

# DOES MEDICINE NEED PSYCHO-SOCIAL SCIENCE?

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## ABSTRACT

Despite Alma Ata in 1978, the developing countries continue to divert scarce resources to multiple-story tertiary hospitals at the expense of primary health care services. No country in the world has unlimited resources with regard to budget allocation for health care. Paradoxically, a number of advanced western countries are in the forefront with regard to budget allocations to primary care.

The continuing dominance of the biomedical/engineering model of health care which views the human body as a machine requiring regular servicing and fixing is the major stumbling block – hence the current suspicions and disequilibrium between the non-selective bio-psycho-social primary health care approach and biomedicine. Biomedicine, with the hospital as a bureaucratic organisation, remains the latent albatross over communities and legislators alike. Behavioural sciences, underpinned by the bio-psycho-social consultation model need to be introduced urgently in all medical school curriculums.  
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## INTRODUCTION

Social Science in a nutshell is the study of societies in their respective social contexts. The practice of medicine is a societal matter – there can be no medicine without a society. Modern medicine has come to accept what is termed interdisciplinary approaches ranging from research, management of patients and the economics of health care.

Public health is one area which clearly demonstrates this need for team work – ‘epidemiological research is becoming increasingly a matter of teamwork, not only because of the large number of people

that may have to be studied and the large amount of data that have to be collected and analyzed, but also because of the need to bring together for the design and conduct of the study, clinical experience, biological understanding, statistical expertise and many other special skills that vary from one study to another’.<sup>1</sup> “The many other special skills can only be acquired from, inter alia social science, psychology and anthropology. It is not possible to identify and follow a cohort group with a complete disregard of its social conditions and social structure. In his treatise, *Principles of*

*Family Medicine*, Ian McWhinney states with regard to the context of any patient's illness: ‘To understand a thing rightly, we need to see it both out of its environment and in it, and to have acquaintance with the whole range of its variations’ - wrote William James. Many illnesses cannot be fully understood unless they are seen in their personal, family, and social context. When a patient is admitted to the hospital, much of the context of the illness is removed or obscured. Attention seems to be focused on the foreground rather than the background, often resulting in a limited picture

of the illness.”<sup>2</sup>

In yet another principle “*sharing the same habitat*”, McWhinney borrows the idea from a combination of history and social science when he writes: ‘If we do not live where we work, and when we work, we are wasting our lives, and our work too. The Love Canal disaster in Niagara Falls provides a vivid illustration of what can happen when physicians are remote from the environment of their patients. This abandoned canal had been used by a local industry for the disposal of toxic waste products. The canal was then covered over and, some year later, houses were built on the site. During the 1960’s, householders began to notice that chemical sludge was seeping into their basements and gardens. Trees and shrubs died, and the atmosphere became polluted by malodorous fumes. About the same time, residents in the neighborhood began to suffer from illnesses caused by the toxic chemicals. It was not, however, until a local journalist did a health survey in the area that an official health study was done. This showed rates of illness, miscarriage, and birth defects far in excess of the norm (Brown, 1979). How did the cluster of illnesses in an obviously polluted environment escape the notice of local physicians? One can only assume that they treated patients without seeing them in their home environment. It is difficult to believe that a neighborhood family physician, visiting patients in their homes and interested in their environment, would have remained unaware of the problem for so long. To be fully effective a family physician still needs to be a visible presence in the neighborhood.’<sup>3</sup>

Similarly, in the South African context, it is not possible to understand the clusters of stunted growth amongst children in black African communities without imploring a

more than passing reference to social science. Social Science research at The Institute of Race Relations in South Africa has shown that “stunting (or low height for age) remained the most common nutritional disorder, affecting nearly one in five children in South Africa. This disorder was especially prevalent on commercial farms, but tribal land and other rural areas were worst affected.”<sup>4</sup>

Arguably, the taking of a good medical history of patients is the property of the discipline of family medicine and primary health care. The reason for this is that this discipline follows the bio-psycho-social approach in encounters with patients. The engineering model of medicine (biomedicine) is grudgingly beginning to facilitate and adopt this approach. Thus, The Consultation, as a module at medical schools would be better facilitated by family and primary health care physicians. In a leading textbook of Internal Medicine, we read ‘It may seem trite to emphasize that physicians need to approach patients not as cases or diseases but as individuals whose problems all too often transcend their physical complaints..... The physician must be alert to the possibility that any event related by the patient, however trivial or apparently remote, may be the key to the solution of the medical problem. It is helpful to develop the patient’s expectations of the physician and the medical care system and the financial and social implications of the illness to the patient.’<sup>5</sup> For this welcome approach to remain relevant, biomedicine needs to maintain its newly found association with the psychosocial sciences.

Physicians in all disciplines are often ill at ease and puzzled concerning the issue of what has been variously termed compliance, co-operation and co-ordnance. The

subject involves patients’ lay beliefs amongst many other issues relating to doctor patient interactions. It is an extremely relevant topic since issues such as cost (private and public), drug adverse effects and iatrogenicity remain permanent in encounters with patients. The research and literature in this field is overwhelmingly bio-psychosocial in approach. In a commentary under the title ‘Does a prescribed treatment match a patient’s priorities?’ Townsend et al concluded from their qualitative study of attitudes to drug use that “insight into the considerable tension experienced by people managing complex drug regimens to manage multiple chronic illness may help medical carers to support self care practices among patients and to optimize concordance in their use of prescribed drugs”.<sup>6</sup> Prof. Nicky Britten, a leading social scientist, and John Benson in their study of patients’ views about taking anti-hypertensive drugs concluded that “many patients taking anti-hypertensive drugs hold reservations about them such as persistent side effects but balance them against reasons to take antihypertensives that make sense to them personally. Our study may underrepresent the views of patients from ethnic minorities and patients who are most infirm”.<sup>7</sup>

Guided by social science, Sam Mhlomo focused his research on his African-Caribbean patients in London and concluded that “African Caribbean’s will take prescribed medication when they believe their blood pressure to be high. A significant number claimed they could tell if their blood pressure was up, i.e. they experience stress, head pains and crawling sensations in the head”.<sup>8</sup>

One area that has been neglected for study with regard to disease and mortality profile in South Africa is social class. This has been al-



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most entirely due to preoccupations with race for many decades. As the country painstakingly and inexorably moves away from these preoccupations, the subject of social classes will have to be researched and addressed. Writing about Britain in 1979 Thomas McKeown noted: "The class differences are greatest in relation to infective and parasitic diseases and diseases of the respiratory system, but are also quite marked for malignant neoplasms, diseases of the nervous system and sense organs, diseases of the digestive system, diseases of the genito urinary system, and accidents and violence"<sup>9</sup> Morgan and colleagues in their evaluation of inequalities in health write "The

association between social class and health is traditionally explained in terms of the health risks associated with particular aspects of the life circumstances, health beliefs and behaviour of social class groups. Alternative approaches are to view the apparent differences in morbidity and mortality rates from particular diseases as forming a product of social labeling, reflecting differences in doctors' readiness to apply specific disease labels to different social class groups, or as forming a product of the selective effects of health on social class membership."<sup>10</sup>

In South Africa the preoccupation with race on statistics relating to morbidity and mortality throws hardly any light on social

class. **Table I** serves to illustrate this point:

**Table I** makes no reference to social class as if the country has no social classes – i.e. a form of an ideal communist state!! The time has perhaps come for epidemiologists and social scientists in South Africa to get together on the subject of health in the country. Not only do health professionals, but the government, the treasury and the entire National Health Service need psycho-social science for the benefit of patients, health professionals and the management of resources.✂

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**Table I: Estimated life expectancy by race 1996-2001 to 2026-31**

Race	1996-2001	2011-16	2026-31	Increase/decrease
African	54.8	47.2	53.2	(2.9%)
Coloured	59.6	58.7	64.0	7.3%
Indian/Asian	70.2	74.3	77.8	10.8%
White	73.7	75.7	77.8	5.6%
South Africa	57.1	50.3	56.2	(1.6%)