

Assessment of general practitioners' needs and barriers in primary health care delivery in Asia Pacific region

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ABSTRACT

Background: Primary health care is the key to achieve universal health coverage and health for all. The role of general practitioner is now more important than ever. Gaps exist between primary care doctors' needs and available resources. Primary care professionals everywhere in the world are expected to provide basic standard of care and fulfill the unmet needs of the population. "Needs assessment" is essential in order to develop plans that reflect clinical priorities, educational needs, patient-centered care, and effective and efficient utilization of resources. **Materials and Methods:** A blend of qualitative (28 in-depth interviews) and quantitative (315 survey respondents) research helped to identify the educational gaps of general practitioners in the Asia Pacific (APAC) countries. Our in-depth methodology assessed perceived needs in order to inform educational tactics that will engage physicians and drive changes in clinical practice. Barriers to change and best practices were identified so that those barriers may be addressed by the educational strategy. **Results:** Key findings include a strong need for education for chronic conditions such as mental illness, skin problems, diabetes, hypertension, and others. The majority of physicians indicated that they prefer education in all aspects of the disease, from screening and diagnosis to maintenance or referral. Most clinicians prefer live presentations and small groups over Internet-based formats. Sub-analysis based on demographic factors showed little differences in the perceived needs, but significant differences in barriers to best practices. **Conclusion:** "Needs assessment" gives an insight into barriers, interest, and necessity related to education and skills in primary care and the best ways to deliver it.

Keywords: Family medicine, general practice, needs assessment, primary care, primary health care, WONCA

Introduction

It has been identified that a gap exists between needs of general practitioners and available means and resources. These are important to strengthen primary health care based on local priorities and understanding of epidemiology of disease.

There is enough evidence to the fact that those physicians who are far from educational environments lack enough confidence in their clinical diagnoses.^[1] Most of the doctors working away

from academic institutions are recommended by their medical council/associations to participate in continuous medical education and professional development courses.^[2] It is required to maintain the high standard of health care and promote effective and efficient services. Needs assessments assist in planning such educational resources to meet knowledge gaps.

Insight gained by a wealth of epidemiological studies and clinical research has brought revolutionary changes over the past decade and changed the paradigms of approach. Recent advances have changed diagnosis and management strategies, and further research will bring a sizeable change in health care

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services. It is essential that physicians keep well informed of this ever-increasing plethora of contemporary advances in medicine.

Needs assessment is an important tool to assist with planning, developing, and evaluating an educational program. Educational requirement is defined as the difference between what is done now and what must be done to upgrade present performance to optimal performances.^[3]

Although these are beneficial, there exist various barriers which widen the gap like cost, distance, busy schedule, topic of interest, etc.

Asia Pacific (APAC) is a geographically large region and is home to substantial proportion of the world's population with significant diversity in culture, language, tradition, economic growth and disease epidemiology, and demography. Aging population, health workforce shortage, and ever-increasing health demands of the growing population are quite common in this region.

In order to plan effective and efficient continuous medical education, it is essential to assess and prioritize needs and barriers. It is imperative that physicians keep pace with evolving science to deliver quality health care. Hence, we conducted a study to identify and quantify the educational needs and barriers of general practitioners across APAC regions.

Materials and Methods

This was a cross-sectional study with a blend of qualitative and quantitative study. The estimated sample size was approximately 300 physicians in APAC regions, namely India, Pakistan, Thailand, Indonesia, and Malaysia. It involved one project partner as faculty advisors from each country. It was done over a period of three months, and the project goal was to improve the quality of care for patients in the APAC region by identifying the needs of physicians and then supplying education to meet those needs.

Methodology

An initial pilot study was done to validate the questionnaire to assess knowledge and performance gaps in each country. Based on the response of project advisors, a questionnaire was prepared. The questionnaire was established after expert committee meeting and the language accepted by all was English. It was set in a self-administered format and approximately 5 minutes of time duration was given to answer all the questions. It included open-ended as well close-ended questions with multiple-choice, Likert-type scales, true/false, etc. The questionnaire was assessed to include various dimensions of educational strategies towards bridging the knowledge and practice gaps.

Preliminary pilot testing was done on advisors from each country and was analyzed and reformatted. To ensure valid and reliable data, a systematic process was used to design, develop, and validate the needs-assessment tools. No private

health information was collected and personal information was collected only for purposes of reimbursing interviewees and survey respondents for their time.

Statistical analysis

Quantitative assessments underwent statistical analysis, utilizing common statistical tests to quantify and establish the statistical significance of gaps, attitudes, barriers, etc. Additionally, statistical analysis revealed correlations and relationships between demographic variables, knowledge gaps, practice gaps, and barriers to best practices. A master analysis utilized triangulation to compare data from different components and develop overall findings and recommendations.

Results

Initial pilot study was done on faculty advisors from Malaysia, Pakistan, Indonesia, Thailand, and India. We completed 28-hour-long interviews via telephone followed by in-person interview with physicians and faculty advisors. These interviews were mainly focused on the perceived needs, conditions most commonly treated, barriers to education, and current practices related to continuing professional development. Barriers to best practice were also discussed. These interviews also helped to identify touchpoints in general practice where clinician educational interventions were most helpful. The interviews served to inform development and validation of the survey tools used in the quantitative assessment.

Analysis of all the interview details led to general themes [Table 1] based on which questionnaire was designed.

This survey was done with 315 family doctors/general practitioners from APAC regions. Nearly one-half (142) of the responses were from physicians in Malaysia, followed by India (52), Indonesia (31), Thailand (29), Pakistan (17), Philippines (10), Singapore (9), Vietnam (6), and others (19).

Forty-seven percent of the respondents reported completion of a family medicine residency. The majority of the respondents

Table 1: Outcomes of interview - general themes

A lack of continuity in the care of patients is prevalent
Communication skills are needed
Treating patients in poverty-stricken areas is difficult
The lack of adherence due to cost or conflicting advice is problematic
A desire for patient education material was expressed
Opportunities to expand services for general practice/family medicine exist
Education is needed in the area of efficiency
A wide range of topics for continuing education exists
The general practitioners/family physicians need a way to do self-assessment
Keeping up-to-date presents a barrier
Physicians' lack of practice awareness creates a need
Educational design will be important

had fewer than 10 years in practice but representatives from each of the four age categories responded to the survey [Figure 1].

Only 11% of the respondents were from rural areas; the urban and a mix of urban and rural distribution was fairly [Figure 2].

The survey revealed that conditions most often encountered in practice out of 24 disease/conditions were diabetes, hypertension, respiratory tract infections and aches, and pains [Figure 3].

Most desired area of education according to respondents were mental health issues – 32%, health promotion – 25%, skin problem – 22%, diabetes – 22%, palliative care – 21%, and dementia/Alzheimer's – 21% [Figure 4].

In needs assessment regarding focus areas in education like screening, diagnosis, treatment, patient education, referral, ongoing care or all of the above, a vast majority of respondents selected all of these.

Additionally, in areas of special interest, the most favorite domains were dermatology – 63%, rheumatology – 47%, psychiatry – 44%, and endocrinology – 43% [Figure 5].

Regarding interest in various physician skills like physician–patient communications, communicating with specialists, motivational interviewing, patient-centered care, advocacy for family medicine, leadership training, majority showed equal interest in all of these.

The survey also looked into preferred formats for learning and education. Live workshops or small groups were most favored with 60% respondents followed by online readings 39%, live session with faculty 36%, videos 35%, printed reading 30%, online 24/7 presentations 28%, live online webinars 20% [Figure 6].

Factors influencing attendance in educational programs were evaluated, and cost was found to be the most critical barrier towards attendance in any educational meetings followed by the variety of topics, location, time, format (lecture/workshop, etc.), quality of faculty, organization/institution conducting the meeting, and venue [Figure 7].

The survey inquired about the role of education material for physicians and patients. There was a high value placed on education materials and information to support policy decisions.

Barriers to best practices as per respondents included primarily conflicting information/misinformation which patient received from others, lack of continuity, time constraints, communication gap, and non-compliance. Other factors were affordability, system issues, access to specialists, and location.

Regional variations about perceived barriers were also noted. Barriers were also analyzed with rural and urban settings, training

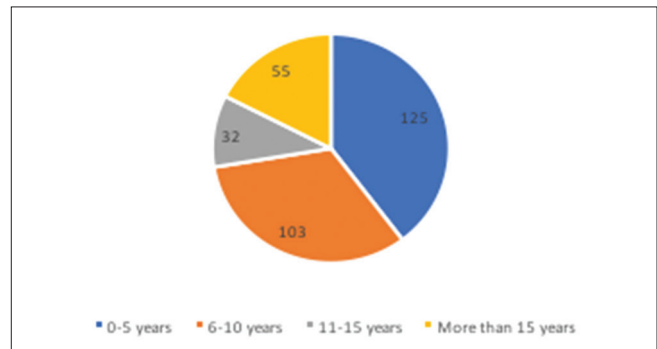


Figure 1: Years in practice

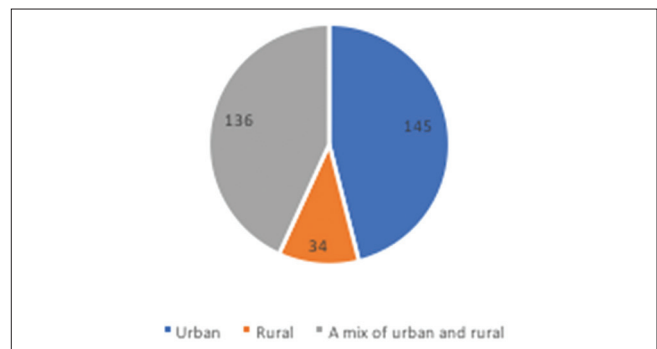


Figure 2: Practice setting

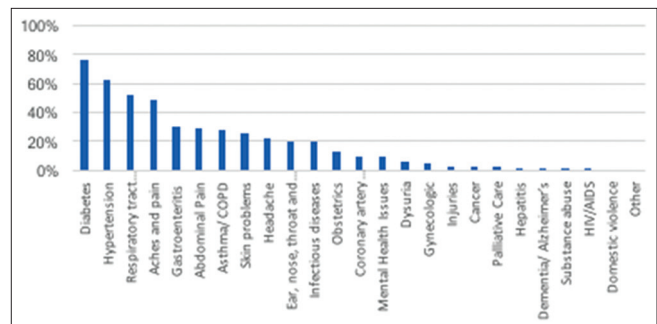


Figure 3: Conditions seen in practice

in family medicine, and experience as general practitioner. It was found that physicians perceive different barriers based on the country and the system in which they work. Barriers were also significantly higher among those who had not completed a family medicine residency, and when compared to experienced doctors, younger doctors faced more barriers.

Discussion

Assessment of general practice needs across APAC region showed various barriers, facilitators towards best care. It also revealed differences based on regions, experience, and training, and gave insight into actual needs and best possible ways to fill in those gaps.

It also delved into factors that influence clinical practice, training, and medical education.

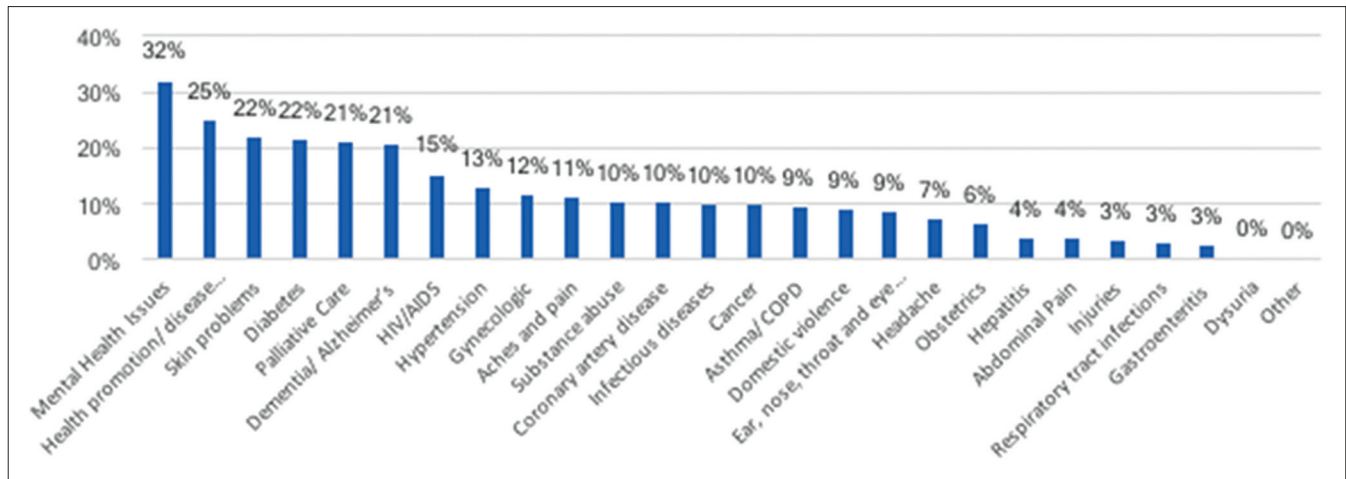


Figure 4: Desired area for education

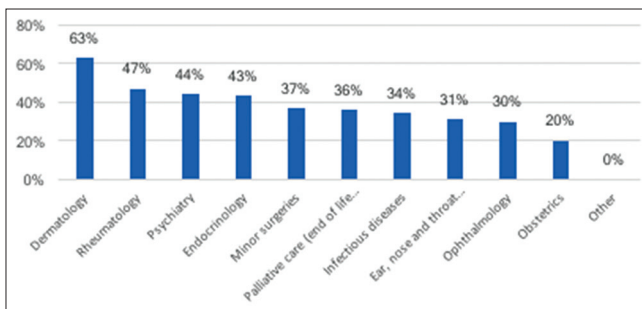


Figure 5: Areas of special interest

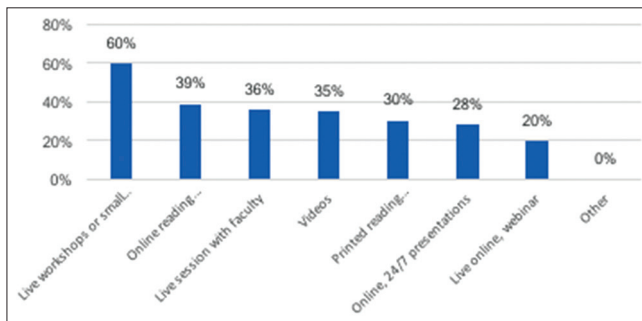


Figure 6: Preferred format of learning

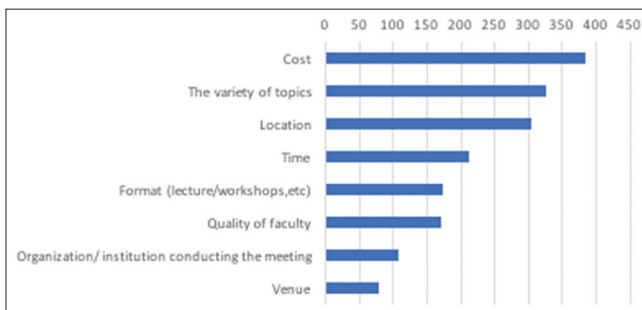


Figure 7: Influence on attendance

Common disease profiles encountered in clinical practice clearly include non-communicable diseases like diabetes and

hypertension as the most common cause for the visits. It was consistent across different regions. Globally, non communicable diseases (NCD) prevalence has increased and even more rapidly in South Asian countries.^[4]

Development of clinical interest as shown in our study is interesting and is an exciting opportunity for general practitioners to widen their horizons.^[5] Although, this has been debated with concerns regarding possible risk of fragmentation of general practice.^[6]

The generalist skills required to assess a broad range of health problems and manage them in a patient-centered way have been undervalued.^[7] Drift towards further specialization may be also due to the lack of recognition despite the evidence of fragmentation, increased cost, and decreased coordination.^[6]

Challenges related with doctor–patient communication and specialist referral are common across different countries in this region. Developing communication skills for general practice has been widely advocated, and medical curriculum revisions globally in the last 20 years have witnessed increasing number of teaching hours in communication skills.^[8] The goal is to improve the doctor–patient collaboration and relationship which is not an option, but a necessity.^[9] Our survey clearly outlines similar needs across different countries and practice localities. Primary care doctors need to continuously update and refine their skills to match with latest developments.

“Needs assessment” was also used to gain insight into motivation versus resistance to learn and best formats for the same. For a successful learning process, interaction is a key feature of the teaching methods employed in continuous medical education.^[10] Similar results were shown in our survey, where maximum respondents favored live workshops or small groups. It is essential to evaluate the needs and gaps in providing education. Professional physicians tend to experience more

barriers in learning owing to their busy schedule and family commitments.^[11]

Andragogy is methods and principle in adult education, and suggests that learning needs and styles are different in adults. Learning theories by Knowles identified six principles which are result oriented, autonomous and self-directed, life experiences and knowledge as a basis, relevancy oriented, practical, and high motivation to learn. While addressing those educational gaps, these principles should be taken into account during planning.

The most common limitations found in our survey to access these educational programs were the costs involved. Many studies have corroborated the financial aspect as the most threatening pitfall to such programs.^[12,13] The best way forward is to have clearly defined learning objectives with minimal logistics investment, a motivated audience, and the best format for learning.

Research studies have found that barriers to appropriate care and evidence-based management as perceived by general practitioners are gaps in knowledge, experience and skills, time pressure, and patients' requests conflicting with effective health care.^[14] Some studies have looked at these barriers for various domains such as structural, organizational, professional, patient-related factors and attitudinal, and the most common findings were time restraints, general organizational problems, insufficient counselling skills, experience and knowledge, low adherence, and negative attitude to prevention, respectively.^[15] Our study was consistent with these studies.

Rural urban disparity was evident in our study. There are significantly greater barriers due to affordability of tests and medicines and access to specialists for rural physicians when compared to urban counterparts. This is consistent with other studies confirming rural urban disparities as receiving standard of care therapy.^[16]

Conclusion

"Needs assessment" gives an insight into general practitioners' role in strengthening primary health care services. It explores various dimensions to empower general practitioners and enable them to provide comprehensive quality care.

Key findings from this study include a strong need for education for chronic conditions such as mental illness, skin problems, diabetes, hypertension, and others. The majority of physicians indicated that they preferred education in all aspects of the diseases, from screening and diagnosis to maintenance or referral. Most prefer live presentations and small groups over Internet-based formats. Sub-analysis based on demographic factors showed little differences in the perceived needs, but significant differences in barriers to best practices. Younger physicians experience more barriers than older physicians.

Physicians who have completed a residency experience fewer barriers than those who have not. Rural physicians have different barriers than urban physicians.

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Conflicts of interest

There are no conflicts of interest.

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