

## Readiness of Dentists in Selected ASEAN Countries on Mutual Recognition Arrangement (MRA): Implications to Enhancement of Dental Education

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### Abstract

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*ASEAN 2015 was created in response to the global trend of liberalization and regional integration. Under the free flow of services in the ASEAN Economic Community pillar, qualified professionals including dentists can freely move and practice their profession in any ASEAN country. While the Mutual Recognition Arrangement (MRA) for Dental Practitioners was provided to strengthen the professional capabilities, the big question is, how ready are the dentists to embrace the challenges ahead? The descriptive method of research was used to assess the level of readiness of dentists in four ASEAN countries as to the competency standards stipulated in the MRA for Dental Practitioners and compare them according to specific characteristics. Description of the specific curriculum components of one representative dental school in four ASEAN countries, and the domestic regulations, qualifications and requirements of these ASEAN Members regarding dental examinations, registration and renewal of registration were also done as a basis for curriculum restructuring to enhance dental education. Questionnaire was utilized to gather pertinent data where frequency, percentage, mean, standard deviation, T-test and Analysis of variance were employed to treat gathered data. Results revealed that dentists in country B are ready to a “very large extent” in professionalism, biomedical technical and clinical sciences, acquiring and using information, clinical information gathering, and diagnosis and treatment planning core competencies. Dentists in country D on the other hand show the same level of readiness in professionalism, clinical information gathering and oral health promotion while dentists in countries A and C in clinical information gathering only. When level of readiness was compared there was no significant difference in gender, number of years in active practice, type of practice, area of specialization and country. However, a significant difference was seen in age particularly at 46-50 years old in acquiring and using information and clinical information gathering aspects. There is therefore a need for curriculum developers and innovators to restructure the dentistry curriculum to be competency-based to be able to align it to the competency standards set by the MRA for Dental Practitioners.*

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**Keywords:** ASEAN 2015, Competency- based, Core Competencies, Mutual Recognition Arrangement (MRA), Readiness

### Introduction

Stretching over four million square kilometres and home to 600 million people Southeast Asia is one of the most diverse regions on earth. Amidst this diversity, global trend of liberalization led to the creation of ASEAN integration with the motto “one vision, one identity and one community” hoping to establish a would-be concert of nations bound together with a common goal of sustainable development.

The Philippine government responds to this challenge by utilizing its agencies like the Technical Education and Skills Development Authority (TESDA), Department of Tourism (DOT) and the Commission on Higher Education (CHED) by actively engaging them in the preparations for the implementation for Mutual Recognition Agreements. The Commission of Higher Education Commission (CHED) should be fully aware that education particularly the higher education has important role in supporting the establishment of ASEAN Community and preparing Filipino people and the Philippines for the regional integration (Aldaba 2013). But at this point in time, barely a year more before its full implementation, we are confronted with this question, “How ready are we for global competitiveness in knowledge, skills and competencies not to mention that the Philippines woefully lags behind its neighbouring ASEAN countries in terms of basic education?”

Assessment is an indispensable component of curriculum practice. In an educational system, one of the prime considerations of administrators, teachers, and students alike are the outcomes of learning (Mikre, 2012). The ability of students to demonstrate because of an increase in their knowledge and changes in understanding as influenced by their experiences in school or college affect the quality of learning and competencies that can be transferred in the work place. There should be an emphasis on the necessity of coherence in a curriculum development to improve and deepen skills, concepts, attitudes, values, and extend professional expectations. An outward-looking orientation must be complemented by an alignment of laws and regulations that facilitate the expected benefits and lessen any adverse effects of interfacing closely with the world demand (Riguer 2012).

### **Method and Procedures**

The researcher utilized descriptive method of research to assess the readiness of Filipino dentists as compared to their Southeast Asian counterparts by exploring the domestic regulations, professional qualifications and requirements governing the practice of dentistry in Thailand, Malaysia, Philippines and Indonesia with dentistry curriculum assessment of Chulalongkorn University, University of Malaysia, Centro Escolar University, and University of Indonesia dental schools.

The study used two sets of survey questionnaires constructed by the researcher and professionally validated by two deans, one assistant dean for the administrator questionnaire and twenty faculty members who are engaged in active practice for five years for the dentist questionnaire before the final draft was made. The first questionnaire was composed of institutional profile of the selected dental institution categorized into: the number of years to obtain a basic dental degree, the years of existence, postgraduate programs, average student enrolment for the past 5 years, number of faculty members for the past 5 years, and highest educational attainment of faculty members, and the profile of countries where the study was conducted included items about examination, registration and renewal of registration. Status of the dentistry curriculum of the representative institution was also assessed which include human resource and physical facilities, curriculum structure, content, delivery, assessment, staff and student exchange, and research activity.

The second questionnaire was for the dentist respondents composed of two parts. The first part was about the profile of the faculty members such as gender, age, number of years in active practice, type of practice, and area of specialization. Part two was about the level of preparedness subdivided into four subparts namely professionalism, basic biomedical, technical and clinical sciences, clinical skills and oral health promotions. Clinical skills was further broken down into three sub-areas which are the clinical information gathering, diagnosis and treatment planning and oral care and oral health rehabilitation.

The respondents of the first questionnaire were the deans of the dental institutions mentioned. They are considered to be well versed of the existing regulations prevailing in their respective country and the curriculum used in their respective institutions. Likewise a special population of five faculty members who are section coordinators and graduates of the school where they are now employed are utilized from each dental institution who are in active practice for at least five years answered the second questionnaire.

The researcher secured ethics approval from Centro Escolar University, endorsement letters from the graduate school and the dissertation adviser and approval letters to conduct study from the deans. Research protocol required by each dental institution was strictly followed by the researcher before personally conducting the study.

### **Results and Discussions**

Institutional profile indices show large differences in several criteria which could possibly be areas for improvement.

In the number of postgraduate program offerings, institution D outshines the rest with the most number at 9 programs which probably means that it is an academic/teaching institution focusing on educating the minds and honing the skills of individuals who value dental education in their lives. Also, the student and faculty ratio is incredibly low in institution D which is almost 1:1 ratio as compared to close to 30: 1 ratio in institution B. This could be an alarming concern in terms of teaching and learning aspect that could perhaps compromise the level of quality dental education that institution B can offer. These data support the fact that institution B is the only private school among the four institutions considered in the study and it has to exist and sustain within its income with less expenses thus the very high student and teacher ratio.

In terms of the highest educational attainment of faculty members, institution D shows the highest percentage of 61-80% with PhD degree because as an internationally renowned academic institution it has a vision of providing knowledge, morale, national reference, and academic leadership for further development. Institutions A and B are generally low in Master's and PhD degrees of their faculty members What seems to be a negative impact on countries A and B is

**Table 1: Institutional Profile of Selected Dental Institutions**

Particulars	Institution A	Institution B	Institution C	Institution D
Years to obtain Dentistry Course	5	6	6	6
Number of Years of Existence	40	106	53	80
Postgraduate Programs Offered	Orthodontics, Periodontics, Prosthodontics, Oral and Maxillofacial Surgery, Oral Pathology, and Dental Public Health	Orthodontics and Periodontics	Orthodontics, Periodontics, Prosthodontics, Pediatrics, Oral and Maxillofacial Surgery, and Operative Dentistry	Orthodontics, Periodontics, Prosthodontic, Pediatrics, Oral Biology, Oral and Maxillofacial Surgery, Operative Dentistry, Oral Pathology, and Dental Public Health
Average student enrolment for the past five years	265	3,590	Less than 250	330
Number of Faculty Members for the past five years	75	123	128	186
Highest Educational Attainment of Faculty Members	DDM/MA/MS Postgraduate Dental degree = 61-80% PhD = 21-40%	DDM/MA/MA =81-100% Postgraduate Dental Degree =10-20% PhD= 21-40%	DDM/MA/MS =10-20% Postgraduate Dental and PhD degree = 41-60%	DDM/MA/MS Postgraduate Dental degree = 10-20% PhD=61-80%

positively reinforced by the study of (Badgett, Decman, & Carman, 2013) that the change in math achievement at the minimum passing level for students of teachers holding master's and doctoral degrees and the change at the commended level for students of teachers who held doctoral degrees was insignificant. This could therefore disprove the general concept that the performance of students held by teachers with graduate degrees would significantly predict and add a positive contribution to their achievement as revealed in the findings of the said study.

As to curriculum component, institution D has very rich human resource with complete physical facilities included in the study.

Institution B has strong curriculum content pertaining to the number and units and hours necessary to attain pre-dentistry and dentistry courses including the number of clinical requirements. Likewise, different traditional and non-traditional assessment modes were “always” used by the said institution. On the other hand, various delivery methods and activities pertaining to research included in the study were utilized by institution C “always” while staff and student exchange activities were “always” practiced by institution A.

Strengths and weaknesses in different curriculum components were then determined to identify areas for development. Institution B has to increase the number of its postgraduate program offerings as it only has 2 at this point in time as against the 9 offerings of institution D. Institution B has 30:1 student:faculty ratio which is too way high as against the almost 1:1 ratio in institution D. Also, institution B needs to hire more personnel to enrich its human resource including construction of a dental hospital together with institution A. Contrariwise, institutions A, C and D need to increase their number of clinical requirements to attain a dentistry course as they are far too behind by 50-75% of the requirements set by institution B. Meanwhile, institution D has to use more often the curriculum delivery modes, non-traditional assessment methods and activities pertaining to student and staff and research activities because they were found to be used “seldom”.

Differences are very evident in all the regulations governing the licensure examination. On the language aspect for example, English is the most commonly used language not only in Asia but around the world and it can be safely said that Countries A and B have an edge as regard the preparedness of dentists for Mutual Recognition Arrangement. Country D has to improve on the areas of the number of examination attempts allowed and the necessary remedial measure to undertake after failing in the allowed number of attempts because it is far behind when compared to the other three countries in terms of standardization of borderless practice. Licensure examination is the utmost evaluative tool for the summative learning of a graduate to determine his readiness to engage into the profession. This, therefore, warrants a review of the policies by the Professional Regulating Body governing the practice of dentistry in the said country. In the modes of assessment aspect country D uses multiple choice only which may not be an adequate evaluation tool in a dentist licensure examination. It should include both the theoretical and practical phases because dentists should have both the knowledge and practical skills as they will work on actual patients in their practice later on. Countries A, C and D should increase their passing percentage in the licensure examination because theirs is far more behind than the 75% passing percentage of country B. Performance in the Licensure examination is very critical as to

**Table 2: Domestic Regulations, Professional Qualifications and Requirements of Selected ASEAN Countries as to the Licensure Examination**

Particulars	Country A	Country B	Country C	Country D
Language	English	English	Local	Local
Number of Examination attempts allowed	2	3	3	Until Passing
Remedial Measures to be taken beyond the allowed number of examination attempts	Refresher Course	Refresher Course	Refresher Course	None
Modes of Assessment	Multiple Choice Practical Essay	Multiple Choice Practical	Multiple Choice Practical	Multiple Choice
Passing Mark	50%	75%	50%	50%
Qualifications	Local Graduate Foreign Graduate of Recognized Dental School Passer of Test of English as a Foreign Language	Local Graduate	Local Graduate	Local Graduate Foreign Graduate of Recognized Dental School
Requirements	Basic Dental Degree Certification/Transcript of Records NRIC/Passport/ACR	Basic Dental Degree Certification/Transcript of Records Certificate of Good Moral Standing NRIC/Passport/ACR	Basic Dental Degree Certification/Transcript of Records	Basic Dental Degree Certification/Transcript of Records

the preparedness of dentists to be engaged in the Mutual Recognition Arrangement. Ong and Palompon's study revealed that there is a very significant correlation between the performances of nursing students in Cebu Normal University and the licensure examination (Ong & Palompon, 2012). The study concluded that students' academic performance in their baccalaureate program and their performance in the pre-board examination are significant bases in determining the success and failure of students' licensure examination performance. Needless to say that high passing percentage in the licensure examination would suggest an expected high performance in the practice.

All countries were comparable as to type and qualification for registration but country C requires certificate of fitness to practice dentistry from a local medical practitioner, hepatitis B status, and character reference from the dental institution where the applicant graduated as additional requirements before a board passer can be registered as a professional dentist.

Country A has very strict regulations regarding renewal of registration as it compulsory requires 31-60 CPE units to be accumulated in one year before renewal of license is allowed. A master's degree is also required within three years after the first registration.

**Table 3: Domestic Regulations, Professional Qualifications and Requirements of Selected ASEAN Countries as to the Renewal of Registration**

Particulars	Country A	Country B	Country C	Country D
Frequency	Yearly	3 Years	5 Years	-
Continuing Professional Education (CPE)	Compulsory	Temporarily Optional	Compulsory	Optional
Number of CPE units requires	31-60	31-60	31-60	-
Number of Months CPE units should be accumulated before Renewal	12	36	60	-
Postgraduate trainings/courses required	MS	-	-	-

Majority of the dentist respondents were female with older of them found in countries B and C and have been in active practice for more than eleven years who are engaged in different types of practice and areas of specialization.

**Table 4: Dentist Respondents' Profile**

<b>Dentist's Profile</b>				
Particulars	Country A	Country B	Country C	Country D
Gender	Female	Female	Female	Male
Age	Equally distributed	51-55	56-60	Equally distributed
Number of years in Practice	31 and above	26-30	26-30	11-15&21-25
Type of Practice	School-based	Private	Hospital-based	School based
Area of Specialization	Prosthodontics	Ortho/Pedo	Ortho/Pedo & OroMaxillo/Perio	Ortho/Pedo & Public Health

Despite that institution B has some areas identified for improvement such as human resource, physical facilities, student and faculty ratio and number of post graduate program offerings, dentists in country B were found to be ready to a “very large extent” in five of the seven core competencies mentioned in the Mutual Recognition Arrangement for Dental Practitioners which are professionalism, biomedical technical and clinical sciences, acquiring and using information, clinical information gathering, and diagnosis and treatment planning core competencies probably because of its very robust curriculum content in terms of number of units and hours necessary to attain both pre-dentistry and dentistry courses including a higher number of clinical requirements by 50-75% more than other institutions considered. Dentists in country D on the other hand show the same level of readiness in three out of seven which are professionalism, clinical information gathering and oral health promotion while dentists in countries A and C in only one out of seven which is clinical information gathering.

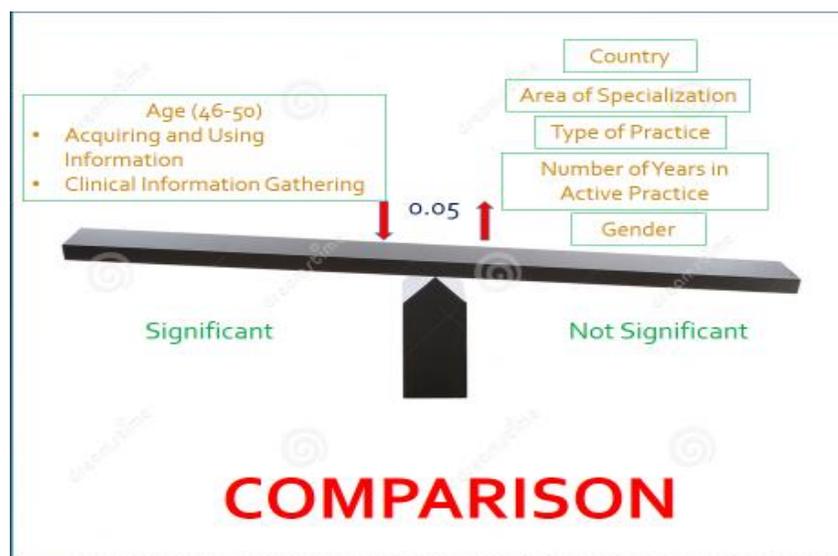
It can be deduced from the presented data that the order on the level of readiness as to country is country B, country D and countries A and C.

**Figure 1: Summary on Level of Readiness of Dentists in Different Core Competencies**



Certain variables were used to compare the level of readiness of dentists in all core competencies covered in the Mutual Recognition Arrangement for dental practitioners. It was found out that there was no significant difference in the level of readiness when compared according to gender, number of years in active practice, type of practice, area of specialization and country. However, a significant difference is shown in two aspects which are the acquiring and using information and clinical information gathering. In acquiring and using information, it can be seen that a value of .025 is less than .050 level of significance. Specifically, the age bracket 46-50 is found to have a significant difference on the assessment of respondents belonging to 41-45 age bracket, 51-55, 56-60, and 61 and above age groups. In clinical information gathering it showed the value of .016 which is less than .050 level of significance. This implies that different age brackets have different levels of readiness as regards these two competencies.

On the other hand, twenty first century is considered as an information age where information-processing equipment come to dominate practically all areas of science-related disciplines including dentistry. If the level of dentist respondents' readiness was affected significantly at age 46-50, dental education maybe affected tremendously in the information gathering aspect by teachers who belong to this age group. This should be carefully considered by the stakeholders of curriculum because as the study of Dr. James Sumner also revealed that students of information age have developed skills in critical reasoning and analysis, and the differences in the ways they interpret and describe events are extremely improved (Sumners2013).



**Figure 2: Comparison of Level of Readiness on all Core Competencies**

## Conclusions

1. A strong institutional profile has no bearing in the readiness of dentists on core competencies for Mutual Recognition Arrangement.
2. Dentists of institution with rich curriculum content using various assessment modes “always” with higher passing percentage in the licensure examination have higher level of readiness than other dentists.
3. There is a felt need for dental institutions to improve on all curriculum components covered in the study.
4. There are different regulations, qualifications and requirements governing the practice of the dental profession in the four countries included in the study which might pose problems on borderless practice.
5. Faculty members regardless of country, assigned to different sections of dentistry and are exposed to different cases for several years have gained much experience and maturity to better respond to the demands of the Mutual Recognition Arrangement.
6. Age played a significant role in the data gathering aspect of the core competencies.
7. There is a need to revisit and reconstruct dentistry curriculum into competency-based to increase the level of preparedness of dentists in the competency standards set by the MRA for dental practitioners.

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