ASSESSMENT OF THE SCOPE OF PRACTICE OF PHYSICIANS FROM THE MORE DOCTORS PROGRAM IN BRAZIL, AND ASSOCIATED FACTORS

FOURTH GLOBAL FORUM ON HUMAN RESOURCES FOR HEALTH SKILLS MIX: OPTIMIZING SCOPES OF PRACTICE AND ROLES
14-11-2017
Introduction
Introduction

➢ Scope of practice refers to a set of functions and activities of a given health occupation.

➢ Determined by:
  ➢ Professional regulation
  ➢ Activities authorized by law
  ➢ Education and training
  ➢ Standards for exercising the profession
  ➢ Activities actually carried out in professional practice
  ➢ Patients demands
Introduction

Associated factors

- Gender
- Age
- Experience
- Work location
- Access to secondary care
- Access to specialists

Referral Rates

Costs

Access

Restrict

Broad

Referral Rates

Costs

Access

Baranek PM, 2005.
Federation of State Medical Boards of the United States, 2005.
Introduction

20% of municipalities with shortage of physicians and unequal distribution (Shortage Index)

Insufficient number of physicians

Very low propensity of physicians to go to remote and most needed areas (DCEs)

Projection studies indicated that even in the best scenario Brazil would not reach a sufficient number of physicians

Social perception that the shortage of physician was one of the main problems in health care

Evidence that pointed to a scenario of deep physician shortage in Brazil.

World-wide problem

Example of strategies:
- educational strategies
- regulatory reforms
- financial incentives
- professional support
- recruitment of foreign medical workforce

Medical labor market signals:
- growing salaries
- formalization of jobs
- low unemployment rates
- high demand and use of vacancies in medical graduate courses

MORE DOCTORS PROGRAM (2013)

BARANEK PM, 2005.
WONG E, STEWART M, 2010.
Introduction

➢ More Doctors Program
The ‘More Doctors’, implemented in 2013 is one of the most wide-ranging public policies so far adopted by the Brazilian government to deal with physician shortage.

➢ Three main directions of action:
  I. investment in improving the infrastructure of healthcare facilities;
  II. expansion of the offer of courses and vacancies in medicine, including broad educational reforms in medical graduation and residency;
  III. emergency provision of doctors in priority areas and reduction of distributive inequalities.
Introduction

Primary Healthcare Physician Shortage Index (EPSM/UFMG)

Legend
- With shortage
- Without shortage

2013

2015
Aim of the study
Aim of the study

Considering that...

- Expanded scope of practice is a way to meet patients' needs and enable professionals to practice at the top of their education and experience;
- Physicians are at the frontline of service delivery in primary care.

Know the activities and procedures they perform is essential for policy makers to expand access and the improve efficacy of Brazilian Unified Health System (SUS).

Characterize the scope of practice of the ‘More Doctors’ physicians and identify factors associated with an expanded scope.
Methods
Methods

Regulation of the health professions (EPSM/UFMG and ObservaRH/UERJ - 2015-2017)
Cross-sectional study
January - March 2016
Self-applied questionnaire
Sample of MMD physicians

Questionnaire:
- Access of primary health care protocols from the Ministry of Health
- Interviews with key informants and specialists
- International literature review

- Social-demographic profile
- Work information
- List of procedures, activities, actions practiced by PHC physicians (49 items),

Pre-test conducted with physicians working in PHC health facilities from different geographical regions in Brazil
Methods

3.568 answered

1.241 were included

Social-demographic profile

- Gender, age, nationality, country and year of graduation, specialist title, work experience in primary care and in the primary health care unit
- Work location (geographical region, population size and distance – travel time).

Statistical Analysis

- Frequencies distribution - Measures of central tendency
- Mann Whitney test
  Significance level 5%

MMD Physicians who responded to the questions related to the procedures and activities practiced in PHC units.
Results

Fotos: Araquém Alcântara
## Results

### Profile of More Doctors Physicians participating. Brazil 2016 (n=1,241)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>n¹</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>643</td>
<td>52,3</td>
</tr>
<tr>
<td>Male</td>
<td>586</td>
<td>47,7</td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 a 29</td>
<td>38</td>
<td>3,1</td>
</tr>
<tr>
<td>30 a 39</td>
<td>379</td>
<td>30,9</td>
</tr>
<tr>
<td>40 a 49</td>
<td>488</td>
<td>39,8</td>
</tr>
<tr>
<td>50 a 59</td>
<td>281</td>
<td>22,9</td>
</tr>
<tr>
<td>60 or more</td>
<td>39</td>
<td>3,3</td>
</tr>
<tr>
<td><strong>Nationality</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazilian</td>
<td>227</td>
<td>18,5</td>
</tr>
<tr>
<td>Cuban</td>
<td>906</td>
<td>73,8</td>
</tr>
<tr>
<td>Other</td>
<td>94</td>
<td>7,7</td>
</tr>
<tr>
<td><strong>Country of graduation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>153</td>
<td>12,5</td>
</tr>
<tr>
<td>Other</td>
<td>1071</td>
<td>87,5</td>
</tr>
<tr>
<td><strong>Years since graduation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 a 5</td>
<td>139</td>
<td>11,5</td>
</tr>
<tr>
<td>6 a 10</td>
<td>186</td>
<td>15,3</td>
</tr>
<tr>
<td>11 a 15</td>
<td>150</td>
<td>12,4</td>
</tr>
<tr>
<td>16 a 20</td>
<td>170</td>
<td>14</td>
</tr>
<tr>
<td>21 a 25</td>
<td>309</td>
<td>25,5</td>
</tr>
<tr>
<td>26 or more</td>
<td>258</td>
<td>21,3</td>
</tr>
</tbody>
</table>

### Medical specialist

- Yes: 1075 (86,6%)
- No: 166 (13,4%)

### Experience in PHC

- ≤8 years: 582 (47,1%)
- >8 years: 653 (52,9%)

### Experience in the PHC unit

- ≤2 years: 719 (58,4%)
- >2 years: 513 (41,6%)

### Geographic region of work location

- North: 137 (11%)
- Northeast: 540 (43,5%)
- Southeast: 304 (24,5%)
- South: 183 (14,8%)
- Midwest: 76 (6,1%)

### Population size of the city of work location

- Capitals and metropolitan regions: 292 (23,5%)
- More than 100 mil inhabitant: 166 (13,4%)
- More than 50 up to 100 mil inhabitant: 140 (11,3%)
- More than 20 up to 50 mil inhabitant: 272 (21,9%)
- More than 10 up to 20 mil inhabitant: 221 (17,8%)
- Up to 10 mil inhabitant: 150 (12,1%)

### Distance from the headquarters of the health region (minutes)

- Up to 15 minutes: 448 (36,1%)
- From 16 to 30 minutes: 126 (10,2%)
- From 31 to 45 minutes: 186 (15%)
- From 46 to 60 minutes: 118 (9,5%)
- From 61 to 120 minutes: 253 (20,4%)
- More de 120 minutes: 110 (8,9%)

Source: Girardi et al, 2016
### Results

<table>
<thead>
<tr>
<th>Practice in the PCH Unit (n ± SD)</th>
<th>Know how to practice (n ± SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.8 ± 8.2</td>
<td>39.4 ± 9.1</td>
</tr>
</tbody>
</table>

p < 0.001

Examples of procedures that have less than 50% practice in the PCH health facility and more than 50% knowhow to practice

#### Procedures

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Practice in the PCH Unit (%)</th>
<th>Know how to practice (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of sharp vision (refraction,…)</td>
<td>49.1</td>
<td>68.7</td>
</tr>
<tr>
<td>Visual acuity screening</td>
<td>46.3</td>
<td>78.2</td>
</tr>
<tr>
<td>Sutures</td>
<td>43.5</td>
<td>99.5</td>
</tr>
<tr>
<td>Incision and drainage of abscess</td>
<td>40.7</td>
<td>97.6</td>
</tr>
<tr>
<td>Removal of unwanted body from legs,…</td>
<td>32.9</td>
<td>88.7</td>
</tr>
<tr>
<td>Immobilization of fractures</td>
<td>28.3</td>
<td>87.1</td>
</tr>
<tr>
<td>Removal of unwanted body from eye</td>
<td>27.9</td>
<td>75.9</td>
</tr>
<tr>
<td>Removal of foerign body from air…</td>
<td>27.9</td>
<td>86.2</td>
</tr>
<tr>
<td>Removal of ingrown nail</td>
<td>27.8</td>
<td>85.6</td>
</tr>
<tr>
<td>Cauterisation of nosebleed</td>
<td>19.9</td>
<td>63.0</td>
</tr>
<tr>
<td>Removal of callus</td>
<td>11.5</td>
<td>59.9</td>
</tr>
</tbody>
</table>

Graph showing percentage of procedures practiced and known how to practice.
Why they do not practice what they know?

- Lack of materials and inadequate infrastructure: 87.3%
- Restrictive rules of practice (clinical protocols, medical professional board): 49.0%
- Lack of demand: 24.5%
- Practiced by another professional: 23.0%
- Workload: 21.0%
- Personal reasons: 3.9%
Factors associated with an expanded scope of practice (p < 0.001)

Practice in the health facility

Results
Results

Factors associated with an expanded scope of practice (p < 0.001)

Do not practice, but know how

- Male gender
- Cuban nationality
- Graduated outside of Brazil
- Specialization in PHC or related
- More time experience in primary health care
- North of the country
- Municipalities with small population size
- Municipalities distant from the regional health headquarters
Final Considerations

Fotos: Araquém Alcântara
Final Considerations

- The present study identified several factors associated with an expanded scope of practice and a broader knowledge of practice in PHC, such as: male gender, Cuban nationality, lower time since graduation, graduation outside Brazil, PHC specialist, experience in PHC, geographic region, population size and distance.
  - We can identify bigger differences in an expanded scope of practice specially in smaller municipalities

- The results also showed that ‘More Doctors’ physicians practice a lower number of procedures and activities than they indicated knowing how to practice, mainly due lack of materials and the inadequate infrastructure, and restrictive rules of practice.
  - In this sense, the use of professional competences can be optimized by structuring health care units and by increasing flexibility around scope of practice in PHC.
  - We believe that reviewing the scope of practice of physicians can be an important tool to expand the potential of primary health care and improve patients access and efficacy of Primary Health Care services in Brazil.
Thank you!

Ana Cristina van Stralen
anastralen@gmail.com

PhD student at Federal University of Minas Gerais
Researcher at Estação de Pesquisa em Sinais de Mercado
(Market Signals Research Station)
http://epsm.nescon.medicina.ufmg.br
epsm@nescon.medicina.ufmg.br

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