specialty were found as a stressful and devastating period. Therefore resident turnover rates are quite high with the current TUS system in Turkey. When they resign from their unwanted residency position, the faculty could not substitute them until the next TUS placement so this also negatively effects the patient care of the clinics giving the specialty education.

TUS system may give a way for individuals who are not suitable for a certain specialty to enter such a specialty position. For example a physically handicapped physician may enter an Orthopedics programme, which may eventually cause problem for himself, the clinics, and the patients.

Despite all these negativities, TUS, as a centralized examination was found acceptable and fair by majority of the physicians and there is a strong resistance among physicians against an interview-based examination alternatives. Previous studies (Yıldız et al., 2008) also support that centralized examinations are seen more equitable and fair in Turkey which has paternalistic and collectivistic culture and an interview based examinations may lead to favoritism.

We believe the findings of this study may enlighten the necessary modifications to improve the TUS system in selecting medical specialty students in a more convenient way.

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