THE ROLE OF MEDICAL SCHOOLS IN THE DISTRIBUTION OF PHYSICIANS STRENGTHENING PRIMARY HEALTH CARE

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ABSTRACT

Primary Health Care (PHC) is a central focus of many health sector reform initiatives. The effectiveness of PHC requires an effective health workforce. This is especially evident in rural parts of countries which have significant difficulties in attracting physicians and nurses. Countries continue to try a range of strategies which require the collaboration of a number of government and non – governmental actors. Among the many actors medical schools have critical role to play in the selection, education and orientation of students for PHC and rural practice.

KEYWORDS: Primary Health Care (PHC) , Health Sector Reform, Education, Medical Schools, Universal Health Coverage, Health Care Workers

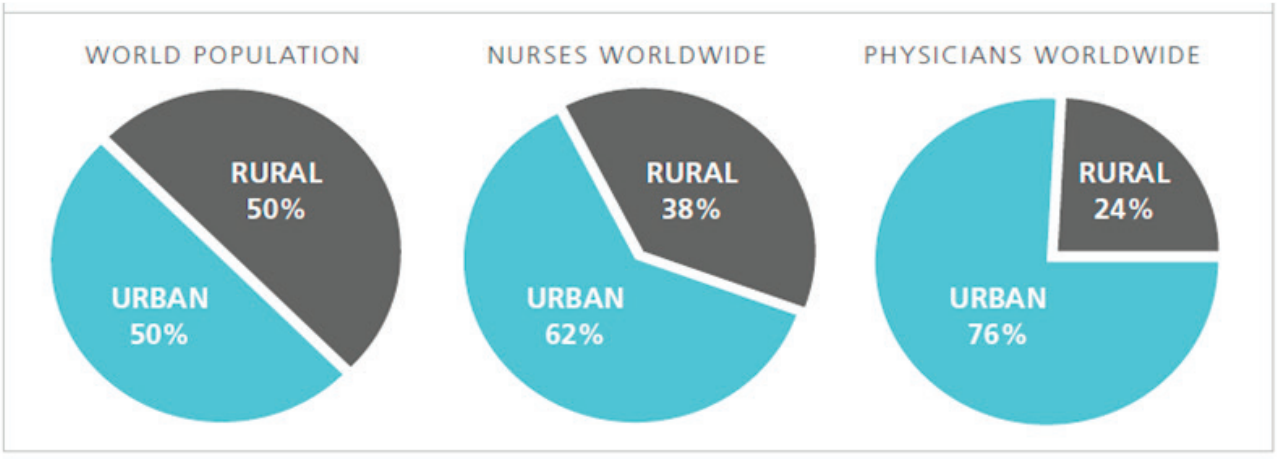
INTORDUCTION

"Human resources for health are the indispensable input to effective implementation of primary care and universal coverage reforms, and they are also the personification of the values that define PHC. Yet, in the absence of a deliberate choice to guide the health workforce policy by the PHC goals, market forces within the health-care system will drive health workers towards greater sub-specialization in tertiary care institutions". (WHO, 2008)

There is a clear movement among countries towards a renewal of primary health care (PHC). Universal health coverage based on PHC is a strategy that is being pursued by many countries as a means of making health systems more responsive to the needs of their populations. The strategies are designed to increase access to health services and to involve communities in their health care. Within countries different populations have different level of access to health services. A critical element is the number and distribution of health workers. Healthcare workers usually prefer urban practice to rural practise especially in less developing countries [1, 2]. This poses a serious challenge to equitable healthcare delivery given that, people in rural communities are often sicker, poorer, less educated and have worse access to care [3].

Evidence base strategies from the literature can be categorise into five categories: Education; Selection; Coercion; Incentives and Support [1]. Education – These are strategies to optimise medical training programs in order to stimulate interest and participation in community-based medicine which includes rural practice. Components focus on educational training like pre-vocational and vocational, fellowships, content of the training curriculum, exposure in clinical rotation and preceptor ship. In an effort to attract students into rural practice, Canada and Australia have implemented additional strategies by having

Figure 1. Distribution of world's population of physicians and nurses in urban and rural setting



Source: World Health Organization 2010.

family medicine residents give talks to high school students [4]. Selection strategy focuses on selecting students into health professional training programs with the following components, geographic origin, gender, ethnicity, career intent and service orientation .Service orientation includes volunteer activities that are done prior to medical school in rural areas [5]. Most countries have implemented incentives strategies; which include financial and non – financial reward. Some examples of incentives that have been implemented include; bursaries and scholarships, financial compensation, additional allowance for remoteness and loans and pensions [6, 7]. In an effort to retain health workers, non – financial incentives have ranged from creating cadre positions, opportunities for professional development, and continuing training [8]. Support strategies have included a focus on various ways of supporting health professionals while practicing in rural areas. The components includes, continuous professional development, specialist outreach, time-off, and family and life style issues.

Coercion is the use of authoritarian method to force health professionals into rural practice. This approach has been used by medical councils, professional bodies and governments. Components include registration requirements (use community service as a requirement to register as a medical doctor) pre-requisite for specialization (experience of rural service prior to specialization) and international recruitment that is, limitation of foreign health professionals' recruitment to rural practice. Coercion strategies have been implemented in most countries.

In addition to the factors that attract physicians. The five stage of a physician life is recommended as a component in the process of attracting, recruiting and retention. Life before medical school, experience during medical school, experience during post graduate schools and recruitment and retention after completion of post graduate fellowship qualifications and maintenance action plan to keep professionals satisfied and retain them [9, 10].The diagram below (fig 1) provides an overview of the world's population distribution of nurses and physicians within rural and urban settings.

The strategies discussed above are designed to improve the balance of nurses and physicians in rural and urban areas. The success of the strategies is affected by the context and by supporting policies. The literature suggests that some strategies are more effective than others. Table 1 presents a summary of the evidence. created a centre funded by a 30 million dollar gift dedicated to research in health systems and primary care delivery [11].

Medical schools who are trying to increase the number of graduates entering primary care have used number strategies. A key focus is on the curriculum which has a focus on primary care. For a primary care focussed curriculum to be effective it must be endorsed by the faculty members [12]. A recent article in New England Journal of Medicine [13] cites the following five approaches:

1. "The curriculum should be built around the competencies expected of a primary care physician;

Table 1. adapted from Wilson et.al, (2010)

Interventions	Summary of evidence	Ranking
Selection Geographic Origin	Students from rural origin are more likely to practice in rural settings	strong
Gender	Men are more likely to practice rural medicine than women	strong
Career intent	Study entry interest is to practice rural medicine	strong
Ethnicity and service orientation	Students from underserved, populations & Involvement in volunteer services in rural areas	weak
Training Prevocational curriculum content	Emphasis theoretical importance of rural health issues	Absent (no evidence)
Rural exposure	Clinical rotation in rural settings	moderate
Location		
Post vocational and fellowships		strong

Interventions	Summary of evidence	Ranking
Coercion Registration requirement	Qualified doctors spent community service in rural area	weak
Pre requisite for specialization	Mandatory basic requirements of serving in rural areas before specialization	weak
International recruitment	Recruiting with constrains limitation to rural practice	moderate
Incentives Bursaries	Scholarship with enforcement rural service agreement	moderate
Financial compensation	Provision of direct financial incentives to encourage rural	moderate
Support ;continuous professional development	Provide enough opportunities for professional development motivates rural practise	weak
Specialist outreach support	Providing relevant outreach specialist support	weak
Family lifestyle issues	Addressing most relevant family life style attracts retention	weak

2. Teaching medical students to be part of an inter – professional team should be part of the curriculum;

3. Students should be offered the opportunity to do their clinical training in community – based settings;

4. Socio – medical research , which examines the translation of scientific knowledge into clinical practice (e.g. patients adherence to medications, smoking cessation)

5. Medical schools should develop a culture which supports primary care".

Canadian medical schools have used some additional strategies such as selective admission by screening for students from rural settings and financial incentives and return of service agreements. In the United States, the Physician Shortage Area Program (PSAP) at Jefferson Medical College in Pennsylvania. In the PSAP students are admitted based on having grown up in a rural area. The student has a higher probability of being admitted into the program if they had previously indicated their intention of practicing in a rural area after graduation. The primary care students are supported by advisors in family medicine. The students must also take their family medicine rotation in rural locations [14].

CONCLUSION

There is evidence that medical schools can play a significant part in addressing access to primary care by attracting, training and supporting their medical students to become effective primary care practitioners. The curriculum can be used to influence students to choose rural medicine by ensuring that they have opportunities for exposure to rural community practice and that the learning experiences are positive. The medical schools must work to foster a positive attitude towards family and rural medicine.

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