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REVIEW ARTICLE

FAMILY MEDICINE: A MISSING LINK IN HEALTH SYSTEM OF PAKISTAN

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ABSTRACT

By taking a global perspective in order to look at how the field of Medicine has diversified, we believe that we can come to see how the Family Physician has, over time, disappeared from it. Prior to the idea of the Family Physician, a single, non-specialist, Physician would be responsible for the oversight, diagnosis and treatment of a number of diseases. However, due to the ever increasing number of illnesses and diseases, over time, the role of the Family Physician became minimized, as Specialist Physicians of particular illnesses and diseases began emerging at speed. We now find ourselves, particularly in Pakistan, in dire need of more Family Physicians. In this review we look at how, in other parts of the world, Family Physicians – also referred to as General Practitioners, or 'GPs' in parts of Europe – are responsible for the preventive and curative provision to whole families. The principles of Family Medicine, we argue, are universal, and there are few contextual factors, such as geography, the availability of material and medical resources, as well as disease prevalence, that impact the practice of Family Physicians from country to country. By looking at these factors and by summing up the countries in which they are endemic, we believe we can then establish a link between the similarities in each First World Country, and provide a contrast between those and the things that impact practice in Third World Countries. We also examine the role of regulation, qualifications and contemporary primary and family care in Pakistan.

Keywords: Medical Students, Career Choice, Speciality, Family Medicine, General Practitioner, Global, Curative and Preventive medicine.

INTRODUCTION

In application of my Master of Arts in Health Professions Education, research was conducted around the factors associated with medical students opting for a career choice in Family Medicine. In order to provide some contextual background, and to shed some light on the particulars of Family Medicine and its evolution through the ages, a literature review was completed that sought to outline and define the most salient historical and contemporary issues related to Family Medicine. This, it is thought, will enable the reader to garner some perspective related to the research, via a brief, in depth look at Family Medicine as a whole. A history review is thus conducted.

Family Medicine, overall, differs in context from country to country – and these differences are further amplified depending upon culture, environment, climate, etc – as has been discussed in the forthcoming article. The First World has a more fluid and structured system of Family Medicine and its practitioners are well recompensed and regulated, enabling them to carry out their roles in the most effective and satisfactory manner. Whereas, in the Third World, due to a dearth in resources, funding – and little to no regulation – Family Medicine is on the decline, and medical practitioners thus have little or no motivation to pursue the practice of a Family Physician.

The review itself is broken up into segments in order to enhance the understanding of the reader. Firstly, we look at a brief history of Family Medicine and consider three studies that expand upon the inception, evolution and status quo of Family Medicine. Secondly, we take a look at the practical concept of Family Medicine in the context of developed and underdeveloped countries. Thirdly, contemporary primary and family care in Pakistan is considered and, lastly, we examine studies that shed light upon the factors associated with Family Medicine choice, amongst medical students, as a career choice.

A Brief History of Family Medicine

Before the concept of specialization, a single doctor would have the collective responsibility of a variety of diseases. As medical knowledge expanded and diversified, it became difficult for a single doctor to deal with a single complicated problem. It was the time when a specialty trend came in and two major categories, - i.e., surgery and medicine - were introduced

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(FMSGP, 2014). With the passage of time, more specialties and sub specialties were introduced and patients encouraged this, with doctors subsequently paying more attention to these specialties.

This increasing trend among medical graduates to become specialized began about four decades back. It has been clearly highlighted in a World Health Organization report about family medicine practices (Personal, 1963). The trend was noted in approximately 1953. It has been stated in a report by the World Health Organisation: 'Whatever attitude a community adopts towards medical services, the reason for the very existence of medicine has always been, and will continue to be, the patient. One consequence of the increasing partition of medical science into a number of specialties has been the divergence from the recognition of the patient as a whole', (p. 5).

This statement indicates that the trend of specialty minimized the role of general practice, and patients then encountered a new problem, i.e., that their family physician gradually disappeared from the field. A specialist is an expert in their own field, and when they had to face other problems, they were not able to deal with other issues as they had not been trained in that particular field. There is no parallel for a trained general Family Physician.

Family Medicine in Developed and Underdeveloped Countries

Family Physicians have been referred to as General Physicians in most of Europe, as they deal with whole family problems and provide preventive and curative services and thus they are best suited to comprehendsive care provision, both in developing and developed countries. The principles of family medicine are universal, however, there are few contextual factors including geography, disease prevalence and availability of resources that impact the practice of physicians in different countries.

Family Medicine became the centre of attention in 1978 when the World Health Organization began a 'Health for All' programme. Comprehensive and selective health care was given prime importance. Most people still lack this health care facility in developing countries, as well as in developed countries, due to an uneven distribution of the different specialties. In developing countries infectious diseases are the main cause of child mortality, and chronic diseases are the leading causes of death among adults (Jamison D.T., Mosley, W.H., 1991).

The global burden of disease has been increased with time. Only in America, 133 million people were having one chronic problem in 2005 and it is forecasted to rise to approximately 157 million in 2020. People with multiple chronic diseases will be 81 million by 2020 (Wu, S.Y., and Green, A., 2000) and it has been seen that most of these illnesses are seen to by primary care physicians – primary care offers much effective high quality care at a low cost to the patients as compared to specialist – only care (Bodenheimer, T., Chen, E., Bennett, H.D., 2009).

General practice integrated with primary care can play an important role in controlling or lowering the burden of preventable chronic diseases (Mark, H., 2008). However, primary care facilities and general physicians who work in isolation are to be linked with proper referral to the subspecialties and the whole medical care system has to value its importance for better functioning (Kevinmd blog, 2011). In short, family physicians are at the heart of primary care and we cannot separate primary care from general practice as it is aimed to deliver best quality care at the primary level.

Training of such general physicians varies from country to country. In many countries, General Physicians are non specialists who have received little or no training in primary care because they received little exposure to ambulatory and preventive care (Haq, C., Ventres, W., Hunt, V., Mull, D., Thompson, R., Rivo, M., and Johnson, P., 1996). So these students fail to gain all the necessary skills to become competent physicians.

Throughout the world today, a great emphasis is given to integrate a medical education with public and community health. The World Health Assembly adopted the theme of 'changing medical education and medical practice for all', and emphasised the importance of the family physician in the delivery of Primary Health Care (World Health Organization – Changing Medical Education and Medical Practice for Health for AIL Resolution) and this resolution has been disseminated to all World Health Organization member countries (World Health Organization and World Organization of Family Doctors, 1994).

The situation of the family medicine discipline also varies in developed and developing countries and this variation becomes more acute when comparing developing countries. In many developing countries, this discipline does not exist and even the term Family Medicine is not very well known among medical personnel. There is no medical academic provision of family medicine in Africa. Even in Pakistan, very few institutions have this academic provision.

Contemporary Primary and Family Care in Pakistan

The College of Family Medicine was first established in Karachi in 1972, and then it became a member of the World Organization of National Colleges, Academies and Academic Associations of General Practitioners / Family Physicians (WONCA). It is a part of the World Organization of Family Doctors. This college, in conjunction with the Pakistan Society of Family Physicians, Lahore, has contributed much in providing con-

tinued education to general physicians to improve their practice (FMSGP, 2014).

Following on from that, the College of Physicians and Surgeons started an MCPS and FCPS in Family Medicine in 1992. There has been an effort to institutionalize the specialty of Family Medicine in Pakistan, as in the absence of a structured training programme and an official endorsement, the promotion and promulgation of a research culture is not possible. Research is an integral part of general practice and Family Physicians must know about best practice so that they may apply it in their very own settings.

In developing countries there tends to be a scarcity of resources, and health care delivery is relatively cheap, so the research conducted in developed countries cannot be applied to developing countries where the context is quite distinct and local problems take a quite unique form (Gamer, P.,1998, Hanies A., 1998). In Pakistan, Agha Khan Medical University Karachi, King Edward University and Medical College Lahore, Ziauddin University in Karachi, and Liaquat University of Medical Sciences in Hyderabad have fully developed faculties of Family Medicine and they are also running post graduate training programs in Family Medicine. The University of Health Sciences, in Lahore, will launch two post graduate degree programmes in Family medicine this year (The News Tribe, 2012).

Bruce L. W. Sparks and Shatendra K. Gupta (2004) have emphasized the importance of developing proper family medicine departments in developing countries so that academic departments could contribute more in family medicine research on local problems which are very different from issues in developed countries. This will require an abundance of resources, as well as political will, to develop such departments – so a more appropriate recommendation is to increase capacity. This could be achieved by developing critical reading skills and then implementing the relevant study results in practice. This could be achieved by continuous professional development and conducting courses on research – many such courses are available online (Greenhalg, 1997).

The main role will be of ambulatory care physicians who will first take part in data collection, and with time and training they will start active research (IFPCR).

Contemporaneously, in Pakistan, there is a dire need for Family Physicians as they are the only physicians who are capable of delivering comprehensive Health Care to the general public (Khan, A.S., 2011). The burden of disease in Pakistan is quite distinct as compared to the developed world, as forty percent of children under the age of five die due to diarrhoea and acute respiratory ailments. According to other statistics, 12.2% and 37% of children under the age of 5 present with Vitamin A and Zinc deficiency. The infant mortality rate in Pakistan has increased from 6.8/1000 to 7.3/ 1000, 75/1000 infants, 43/1000 neonates, 108/ 1000 for under 5s, and 350/100, 000 mothers die annually (Sania, N., 2007).

Factors Associated with Family Medicine Choice as a Career

Developing strategies that would encourage medical graduates to opt for a career in Primary Care, as Family Physicians, rather than becoming sub-specialists, is a global challenge (Jeffe,D.B., Whelan, A.J., and Andriole, D.A., 2010). Family Medicine is a speciality in which a doctor does not merely focus upon and treat a single problem, but rather views and considers a holistic, comprehensive and systematic treatment of the individual. Where the person as a whole is assessed and seen to, the breadth of treatment thus comes to combine the broader aspects of medical science, such as the clinical, biological and the behavioural.

Reproductive health is one of the major issues in Pakistan and it has to be addressed properly. We can achieve this with the help of encouraging more female Family Physicians to study the knowledge and skills required of a General Practitioner. By building the capacity of practicing doctors we can improve health outcomes related to reproductive health practice. There is currently a gap in the availability of doctors – particularly female GPs (Khan, N.J., and Hall, S.E., 2004).

Michael Borchert (2002) states that mainly three areas of a student's life affect career choice, and these are personality, opportunity and environment. In essence, it will depend upon how students view their environment, according to their personalities, to opt for a particular occupation. He mentioned many environmental factors, as well as how opportunity affects students in making any career choice. It included parents' education, socio-economic background and status, type of institution – public or private, financial and economic status, etc. He emphasized that such career exploration should be an interesting and positive endeavour for students.

In many cases our parents influence us in our selection of a career. For example, a businessman wishes his son to be a businessman and a doctor wishes likewise. As far as personality is concerned, Splaver (1977) stated that the personality of an individual plays a very important role in the selection of a career. Students should be self motivated to investigate career opportunities and possibilities in their lives from the very beginning. He further stated that 'it is important for you to have a good understanding of yourself and your personality, if you are to make intelligent career plans' (Splaver, 1977, p.12).

Social Cognitive Theory (SCT) by Bandura also emphasizes the interaction between the three main elements of a person: behaviour, opportunity and environment (Alexander, P.M., Holmner, M., Lotriet, H.H, Matthee, M.C, 2005). The authors further elaborate an

intrinsic factor: cognitive ability and affective and physical attribution. The environmental aspect includes extrinsic factors i.e., economic and social circumstances. Individuals are not just mechanical responders to determining factors, they continue reflecting and thus they regulate their behaviour. They are aware of their environment and these collective factors help them in deciding their career choices and concomitant steps. Individuals develop constantly.

Another survey based study conducted by Almon Shumba and Matsidiso N. (2012) in South Africa found that family and teachers are important factors influencing the ability of a learner to identify his/her own career.

Conversely, according to another study, it is not very clear why medical students choose or prefer one specialty over the other. Jillian and Murray (1996) conducted a study at the University of Glasgow where they studied students' choices for opting for General Practice as a career before and after attending a training house job in General Practice. They found that the General Practice house job influenced Male doctors' choices, but this was transient; and they opted for something different following the completion of their training. Females, on the other hand, selected General Practice as their first choice even before starting their training.

Yuko Takeda, M. Kunimasa, Linda S., Jungi O., Miyako T., and Ichiro K (2013) conducted a nationwide study in Japan to identify factors influencing specialty choice among doctors and this study looked at characteristic profiles of senior and junior doctors. Authors suggested that students with varied background and beliefs should be enrolled in this profession to maintain a balanced workforce across specialities. So this is another aspect which may possibly affect career choice.

Another study was conducted at the University of Colombo to find out career trends among fourth year medical students. It showed that students did not prefer Family Medicine, Psychiatry and Geriatrics – not even as a backup career – despite the shortage in these areas. The author stated that to know for certain the reasons for why students select any specialty is very complex, but he emphasized that if such factors are identified accurately then it will be very helpful for educators and curriculum developers to create and define a medical education system which will be relevant and responsive to the medical needs of the country (Tennakoon, H.D., Vidanapathirana, A.K., Sutharsan, S.,1999).

Medical curriculum offered a family medicine rotation to students in an experimental study at Shifa College of Medicine (Iqbal, S.P., 2010) and the results showed that by giving exposure to this specialty can foster the interest among graduates to opt for this as a specialty and this will help in the provision of best quality health care.

The issue of the medical specialism is a global one-speciality choices, in both developed and underdeveloped countries, are not meeting the needs and requirements of the communities within which they are based (Cooper, R.A., 2002, Fisher, E.S., 2003). Research on specialty choice has revealed that Family Medicine, (Campos-Outcalt, D., 2007; McGaha, A.L., 2007; Starfield, B., 2008) and psychiatry (Lehane, M., 2005; Goldacre, M.J., 2005; Wigney, T.; Parker, G., 2007,) are less preferred as a career.

Up until this point, no strategies or plans have been made to deal with the foregoing disparity in the choices of specialities. Very little work has been done on the future graduate distribution in different specialities and factors influencing this distribution (Saigal, P., 2007, Lawrence, J., Poole, P., Diener, S., 2003; Kassebaum, D.G., Szenas, P.L., Schuchert, M.K., 1996).

Four medical colleges – two public and two private sector institutions – were included in a Karachi-based, cross-sectional study: third, forth and final year students along with house officers were included. A questionnaire was used as a tool to determine what career choices each of the cohorts would make – each group was asked to list a first choice, second choice, and third choice. Internal medicine, paediatrics, general surgery, obstetrics and gynaecology were the four highest ranked choices of specialities selected by the cross-sectional cohorts. Albeit, a higher proportion of public college students (10.8%) stated obstetrics and gynaecology as their first career choice than did those attending private institutions (5.2%) (Aslam, M., Ali, T., Taj, N., Badar, W., Mirza, A., Ammar, S., Muzaffar and Kauten, J.R., 2011).

It is ***concluded*** that the role of the Family Physician, as highlighted amply in the foregoing research, is crucial to the comprehensive preventive and curative medical care of individuals, as well as families. Since Pakistani society is one centred around families, and medical issues within families tend to be multiple, it only makes sense to focus on the training and development of medical students to engage with this particular kind of practice.

RECOMMENDATIONS

Institutions and commissions that are responsible for Medical Education in Pakistan, at the local, federal, and central governmental levels should subsidize the provision of marketing and promotion of the Family Physician Speciality in colleges, and universities – across the country. Or, more specifically, where there is greatest need of Family Physicians.

Medical Education Departments, within colleges and universities, should take it upon their own initiative to promote the role of the Family Physician within their own institutions in order to build an awareness amongst medical students regarding the importance of

the Family Physician, and the significance of the role.

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