

Position statement

Health, Commerce, and the Future of Health Psychology



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Recently, Olshansky et al. (2005) concluded that life expectancy in the developed countries might fall in the 21st Century, rather than rise, for the first time in several hundreds of years. They give three main reasons for their conclusion: First, notwithstanding popular portrayals, life-extending biomedical technology capable of appreciably raising population life expectancy does not exist and will not for the foreseeable future. Secondly, past gains in population life expectancy were largely the product of saving the young, something that cannot be repeated. The major declines in death were from infectious diseases that struck large numbers of infants, children, adolescents, and young adults in their prime. Future gains will have to be made with older groups.

The third reason for the likely fall in life expectancy in the coming decades relates to new threats to health, which have already begun to appear and, if left unchecked, will reverse the centuries-old trend of increasing longevity. Health care during the 20th Century, especially since the Second World War, has pursued a relentlessly biomedical path. This might have been a good strategy were the new health challenges threatening life expectancy biomedical in nature, but they are not. The new threats are primarily psychosocial.

One of these new threats, and the one of particular concern in the opinion of Olshansky et al. (2005), is the rise in the prevalence of obesity. In the United States, two-thirds of people are now deemed to be overweight, and about half of these are obese. Obesity is primarily a disorder of behaviour and the sociopolitical context in which behaviour patterns emerge, including high consumption of energy dense low-nutritious food and low levels of physical activity encouraged in part by a plethora of marketing devices and passive entertainment options. In turn, obesity is a major contributor to a host of disorders, including diabetes, the lifetime risk of which is now greater than 1 in 3 in the United States. Diabetes in adulthood increases the likelihood of heart attack by as much as having had a previous heart attack, and is associated with an increased risk of stroke, renal failure, blindness, and limb amputation. Persons with diabetes experience a reduced life expectancy of about 13 years.

Relative Importance of Biomedical and Psychosocial Factors

Part of the *raison d'être* of health psychology has been to show that psychosocial factors are important determinants of health. With ever-increasing understanding of the importance of psychosocial factors, radical shifts in emphasis away from the search for biomedical solutions towards psychosocial alternatives might already have been expected to have occurred. However, the growth in interest in psychosocial factors in health at national and international levels (e.g., the WHO, 2000, response to the "global epidemic" in obesity) is far outstripped by the unabated clamber for evermore technological medicine.

In the face of the intransigence of biomedical health care, it is arguable that the time has come for health psychology to emphasise not so much the importance of psychosocial factors *per se*, but rather the importance of psychosocial factors *relative* to biomedical factors in health and health care delivery. Many diverse examples of the relative importance of these factors could be cited, but a single recent study by Ünal et al. (2005) may suffice as a representative illustration. In the 20 years between 1981 and 2000, there were 70,000 fewer deaths in England and Wales than would have been expected on the basis of earlier trends in mortality. This number of fewer deaths translated to almost 1 million additional life years gained in a population of about 55 million, and Ünal et al. (2005) sought to identify the main causes of this substantial health benefit.

Ünal et al. found that about 20% of the benefit was due to biomedical intervention (e.g., treatment of acute myocardial infarction, secondary prevention involving corrective surgery and drugs for the control of hypertension). The remaining 80% of benefit was due to positive changes in behaviour and lifestyle during the period (e.g., reduced smoking levels, improvements in nutrition resulting in

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lower blood pressure levels and lower levels of serum cholesterol), which occurred against a background of improved understanding of behavioural factors in health. In short, despite health expenditure being directed overwhelmingly at biomedical health care, a fourfold larger benefit was achieved through psychosocial changes. Ominously, Ünal et al. (2005) observed adverse (as well as positive) trends in behaviour and lifestyle, including increased levels of obesity and decreased levels of physical exercise, which they found are already having measurable adverse effects on population mortality rates.

Biotechnology and the Commercial Culture of Contemporary Health Care

Although the available evidence suggests the need for major shifts towards psychosocial management and intervention, health care remains captive to a vision of the future in which biotechnology remains overwhelming dominant. For example, Senator William Frist (2005), medical doctor, Majority Leader in the United States Senate, and spokesperson for health, recently outlined his vision for future health care in a Special Article published in a major medical journal. While commenting perfunctorily that “people should be more responsible for preventing illness & disease” (p. 270), Frist offered a vision of health based on new and emerging biotechnology, including the use of permanently implantable microchips to monitor blood chemistries, measure blood pressure and conduct diagnostic tests, and injection of nanorobots to detect and repair lesions in defective organs. Although such technology, once refined, would be capable of doing good for individuals suffering manifest disease, the approach proffered by Senator Frist perpetuates familiar shortcomings of existing biomedical health care (e.g., predominantly illness focused care that encourages patients to be passive recipients of treatment) known to contribute little to overall health and avoidance of disease. Accordingly, such a vision has minimal prospects of producing appreciable improvements in population life expectancy.

In the main, Frist’s (2005) vision panders to the interests of a commercial sector that exploits illness through the sale of products for profit. While a rational assessment of the evidence suggests the need for shifts in emphasis in health care away from biotechnology towards behaviour change, it is evident that the latter offers limited scope for commercial exploitation. In contrast, the prescribing of drugs, for example, involves products that are valued in the region of \$200 billion per year in the United States alone (Als-Nielsen et al., 2003). The pharmaceutical industry invests heavily in selling its products, with approximately \$12-15 billion per annum being spent for the sole purpose of encouraging physicians to prescribe drugs, especially newer compounds that are more expensive for patients and insurers while often being no more effective than older alternatives (Blumenthal, 2004).

Considering the extent of formal training that prescribing physicians receive, it is not obvious why so much input is required from industry representatives. In any event, the pattern of sales of prescription drugs often does not correspond with the efficacy of the drugs prescribed, and therefore is irrational when assessed on the basis of principles of cost-effectiveness. However, nor are the prescribing patterns of physicians random. The relationship between industry representatives and physicians is characterised by the giving of gifts by the former to the latter, and the value of the drugs prescribed by physicians is positively correlated with the amount of contact between physicians and industry representatives (Dana & Lowenstein, 2003).

The level of penetration by industry into the practice of medicine is evidenced by industry presence in medical education. For example, nine-tenths of the \$1 billion spent per annum on physician continuing education in the United States is paid by industry (Blumenthal, 2004). Opportunities for industry influence even exist in relation to the authoritative guidelines that govern everyday clinical practice. It has been estimated that two-thirds of the authors of clinical guidelines have conflicts of interest arising from their associations, generally of a pecuniary nature, with industry (Blumenthal, 2004).

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Commercial Culture of Research

The influence of commercial interests evident in clinical practice is equally evident in the research from which practice is derived. It is estimated that the pharmaceutical industry funds more than 70% of the clinical trials undertaken to evaluate the relative efficacy of new and existing drugs (Als-Nielsen et al., 2003). Indeed, industry is responsible for approximately 60% of all biomedical research. At one level, this could be regarded a good thing. Research is expensive, and the fact that industry pays for much biomedical research could be thought of as a positive example of the cost of a potential public good being borne by the private sector. Conversely, questions could be raised about this practice on the grounds that much of the research takes place in universities that have created large research infrastructures using public finances, and the research in question is generally being undertaken for private commercial gain.

Whether one settles for viewing these practices as desirable or dubious could depend on the confidence inspired by the work that is done. In a study of the scientific integrity of research, Als-Nielsen et al. (2003) examined data from 370 randomised drug trials, categorising trials into four groups according to funding source as either nonprofit, not reported, combined nonprofit and for-profit, or for-profit. While there was nothing to differentiate the studies other than funding source, the authors of for-profit trials were 3 times more likely to recommend the new (experimental) drug as the treatment of choice. Since there was nothing in the reported studies to differentiate one from another, apart from funding source, Als-Nielsen et al. found no alternative but to conclude that for-profit funding creates “biased interpretation” of trial results.

It should not be imagined that the threats to scientific integrity implied in studies such as that by Als-Nielsen et al. (2003) are peculiar to North America, as the studies sampled were selected from global data bases. Indeed, in addition to being widely exposed to such bias, there is evidence of industry influence at the very heart of key European research institutions. The European Commission actively solicits industry partners in large scale publicly-funded research, including extensive “third party” collaboration where the links to industry are not publicly disclosed (James, 2002). Something of the pervasive influence of the Commission’s commercial priorities may be illuminated by the personal experience of this author. The particular experience relates to a project, “Dietary Caffeine, Health and Quality of Life in Europe”, 2001-2004, funded by the European Commission as part of its Fifth Framework Programme (Project QLRT-2000-00069).

Midway through the project, this author, as Project Coordinator, was contacted by a representative of the relevant Research Directorate in Brussels with expressions of concern that the project had produced “no positive messages”, meaning that no conclusions had been offered to indicate a health “protective” effect of caffeine (personal correspondence, 12 September 2002). We were asked whether it would be “possible to give also some positive messages”. It is important to understand that these concerns were not linked in any way to issues of methodology or scientific standards. Consequently, there was no escaping the impression that it was the Commission’s wish that the work should produce pro-industry findings. In reality, the findings were not supportive of oft-repeated industry claims of caffeine-induced “benefits”. Under the circumstances, the concerns expressed by the Commission are meaningful only in terms of the European Union’s abiding commitment to stimulating commercial activity, as evidenced by its own extensive literature on the topic (e.g., <http://europa.eu.int/comm/research>). In due course, the research in question was published, unadulterated by concerns for industry interests, in various peer-review scientific journals (e.g. James, 2004; James & Gregg, 2004; James et al., 2005; James & Rogers, 2005).

Taking daily consumption as an index, caffeine products (principally, coffee, tea, soft drinks, and so-called “energy” drinks) have achieved almost total penetration of the European diet. As such, the “positive messages” of interest to the Commission would have served commercial interests, whereas the “negative” effects suggested by

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the data are likely to be commercially unhelpful. At no time in the course of the project did the Commission express any appreciation of, or interest in, the substantial implications of our “negative” findings for current and future health in Europe. From the experience outlined, and the Commission’ own position statements, it might be surmised that health is not only subservient to commerce as a Commission priority, but that the Commission believes it acceptable, in the interests of commercial advantage, for “health messages” to be used as a veil for enterprises having primarily commercial aims. It would be reasonable to expect consumers to be disapproving, were the European Commission to subvert health in the interests of stimulating commercial activity, and it should be a matter of concern to health psychologists were this found to be the case.

Conclusion

The advancement of health psychology as a discipline and profession will involve more than demonstrating the involvement of psychosocial factors as causes and outcomes of health and illness. Greater effort is needed to create an appreciation beyond health psychology itself, of the fact that psychosocial processes are more important than biomedical processes in understanding population patterns of health and illness. Of course, much still remains to be learned about psychosocial factors in health, and it would be wrong of health psychologists to make claims that cannot yet be delivered. However, accepting that shifts in focus are needed within health care, a major role of health psychology should be to encourage greater public commitment to finding psychosocial solutions to major health problems. At the same time, among other things, any major shift toward a psychosocial focus within health care would upset current political priorities and threaten extensive commercial interests. Consequently, formidable opposition to health psychology aspirations should be expected from within the existing complex of institutions and organisations concerned with health care. Discussion of such issues does not yet appear to be part of mainstream debate in health psychology. Perhaps it should be.

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