



Researchers' Page

Combining the biologic with the psychosocial

Why family physicians conducting research should be interested

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The term biopsychosocial has been used for several years to refer to a holistic view that perceives how systemic characteristics in a given society interact to affect the health of the population. These systemic characteristics act on biologic and psychosocial factors simultaneously. Patients' biologic resistance (determined by genetic background, age, and sex), lifestyle, mental and cognitive makeup, and resources all influence this field of positive and negative forces (which include social support, microbes and other pathogens, eating habits, the health care system, and stress).

The term biopsychosocial also implies that every person has biologic, psychological, and social dimensions. The life sciences seek to understand the biologic dimension; in taking human beings apart, these sciences have sought to understand the normal and the pathologic. The behavioural and social sciences seek to further our understanding of how human beings function in society. These two spheres of knowledge intersect at the level of the individual: a psychological, social, and biologic being.¹ In general, however, research on individuals remains within the rigid confines of one or another of these broad disciplinary fields, analyzing one aspect of the individual, rather than the individual as a whole. This article explains why family physicians are in an ideal position to contribute to research and integration of the biologic with

the psychosocial, and provides a few examples of research topics in this field.

Since the discovery that the environment affects health, medicine has become more legitimately and openly social. Recent discoveries have reminded us of the social origins of medicine. McKeown and others claimed, and it is now widely acknowledged, that Canadians are healthier and that their life expectancy has increased by more than 15 years since the Second World War, not because of measures taken when they are sick, but because they are sick less often.² Better social conditions have made the greatest contribution to this spectacular increase in life expectancy. The factors most likely to affect our health adversely and to shorten life expectancy are childhood poverty, unemployment, cutbacks in social programs, and the breakdown of families and communities. Since family physicians' work brings them face-to-face with all of these factors, they are in a good position to contribute to our understanding of the mechanisms that connect them.

While a holistic approach is encouraged in several disciplines, including alternative medicine, the fundamental principles upon which family medicine is based are entirely holistic in nature. Family medicine is constantly evolving; it is expanding its professional vision. Consequently, it is not locked into a rigid conceptual framework. This is why it is ideally placed to explore the interfaces between

the hard sciences, the soft sciences, and the behavioural sciences. Family physicians are in position to gain an overall view of an individual. They are often the first medical professional with whom a patient comes into contact, and they have an important role in health care and prevention services. It is not unusual for family physicians to treat patients and their families throughout their entire lives. In this sense, family physicians represent the primary connection with the health care system.

With the awareness that the crucial factor is the psychological impact of socioeconomic status and that social factors interact with biologic factors, we are beginning to gain a “biologic” understanding of empirical observations that connect psychosocial and biologic events. This understanding could transform the way in which we practise medicine. The clinical meeting between patient and physician (ie, the patient-physician relationship) is an area to which family physicians, by virtue of their position, have unique access. There has been little systematic observation of what happens on each visit, from a biopsychosocial standpoint, or what happens over an extended period. Research could provide us with a wealth of information and is a readily accessible area of investigation in family medicine.

Here is an example of what family medicine research on integrating the biologic with the biopsychosocial could look like. A family physician observes that, when he vaccinates children, they rarely cry. He thinks that it has to do with having a “gift” or maybe that he has a gentle touch. After several observations, he notes that the babies who do not cry are those who are breastfed immediately before receiving their injection. He looks to a biopsychosocial model for answers. Seeking to understand the biologic processes underlying this phenomenon, he looks for some biologic factor that could explain it. He finds his answers in the work of a pediatrician who has studied the phenomenon thoroughly, testing the theory that breastfeeding (and the content, contact, and suction that it provides) stimulates the central circuits that reduce the sensation of pain.³ With the help of a biologic hypothesis, this study confirms the family physician’s observation.

This example illustrates the issues and challenges of this type of undertaking. Epidemiologic research based on empirical observations and a biologic hypothesis could result in more effective medical practices, since it would be based on an understanding, shared with the client, of the mechanisms that are really at work.

Given the explosive increase in the body of knowledge of the biologic mechanisms underlying certain phenomena and the contribution of social phenomena to public health, family medicine could:

- act as a point of contact or crossroads between many different disciplines,
- contribute to knowledge in the field of biopsychosociology, and
- coordinate the truly interdisciplinary work of knowledge and experience.

Since the ultimate goal of the discipline of family medicine is to contribute to improved individual and public health, it should use its unique and privileged position to lead these endeavours, with the support of strong methodologists in the biologic and social disciplines. Family medicine’s sometimes uncomfortable position at the interface—or on the periphery—of many disciplines could, like all eccentric or marginal vantage points, be a source of great creativity. This is where all research efforts, and exciting discoveries, must begin. In this way, family medicine could be the starting point for research integrating the natural and the social sciences and for research pursuing a holistic approach to the individual. To develop such a field of research in family medicine would affirm both its specificity and its legitimacy. 

References

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