## **BOOK REVIEW**

## What Matters in Medicine: **Lessons from a Life in Primary Care**

Reviewed by P. Ravi Shankar, Xavier University School of Medicine, Oranjestad, Aruba

## **ABSTRACT**

A primary care physician, Dr David Loxterkamp practicing in Belfast, Maine, United States has recently published a book titled 'What matters in medicine: Lessons from a life in primary care'. In the book the author describes the role models who influenced him to be a primary care physician, and also reflects on his three decades of practice as a rural physician. His description of his father Dr Edward Loxterkamp and his early death is particularly poignant and moving. The author mentions how primary care may be the most cost-effective option of providing affordable, good quality care for all. He also explores possible modifications to primary care for fulfilling this mission. In the later part of the manuscript I put forward certain observations and recommendations for undergraduate medical education with special emphasis on South Asia and other developing regions of the world to more effectively educate primary care doctors for rural areas and for deprived urban populations. Among the recommendations are increasing the proportion of learning taking place in the community, involving local practitioners as preceptors, selecting more students from rural areas, and developing closer links between medical schools and the country's public health system. Most of the role-modeling should be done by primary care practitioners are not by specialists as is presently the case.

Kevwords: Community, General Practitioner, Health Systems, Medical Education, Preceptors, Primary Care, Relationship Building, Rural Areas

What Matters in Medicine: Lessons from a Life in Primary Care David Loxterkamp
© 2013 by The University of Michigan Press
182 pp.
\$ 23.82
ISBN 978-0-472-11865-6.

The Foundation for International Medical Education and Research (FAIMER) has the objective of improving world health through education. Having completed a FAIMER fellowship in health professions education I have a keen interest in medical education, primary care and strengthening the link between medical education and the health system.

I recently read an interesting book titled 'What matters in medicine: Lessons from a life in primary care' by Dr David Loxterkamp who has been a primary care physician in Belfast, Maine, United States (US) for nearly three decades. In his book, Dr Loxterkamp reflects on the heroes and role models who attracted him to a life in primary care, his many years of practice as a primary care practitioner in rural Maine, and also reflects on possible changes in the way patients and doctors approach their shared contract for good health and a happy life.

The author has structured the book into three sections titled, 'Staging: a moral capital', 'Departure: a sense of place' and 'Arrival: the fall and rise of primary care'. In the preface, the author describes how he arrived at the title of his book. He mentions how he was inspired by Paul Goldberger's book 'Why architecture matters' in which he describes how architecture can have a significant influence on the lives of residents.

In the first section he describes three leading family physicians of a previous generation; Dr Ceriani practiced in Kremmling, Colorado, US, while Dr John Eskell practiced in St. Briavels, Wales, United Kingdom. His third hero was his father, Dr. Edward Loxterkamp, a family physician in the small town of Rolfe, Iowa, US. Dr Loxterkamp has an effective way with words and succeeds in painting vivid pictures of life in the years immediately following the Second World War. Dr Ceriani was one of the famous personalities in US medicine and in 1948 his face had graced the pages of 'Life' magazine. The picture essay titled 'Country doctor' was immensely popular and has influenced many generations of doctors and medical students. Dr Eskell's life was intertwined with the beginnings of and the consolidation phase of the National Health Service (NHS) in the United Kingdom. Regarding his father, Dr Loxterkamp mentions how most of his memories of time spent with his father were of waiting. He would take his son along on trips to the hospital, and while his father saw patients, the author would patiently wait for him to finish. I enjoyed his description of how his father was involved in the formation of the Pocahontas County Medical Society in Iowa which organized

medical meetings and gatherings for about three decades. The society was founded with the dual objectives of social companionship and also provides a forum to share medical knowledge and skill.

The author describes the courage, skill and dedication of the general practitioners and also their failings. Being used to independent practice they often had difficulty adjusting to group practice, managed care, and the changes brought about by modern medicine. He skillfully describes the effects of work pressures and stress on the doctors' personal lives and the toll it took on their family. His description of his father's premature death is very poignant.

In the second section of the book, 'Departure', the author mentions how towards the latter part of his practice he realized most of medicine has a strong behavioral foundation. In many small towns and rural areas people have a strong sense of place. The description of how the author first came to Belfast and slowly developed a sense of place and strong ties to the small town has been powerfully described.

Belfast had to face many challenges during the four centuries of its existence and had to reinvent itself periodically. The main occupation of the inhabitants had changed from lumbering, ship building, shoe manufacturing, and poultry farming to telemarketing with the advent of the era of information technology and consumerism. He describes how in a small town the patient-doctor relationship is intimate and personal. An interesting point he mentions is that the patient-doctor relationship is bidirectional and doctors gain much from their patients. The traditional emphasis has always been on how patients are benefited by their doctors. As a medical educator I am able to draw close parallels with how much I have gained from my students. He draws affectionate word pictures of some of his patients and the effects their illness had on their daily lives and on the relationship with their physician. Dr Loxterkamp emphasizes the importance of doing things you like and which make you come alive. The world has a vital need of persons who have come alive in a philosophical and metaphorical sense of the word.

With the emphasis on technology and infrastructure, the author feels that 'the doctor' may receive less attention than he deserves. Equipping doctors with new knowledge and skills and reducing their anxiety about change is important. The old black and white photographs in the book bring to life a bygone era. In the olden days, having one's picture taken was an important occasion and photographs were something to be cherished as compared to today's era of disposable photos taken using digital cameras, tablets, and even mobile phone cameras. The effort and planning that went into the taking of a picture in that era made it a momentous occasion, an event to remember and reminisce about.

In the last section of the book, 'Arrival', the author looks back at primary care from the period immediately after World War II to the present day, and mentions how primary care, in the future, may have to change and adapt itself to be able to provide affordable quality health care to all and promote health rather than cure

sickness. The major contributing factor to the decline of the general practitioner in post war America was the significant difference in pay and status between a generalist and a specialist, the long hours of work in general practice, and being on-call most of the time in a rural area. The author's description of how primary care might be the most cost-effective option of providing affordable, good quality care for all has been supported by a number of studies (Gofin et al., 2014; Rieselbach et al., 2013; Vasan et al., 2014). In the third section of the book, the author cites many studies from published scholarly literature to support his assertions. The author critically examines primary care and how it requires greater patience, long term commitment, a greater level of tolerance for ambiguity, and investment of time and resources on building relationships. Most of us want to live long and productive lives. Dr Loxterkamp mentions how certain regions of the world are well known for having a large percentage of centenarians in the population. Regular physical activity, a diet limiting total calories, purposeful living and strong social networks have been shown to be associated with longevity.

Dr Loxterkamp mentions how childhood emotional trauma can influence the development of the brain and predispose to destructive methods of coping with stress. Childhood emotional abuse predisposes to drug addiction, smoking and alcoholism in later life. He draws on recent research which explores how chronic diseases, unhealthy behavior, and even happiness can spread through social networks. Doctors, teachers, and professionals with large networks can influence large numbers of people. This underscores the importance of healthy behavior among healthcare practitioners and also why doctors should be happy. As a pharmacologist I have always been interested in the placebo response. Placebo, from 'I please', is where a medicine or a pill works not because of its active principles but because the patient believes that it will. The color, shape, taste of the medicine can all influence the placebo response. Belief in the doctor and a strong patient-doctor relationship is an important factor influencing the response. A recent systematic review of the literature mentions that the placebo response may be influenced by expectations of how symptoms might change after treatment, or by expectations of how a repetition of symptoms can be dealt with (Horing et al., 2014). Goal seeking behavior, self-esteem, locus of control, optimism, desire for control, gender, personality variables, and a single nucleotide polymorphism related to dopamine metabolism can all affect the placebo response. A strong patient-doctor relationship can foster a strong placebo response and mitigate any nocebo (negative response or adverse effect to a placebo) response (Olshansky, 2007).

The author examines the challenge of change: how change is often inevitable. but most persons are uncomfortable when change actually does happen. He exhorts doctors to make informed and shared decisions about treatment, get involved in the community, treat patients where they find them, let patients shape the agenda

of their practice, and he ends by highlighting once again the importance of coming alive.

Though he does not directly provide insights about medical education, many observations of Dr Loxterkamp, during his long career as a primary care physician, are of importance while considering the education of the next generation of physicians. In this, and the next three paragraphs, I will share certain observations about educating doctors for primary care in South Asia. This is an outline which will require elaboration in a future manuscript/s dedicated solely to the issue of undergraduate medical education. In most areas of the world, a majority of the education of medical students occurs in teaching hospitals and under the guidance of specialist tertiary-care physicians. Medical councils, which are also the accrediting agencies for medical schools in the South Asia region, require a certain number of beds in the teaching hospital per student. The number of hospital beds and the occupancy rate plays a vital role during site visits as a part of the accreditation process. Recently, the World Organization of Family Doctors (WONCA), has published a rural medical education guidebook, which provides important guidelines for medical educators interested in educating doctors for rural areas (Reid et al., 2014).

Rural medical practitioners are primarily generalists and require particular attributes and special training (Reid et al., 2014). The rural practitioner has to deal with 'any patient, with any problem, anytime, and anywhere'. A recent article mentions that primary care is associated with a more equitable distribution of health in populations, ensures better access to health services for relatively deprived population groups, provides a better quality of care with a greater emphasis on prevention, and early management of health problems (Starfield et al., 2005). Primary care focuses on the person rather than on particular diseases and can have an important role in reducing unnecessary and inappropriate specialist care. The United States has a greater proportion of specialists compared to other industrialized countries and it has been mentioned specialists practicing in the community may overestimate the likelihood of illness in the patients they see with consequent inappropriate use of diagnostic and therapeutic modalities (Hashem et al., 2003).

A greater proportion of undergraduate medical learning should take place in the community, under the guidance of rural general practitioners and other health care personnel (Baker et al., 2003; Walters et al., 2003). Many medical schools in South Asia have started community postings and community health projects. However, at present these postings occupy only a modest percentage of curriculum time. If the health needs of the rural community are to be addressed I am of the opinion at least around 70% of the curriculum time should be spend in rural communities with local primary care practitioners. This will provide students with a good grounding about rural life and the rural practitioners will serve as powerful

role-models for a career in primary care. In many rural medical schools in Canada and Australia local physicians play an important role as preceptors and are supported by the medical school (Murdoch, 2014). There is community involvement in the education process and students stay with rural communities.

Students from rural communities are more likely to stay and practice in rural areas and efforts have been made in most countries to recruit more rural students into medical schools (Rabinowitz et al., 2011; Rourke at al., 2005; Somers et al., 2007). In South Asia with increasing urbanization the proportion of the population staying in urban slums is increasing and this population due to its low socioeconomic standards has a low standard of living and may have difficulty in accessing health care (Khor, 2008; Mukhopadhyay, 2007). Broad guidelines for reforming medical education in South Asia with a greater emphasis on primary care to meet the health needs of the rural population and the urban poor could be having a greater number of primary healthcare facilities and rural general practitioners and health workers as teaching sites and preceptors, developing closer links between the medical school and the community, supporting continuing professional development of general practitioners in the practice area of the school and reducing the amount of teaching time spend in specialized tertiary care teaching hospitals. Role modeling should be provided by rural general practitioners and doctors practicing in urban slums. Small satellite centers can be developed in the school's community of practice and students can rotate among these centers. Online learning resources and platforms can be used to deliver lecture content like in medical schools in Australia and Canada so that students may no longer be required to stay in a large, centralized campus. Close linkages between medical schools and the public health system is required (Donovan, 2014). In many South Asian countries strengthening of public health systems is a priority. Developing close linkages between public health institutions and medical schools will be mutually advantageous to both parties. Educating medical students about health systems management and leadership (Stringfellow et al., 2014) and about medical humanities and ethics is required (Shankar & Piryani, 2009).

I enjoyed reading the book which flows well in most places. I was inspired by the lives of role model family doctors and the author's description of life and medicine in the two decades following the end of the Second World War. His deep insights from over three decades spent working as a rural family physician, based on keen observation and intense reflection, provide much food for thought for policy planners, medical educators, and physicians. Lay persons interested in health and primary care will find this book of interest. The author has important insights to promote wellness and improve health which can be considered by policy makers, doctors, health administrators, economists, and public health specialists. In democracies, lay persons aware of important health issues can make better informed choices and decisions while electing their politicians.

## REFERENCES

Baker, P. G., Dalton, L., & Walker, J. (2003). Rural general practitioner preceptors--how can effective undergraduate teaching be supported or improved? Rural and Remote Health, 3(1), 107. PMID:15877484

Donovan, D. (2014). Integrating public health and medicine. In A.B. Chater, J. Rourke, I.D. Couper, R.P. Strasser, & S. Reid (Eds.), WONCA Rural Medical Education Guidebook. Retrieved from http://www.globalfamilyldoctor.com

Gofin, J., Gofin, R., & Stimpson, J.P. (2014). Community-Oriented Primary Care (COPC) and the Affordable Care Act: An Opportunity to Meet the Demands of an Evolving Health Care System. Journal of Primary Care and Community Health.

Hashem, A., Chi, M. T., & Friedman, C. P. (2003). Medical Errors as a Result of Specialization. Journal of Biomedical Informatics, 36(1-2), 61-69. doi:10.1016/S1532-0464(03)00057-1 PMID:14552847

Horing, B., Weimer, K., Muth, E. R., & Enck, P. (2014). Prediction of placebo responses: A systematic review of the literature. Frontiers in Psychology, 5, 1079. doi:10.3389/ fpsyg.2014.01079 PMID:25324797

Khor, G. L. (2008). Food-based approaches to combat the double burden among the poor: Challenges in the Asian context. Asia Pacific Journal of Clinical Nutrition, 17 (Suppl. 1), 111-115. PMID:18296315

Mukhopadhyay, A. (2007). South Asia's health promotion kaleidoscope. Promotion & Education, 14(4), 238-243. doi:10.1177/10253823070140041101 PMID:18372876

Murdoch, J. C. (2014). Excellence in 'bush medical schools': The value of rural education. In A.B. Chater, J. Rourke, I.D. Couper, R.P. Strasser, & S. Reid (Eds.), WONCA Rural Medical Education Guidebook. Retrieved from http://www.globalfamilyldoctor.com

Olshansky, B. (2007). Placebo and nocebo in cardiovascular health: Implications for healthcare, research, and the doctor-patient relationship. Journal of the American College of Cardiology, 49(4), 415–421. doi:10.1016/j.jacc.2006.09.036 PMID:17258086

Rabinowitz, H., Diamond, J., Markham, F., & Santana, A. (2011). Increasing the supply of rural family physicians: Recent outcomes from Jefferson Medical College's Physician Shortage Area Programme (PSAP). Academic Medicine, 86(2), 264–269. doi:10.1097/ ACM.0b013e31820469d6 PMID:21169776

Reid, S., Worley, P., Strasser, R., Couper, I., & Rourke, J. (2014). 'What brings us together': The values and principles of rural medical education. In A.B. Chater, J. Rourke, I.D. Couper, R.P. Strasser, & S. Reid (Eds.), WONCA Rural Medical Education Guidebook. Retrieved from http://www.globalfamilyldoctor.com

Rieselbach, R. E., Crouse, B. J., Neuhausen, K., Nasca, T. J., & Frohna, J. G. (2013). Academic medicine: A key partner in strengthening the primary care infrastructure via teaching health centers. Academic Medicine, 88(12), 1835-1843. doi:10.1097/ ACM.0000000000000035 PMID:24128617

Rourke, J. T., Incitti, F., Rourke, L. L., & Kennard, M. A. (2005). Relationship between practice location of Ontario family physicians and their rural background or amount of rural medical education experience. *Canadian Journal of Rural Medicine*, 10(4), 231–239. PMID:16356384

Shankar, P. R., & Piryani, R. M. (2009). Medical education and medical educators in South Asia--a set of challenges. *Journal of the College of Physicians and Surgeons--Pakistan*, 19(1), 52–56. PMID:19149982

Somers, G. T., Strasser, R., & Jolly, B. (2007). What does it take? The influence of rural upbringing and sense or rural background on medical students' intention to work in a rural environment. *Rural and Remote Health*, 7(706), 1–11. PMID:17430082

Starfield, B., Shi, L., & Macinko, J. (2005). Contribution of primary care to health systems and health. *The Milbank Quarterly*, 83(3), 457–502. doi:10.1111/j.1468-0009.2005.00409.x PMID:16202000

Stringfellow, T. D., Rohrer, R. M., Loewenthal, L., Gorrard-Smith, C., Sheriff, I. H., Armit, K., & Spurgeon, P. C. et al. (2014). Defining the structure of undergraduate medical leadership and management teaching and assessment in the UK. *Medical Teacher*. PMID:25301039

Vasan, A., Ellner, A., Lawn, S. D., Gove, S., Anatole, M., Gupta, N., & Farmer, P. E. et al. (2014). Integrated care as a means to improve primary care delivery for adults and adolescents in the developing world: A critical analysis of Integrated Management of Adolescent and Adult Illness (IMAI). *BMC Medicine*, *12*(1), 6. doi:10.1186/1741-7015-12-6 PMID:24423387

Walters, L. K., Worley, P. S., & Mugford, B. V. (2003). Parallel Rural Community Curriculum: Is it a transferable model? *Rural and Remote Health*, 3(3), 236. PMID:15882099

P. Ravi Shankar is a Professor of Pharmacology at the Xavier University School of Medicine, Aruba, Kingdom of the Netherlands. He is Chair of the Curriculum and the Research Committee. Dr. Shankar has completed a Fellowship in Health Professions Education from the PSGFAIMER Regional Institute, Coimbatore, India. He has a keen interest in primary care and in educating doctors for primary care and rural practice. His areas of research include small group learning, educational environment, and educating primary care physicians.