

Review :**General Practice and Family Medicine as a speciality:
Key to health care in india*****J.K. Chhapparwal, **B.C. Chhapparwal**

*Assistant Professor of Medicine, Pacific Medical College, Udaipur (Rajasthan)

**Emeritus Professor of Paediatrics, MGM Medical College, Indore (M.P.) & Former Vice Chancellor, Devi Ahilya Vishwavidyalaya, Indore (M.P.) INDIA. Email: nathdwar14@gmail.com

Introduction:

Health is a basic need of human being and access to health-care a fundamental Human Right. The constitution of India charges the state with the responsibility of providing health/medical care to the people in the state in the directive principles of state policy. It can be seen as a fundamental right in 'Right to life' under Article 21. The quality, quantity, distribution and availability of human resources for the health care sector is far from satisfactory, to deliver care driven, rural oriented and equitable health care services. Over the years health related education and training has become more urban oriented, doctor-centric and technology driven. Medical education is part of the whole system of education which is in crisis mode today. We are paying a high price for inadequately investing in the balanced growth for the social sector- i.e. health & education. A large urban rural divide is present in terms of location of health care facilities their quality and is increasing with decreasing access and equity of services for the rural areas and urban slums. Over investigations over medicalization and technology driven strategies dominate the urban rich in tertiary care hospitals.

Despite all these lacunae, impressive change in health indicators has been recorded since independence. Infant mortality rate has been brought down from 146 to 30, maternal mortality rate from 840 to 212, life expectancy at birth from less than 30 to 65, crude birth rate 41 to 22.5 per

thousand population and total fertility rate 6.6 to 2.6. However, the general health indices in India are below average of other developing countries and are way below socially acceptable level. The country still carries an enormous share of the global disease burden. With 17% of the global population, India accounts for 20% of the total global disease burden: 23% of the child death, 20% of maternal death, 30% tuberculosis, 68% of leprosy and 14% of HIV infection. India continuous to bear a larger portion of global burden of pre-transmission communicable diseases, acute respiratory cases, diarrheal diseases, besides other preventable diseases. Magnitude of mortality figure for communicable diseases indicate 2.5 million adult deaths, 2.5 million child deaths in a year (Task force report on medical education for National Rural Health Mission, Government of India, 2006).

While the aggregate member of doctors (0.8million doctors) is not very low for a developing country, only 28% of them are located in the rural areas. 83% of the total health expenditure is in private sector and it has a dominant influence on the health system. Our doctors are mostly self-employed. The present system of medical education is not oriented to produce competent general practitioner or a family physician. The medical care in India is divided into codified and non-codified medicine. Codified medicine includes western and the Indian system. Non-codified medicine practitioners are in huge number such as in home medicine, folk / tribal medicine; besides the non-qualified practitioners of codified

medicine. The medical profession needs to be structured like a pyramid with base made of special trend general practitioner / family physician. Over 420 medical colleges are located in urban areas where only 25-30% of the population live. Annually we train 52000 MBBS, 24000 Specialists (MD & MS), 32000 AYUSH, 60,000 nurses, 16,000 ANM and 40,000 pharmacists. Still no authentic data are available on the paramedical training facilities.

There are very few post-graduate degree program of MCI in family medicine/general practice as a speciality. The number of specialists being trained have no relationship to the numbers of graduates, the speciality proportions, skill mix, manpower required to meet out health care and teaching, the disease profile, the emerging disease pattern, epidemiologic changes, life style changes, economic development, grass root specific manpower and research requirements.

Any successful development process must have a pyramidal structure with a strong horizontal base. In terms of the medical education it has to be a strong base of clinical generalists/ family medicine /general practice specialist who ought to be the backbone and stability of the system. The family physicians/general practitioners of yester years are no longer visible. This needs to be urgently addressed. There is a need to introduce new postgraduate courses in disciplines such as general practice/family medicine including maternity and child health, geriatrics, specific branches of public health, emergency medicine, sports medicine, critical care, trauma care and so on to meet the actual need at the grass-root level. For example, children constitute 42% of our population whereas, 40% of our doctors are not pediatricians. We must train our family physicians and general practitioners adequately, in an integral manner, to cater for this delicate population who would be the future citizens and back-bone of our nation. Same is for women's health.

Recently Dr. Devi Shetty (2015) stated that if

India can initiate some radical changes in medical, nursing and paramedical education, dramatic changes would be visible in a very short period. India can become the first country in the world to dissociate health care from affluence. This can only happen by closely linking health care delivery with medical education. According to World Bank data, Cuba produces the largest number of doctors per capita (6.7 per thousand against 2.5/1000 in US and 0.7/1000 in India) and its health indices are better than that of USA, which spends the highest on health care. India is grossly short of doctors, nurses. Its paramedical training program is virtually non-existent. We simply do not have the number of medical specialists needed to take care of our people. For 26 million child-births per year we need to perform at least 5.2 million caesarian sections. For successful child birth following a C-section, we need over a lakh of obstetricians, specialist anesthetists, pediatricians and radiologists etc. We only have around 30,000 ob/gyn specialists, 20,000 anesthetists and radiologists. Only 30% of our population has satisfactory access to proper anesthetists services of which 80% are urban beneficiaries. Large number of specialists posts are vacant in hospitals all over the country. In most developed countries post graduates seats are twice the number of undergraduate medical seats. However in India we have over 50000 undergraduate seats and only 14000 postgraduate seats in clinical subjects, the root cause of corruption in medical education today.

Family Medicine/General Practitioner as a Speciality:

A recent survey in the USA showed that 62% of upper middle class Americans cannot afford to go to hospitals there, as medicine has become prohibitively expensive despite patients having more than one medical insurance policy. Fifty seven percent of the British do not want to go to modern medical facility, if they could help it, despite the free National Health Service scheme. In the last half a century medicine has gone to the market place riding piggyback on technology and

market forces act-on it in a big way. Today consumerism rules the roost making doctors practice expensive, defensive medicine. Thinking people in the medical world will have to do something before it is too late. The only solution is to go back to the time tested family physician system with necessary modifications in the training period to make the family physician truly useful to the sick. After graduation one should take post-graduate training for at least three years in this speciality. The family physician should be a sort of jack of all trades and should have a good grounding on human psychology, health promotive activities, nutrition, exercise physiology, rural surgery and intense training in bed side methods of diagnosis and management are to be stressed, technology being given very limited role⁸.

Education and PG training for Family Practice throws many challenges. On one hand the family medicine practitioners should know how to manage common medical conditions that include communicable as well as non communicable diseases such as- diabetes mellitus, hypertension, cancer, emerging conditions like bird flue. On the other hand they should possess basic surgical emergency and trauma care skills. In addition, the family medicine practitioner should be well versed in five domains i.e. communication skills and patient doctor relationship; applied professional knowledge and skills and organizational and legal decisions (D.K. sriniwas, 2008). Indian medical Association's College of General Practitioners is striving hard for nearly half a century, to educate and train modern medicine graduates in family medicine practices. On completion of the course it awards Fellowship in General Practice, though not recognised by the Medical Council of India. National Board of Examinations (NBE), Ministry of Health, Government of India does offer a post graduate 3 years course in Family Medicine. However, this is not the celebrated speciality chosen by medical graduates in India.

To strengthen rural health services in Nepal, 3 year post graduate medical education courses in

general practice was started in 1982 at Institute of Medical Sciences, Kathmandu. The degree awarded is MDGP. This course offers education and training in Medical specialities (Medicine 6 months, Pediatrics 6 months); Surgical specialties 6 months, Obstetrics and Gynaecology 6 months); General Practitioners specialities (Emergency medicine 3 months, Anaesthesia 3 months, District Hospital management 5 months). P.N. Prasad (2008) presented a paper entitled "Nepal's Family Practice Doctor" at an International update on "Excellence in Medical Education for the Best of Health care to Underserved" held at Mahatma Gandhi Institute of Medical Sciences, Sevagram, Maharashtra, India. His study revealed that General Practice (Family Practice) is Nepal's oldest post graduation course established in 1982 and training now under three universities. The CMC Vellore (India) have had their own G.P. programme accredited at Nepal's Institute of Medical Sciences. Nepal G.P.'s have laid down an admirable track record, in providing rural surgery like cesarean sections, orthopaedic procedures, abdominal emergency procedures and so on. Their all-round training means that two G.P.'s can provide a full range of 24x7 services and are the model team for district hospitals. GPs tend to run emergency room and manage out patients departments. G.P.'s are the natural doctor to start primary health care services. Prasad strongly advocated building up this cadre who would be the "Captain of Rural Health Cadre Team" for care of generation in developing countries.

NRHM 2007 - Medical Graduate Curriculum :

There is widespread perception in the country that the MBBS curriculum is too theoretical in its content. After 4 1/2 years of the main course and 1 year of internship, the finished graduate has very little 'hands-on' experience. Most of the Graduates are not confident enough at that stage to even provide primary health care services independently. The MBBS curriculum is closely linked to a tertiary care hospital. And, therefore, the graduates cannot function in a setting where there is

no multi-disciplinary support, or advanced diagnostic hardware. A large percentage of the graduates treat that stage as a launching pad for a the Post-graduate course.

General Practitioner / Family Physician :

Royal College of General Practitioners (UK) defined General Practitioner as “A doctor who provides personal primary and continuing medical care to individuals and families. He attends to patients in their houses, in his consulting rooms, or in hospital. He accepts the responsibility for making initial decision on every problem his patient may present to him, consulting with specialists when he thinks it is appropriate. He will usually work in a group with other general practitioners from premises that are built for (or modified for) the purpose with the help of his paramedical colleagues, adequate secretarial staff and all the equipments which is necessary. Even if he is single handed he will work in a team, delegate when necessary. His diagnosis will be composed in physical, psychological and social trends. He will intervene educationally, preventively, and therapeutically to promote his patient's health”.

Scope of family physicians:

Family physicians provide comprehensive and continuous primary care health care to:

- Individuals as well as families,
- Women and men regardless of age or disease,
- Infants, children and adolescents regardless of disease
- Prevention & management of acute injuries and illnesses
- Health promotion
- Hospital care for acute medical illnesses
- Chronic disease management
- Maternity care

- Well-child care and child development
- Primary mental health care
- Rehabilitation
- Supportive and end-of-life care

Compared with Hospital practice of family physicians in other countries:

USA -

- 83.2% provide inpatient care
- 78.8 have hospital admission privileges
- 22.6% do routine OB
- 22.8% surgical-assist
- 28.4% perform minor surgical procedures
- 38.8% delivered care in the CCU
- 41.1% delivered care in the ICU
- 44.9% deliver care in hospital ER
- 57.4% reported delivering newborn care

(Source—AAFP:Factsabout Family Medicine, Oct 2006 <http://www.aafp.org/facts.xml>)

CHINA -

Health-care in the People's Republic of China has been undergoing significant reform since the beginning of 1980s. Experiments in market-based health systems have been unsuccessful, showing exacerbated disparities. New reforms, announced in 2006 stress the role of family physicians in leading the health care system.²²

SWITZERLAND -

The Significance of family medicine is different in various countries. In Great Britain, The Netherlands, and the Scandinavian countries, for example, family physicians play a central role in health care system, treating the majority of ailments and caring for more than 90% of health care problems presenting to their practice. They

function as gatekeepers for other medical specialists and hospital admissions. By contrast, in Germany, like Switzerland, France, Belgium and United States, there is no such gate keeping system. (Budderberg Fishcher, B. etal :Faimily Medicine 39(9) 651, 2007)

Global Family Medicine Education :

Large number of family medicine education programs exist in:

- Asia South Korea, Thailand, Taiwan, Singapore, China, Kyrgyzstan, Vietnam, and the Russian
- Europe Spain, Hungary, Albania, and Switzerland
- Africa, including Lesotho, South Africa, Uganda, and Nigeria
- Middle East, including Turkey, Oman, Lebanon, Saudi Arabia, and the United Arab Emirates
- Americas, including Argentina and Brazil. Have experience in training and practice.
- Less-developed countries, including Bhuttan, Moldova, Belize, Ethiopia, Cuba, Nicaragua, and Uganda.

A conservative guess would make it unlikely that more than half the world's 1800 medicals schools currently have a family medicine department with a virtually complete absence in the countries that need primary care development most urgently.¹⁶

Practicing And Teaching Family Medicine In India¹

- Fascinated to read about physicians in a speciality, sounded more like the kind of a family physician.
- After Graduation, had opportunity to work in a rural Hospital in Central India.

- Handling of a variety of problems – often single handedly, reinforced my convictions that my country needed more generalist physicians.
- Choose Family Medicine as my vocation and began Training in that speciality.

Challenges :

- My physician Parents were against as my choice of an “unknown speciality”.
- Relatives wondered why I took up “Family Planning”.
- Colleagues advised me not to waste my time. Take “Good speciality and make good money”.
- Fortunately, had excellent hands on experience and training under dedicated, fine clinicians.
- But, did not have a teacher of Family Medicine role model who could explain me what the specilaity was?
- Did not have a textbook of Family Medicine and had little understanding of this wonderful branch of Medicine.
- After my Board Exam in 1998, worked in a tribal Mission Hospital.
- In 2000, a position of lecturer in Family Medicine was offered in the Christians Medical College, Vellore. Though there was a Post Graduate Training program in Family Medicine, nor there were any faculty members trained to be family physicians to teach the subject. There was a Lecturer without students for quite some time there.

Future :

- The speciality of family medicine is slowly but steadily moving forward.
- More Hospitals are offering programs in the

speciality, though there are few who are trained to teach this specialty.

- It is indeed a time of opportunities and challenges both for the students and teachers of family medicine in India.

Dilemma:

- What a family physician trained in India is expected to do.
- Does a family physician work in a district level hospital managing most of the problems.

- How will such a physician fit into a secondary level hospital that has physicians in many specialities?
- Will such a person have a hospital based, clinic based or community based practice? Can the western models be applied in our country, particularly the country-side?

The medical education of today will reflect on the quality of tomorrow's health services Hence, General Practitioner should be the Captain of Rural Health Cadre Team Caring for Generation.

Table No.1 : Deaths at specific age period shown as percentages (%) of the total deaths at all Ages (BHORE Committee report)

	Under 1 year	1 to 5 years	5 to 10 years	Total under 10 years
British India average for 1935-39	24.3	18.7	5.5	48.5
England & Wales (1938)	6.8	2.1	1.1	10

Table No.2 : Health Personnel Bhore Committee Report (1946)

Health Personnel	Number Available Now	Ratio of Nos in Col. 2 to the present population of British India (300 million)	Existing Ration in U.K.	Suggested Ratio to be obtained 1971 in British India with an estimated population of 370 million	Number required in 1971
Doctors	47500	1 to 6000	1 to 1000	1 to 2 000	185000
Nurses	7000	1 to 43000	1 to 300	1 to 300	749000
Health Visitors	750	1 to 400000	1 to 4900*	1 to 5000	74000
Midwives	5000	1 to 60000	1 to 618+	1 per 100 births	100000
Qualified Pharmacists	75	1 to 4000000	1 pharmacist to 3 doctors	1 pharmacist to 3 doctors	62000
Qualified Dentists	1000	1 to 300000	1 to 2700	1 to 4000	92500

*Based on 1935 figures
+Based on 1943 figures

Table No.3 : Expectation of Life for New Born Infants (BHOORE Committee report 1946)

	Expectation of life at Birth in years	
	Males	Females
New Zealand	65.04	67.88(1934)
Australia	63.48	67.14(1932-34)
British India	26.91	26.56(1921-30)

Table No.4 : Disparities in Health Outcomes (Draft NHP 2015)

INDICATOR	INDIA			Differential %
	Total	Rural	Urban	
TFR (2012)	2.4	2.6	1.8	44%
IMR(2012)	40	44	27	63%

INDIATOR	States with good performance	States with Greater challenges
TFR (2012)	Himachal (1.7), Punjab (1.7), Tamilnadu (1.7) West Bengal (1.7)	Bihar (3.5) UP (3.3) Rajasthan (2.9) M.P. (2.9)
IMR(2012)	Kerala (12) Tamilnadu (21) Delhi (24) Maharashtra (24) Rajasthan (47)	MP (54) Assam (54) Orissa (51)
MMR (2010-12)	Kerala (66) Maharashtra (87) Tamilnadu (90) Andhra Pradesh (110)	Assam (328) UP (292) Rajasthan (255) Odisha (235)

Table No.5 : Investment in Health Care (Draft NHP 2015)

Country	Total Health Expectation US 2011	Total Health Expectation % of GDP -2011	Government Health Expectation % of Total Health Expectation 2011	Life Expectancy at Birth (years) 2012
India	\$62	3.9%	30.5%	66
Thailand	\$214	4.1%	17.7%	75
Srilanka	\$93	3.3%	42.1%	75
BRIC COUNTRIES				
Brazil	\$1119	8.9%	45.7%	74
China	\$274	5.1%	55.9%	75
Russia	\$803	6.1%	59.8%	69
South Africa	\$670	8.7%	47.7%	59

Table No.6 : Investment in Health Care (Draft NHP 2015)

Country	Total Health Expectation US \$ 2011	Total Health Expectation % of GDP -2011	Government Health Expectation % of Total Health Expectation 2011	Life Expectancy at Birth (years) 2012
USA	8467	17.7	47.8	79
UK	9659	9.4	82.8	81
GERMANY	4396	11.3	76.5	81
FRANCE	4968	11.6	76.8	82
NORWAY	9908	9.9	85.1	82
SWEDEN	5419	9.5	81.6	82
DENMARK	6521	10.9	85.3	80
JAPAN	4656	10	82.1	84

Global evidence on health spending shows that unless a country spends at least 5.6% of its GDP on health and the major part of it is from government expenditure basic health care needs are seldom met.

Table No.7 : Health Personnel as on March 2007 : Rajvir/Bhalwar et al 2009

All India	Required ®	Sanctioned (S)	In Position (P)	Vacant (S-P)	Shortfall (R-P)
Doctors at PHCs	22370	27274	22608	4920	1410
Specialists (Surgery, Obgyn, Physician, Pediatrician at CHCs)	16180	10615	5117	5078	9455
Nurses at PHCs and CHCs	50685	36036	29776	5727	17262

References :

1. Abrahams,S. : Practicing and Teaching Family Medicine in India. Family Medicine 2007, 39:196 71-1.
2. Arhulraj'S. My Healthy India 2014 (1 to 171 page) (Personal Communication)
3. Bhalwar R., Vaidya R., Tilak R., Gupta R., Kunte R. : Text Book of Public Health and Community Medicine 2009, Published by Community Medicine, AFMC, Pune in Collaboration with WHO, India Office, New Delhi.
4. Evert, J :Banzemore, A, Hixons A; Withyk : Going global, Considerations for introducing. Global Health, into Family Medicine Training Programs and Regional Report, North America Family Medicine 39:655-665, 2007.
5. Fischer, B.B., Stam, M, Phil,Marty F. : Family Medicine in Switzerland : Training Experience in Medical School and Residency Family Medicine 40:651-655, 2007.
6. FreemanWiecha, J.M. Markuns, J.F. :

- Promoting Medical Humanism: Design and Evaluation of an online curriculum : family Medicine No.617-619, 2008.
7. Hegde B.M. : Our Medical Education Indian J. Med. Edu. 20:109-111, 1981
 8. Hegde, B.M.: Born Again Family Physicians, Souvenir National Seminar Family Physician Vanishing Tribe SAIMS, Indore 2008.
 9. Kahn, N.B. : the Future of Family Medicine A Collaborative Project of the Family Medicine Community Annals of Family Medicine 2: 53-59, 2004
 10. Medical Council of India (2011): National Meet on Implementation of Reforms in Undergraduate and Post Graduate Medical Education - Vision 2015.
 11. Ministry of Health and Family Welfare Govt. of India (2006): Report Task Force on Medical Education for the National Rural Health Mission. Ministry of Health and Family Welfare, Government of India: National Health Policy 2015 (Draft)
 12. Montegul, A.J. ; Sachirmer, J, Cartwright, C. Holt, C.; Chrc, N.T.K.; An, P.H., Cummingb, S. Creation of Postgraduate Training Programs for family Medicine in Vietnam Family Medicine 39:634-638, 2007.
 13. National Knowledge Commission : Working Group Report on Medical Education (2007).
 14. Prasad, P.N. : Nepal's Family Practice Doctor in Souvenir - International update on "Excellence in Medical Education for the Best of Health Care to Underserved" MIMS, Sevagram - Maharashtra (India) September 12-13, 2008.
 15. Purvuta, J. ; Grandos, G. : Developing an International Health Area of Concentration in a Family Medicine Residency Family Medicine 39:666-670, 2007
 16. Relnick (Jack), J.E.: A Special Issue on Global Family Medicine Education. Family Medicine 39:614-615, 2007
 17. Saigal, M.D. : Compendium of Recommendations of Various Committees on Health Development (1943-1975). Issued by Central Bureau of Health Intelligence, DGHS, Ministry of Health and Family Planning Government of India, 1985.
 18. SeenyorgaR : Family Medicines role in Health Care Systems in sub-saharan Africa : as an Example. Family Medicine 39:623-626, 2007.
 19. Shetty Devi: To transform health care, reform medical education. <http://health.economictimes.indiatimes.com>. 24th March, 2015
 20. Srinivas, D.K. Excellence in Medical Education for the Best of Health Care to underserved at MGIMS Sevagram, Maharashtra September 12-13, 2008.
 21. UNICEF : the State of World Children, 2008.
 22. Wang, J.; Kustrner, K., Frey (III) J.J. Ping DU; Qian N. Primary Care Reform in the Peoples Republic of China: Implications for Training Family Physicians for the World largest country. Family Medicine 39:639-643, 2007.
 23. Weel, C.V. Caring for People's Health around the World : A Family Physician for Every Community. Family Medicine 39:667, 2007.