On the definition of relevant disease

Historically the art of medicine was defined by the ability to develop a personal reference for normality. This internal reference allowed the subjective identification of abnormality by pure clinical acumen. In contrast, modern medicine provides an objective scientific definition of abnormality, based on accurate measurement and statistical analysis. However, the medical profession still struggles to find the optimal balance between the art (subjective) and the science (objective), in providing holistic health care.

Statistical differentiation into normal and abnormal serves us well when dealing with continuous physiological variables like blood pressure, cholesterol, or weight. The differentiation becomes problematic when dealing with the complex biological balance that exists between infecting organisms and host responses. The initial simplistic differentiation into harmless colonising organisms and dangerous invasive pathogens has been replaced by a more complete appreciation of the complex, dynamic relation that exists between the host and the organism. The challenge facing modern medicine is to translate improved scientific understanding into clear, pragmatic guidelines applicable in diverse settings.

Once abnormality is identified, whether subjectively or objectively, the crucial question that remains is: Does this abnormality constitute disease? Disease is defined by present reduced quality of life (morbidity) as well as the increased risk for future morbidity or mortality. Knowledge of a condition's natural history becomes invaluable when initial morbidity is minimal. Accurate description of the natural history of disease allows scientific risk/benefit analyses of a proposed intervention. The scientific endpoint here is to quantify the relative benefit of the suggested intervention within a particular setting.

The idea of relative benefit or risk, to an individual within a particular setting, differs from the classical public health approach. With this approach the relevance of disease is determined by the total burden placed on a specific society, completely ignoring the individual patient. Although it assists with focusing scarce resources, it undermines the individual patient. Although it assists with focusing scarce resources, it undermines the individual patient, but takes the baseline risk determined by his/her particular setting into account.

Relevant disease defines the point where relative risk increases significantly beyond the baseline risk within a particular community. This implies that contrary to the classic public health approach, any severe disease represents relevant disease, irrespective of its contribution to the total burden of disease. This definition also challenges the classic pharmaceutical approach, which promotes any statistically significant benefit measured against a minimal baseline risk, as the accepted “standard of care”, irrespective of the particular setting.

Identifying the appropriate intervention once relevant disease is diagnosed requires careful analysis, weighing the relative risk posed to the individual and society against the possible benefit, risk and cost of available treatment. The challenge posed by the concept of relevant disease, is to identify the sub-population at highest risk in order to focus cost effective interventions appropriately.

 Protecting children from abuse and neglect in primary care


The world of child protection is constantly evolving, perhaps now more than ever. The report of the Victoria Climbie inquiry, chaired by Lord Laming, was published last year. As most will know, it details the catalogue of abuse and neglect which this young girl suffered through. It also contains 108 recommendations for change. Although the focus of most of these are on social care, police, and paediatric care, there are some specific to the place of GPs and primary care teams, including recommendation 87. “The Department of Health should seek to ensure that all GPs receive training in the recognition of deliberate harm to children, and in the multi-disciplinary aspects of a child protection investigation, as part of their initial vocational training in general practice, and at regular intervals of no less than three years thereafter.”

A mismatch at the centre of child protection has long been recognised—that the primary care team (including GPs) are often in an excellent position to provide an informed assessment of a families’ abilities and struggles over time. Yet they often remain peripheral to child protection proceedings when they occur, whether through lack of time to attend meetings, or lack of experience in the field of child protection, or myriad other reasons. The book attempts to address part of this mismatch, by providing information about child protection targeted at primary care practitioners. In doing so, it may also fill part of the training gap identified by Lord Laming—even though it was produced before his report.

A lot is packed into the 256 pages of this book. It is edited by Michael Bannon and Yvonne Carter, a paediatrician and a GP, both with child protection experience. There are 24 other contributors, many of them authorities in their field. A large range of topics is covered, from information about the main types of child abuse and neglect, to less often covered (but important) topics such as domestic violence and adults abused as children. The style, and with it the utility, of the chapters varies. Some are clearly targeted at primary care professionals and written in an easy to read style. Others are more densely written and less orientated to general practice. For most primary care staff there is likely to be much of use within the book. For those more frequently involved in the child protection process, including paediatricians, there may be some useful reminders that have been forgotten and some useful updates on key areas of child abuse and neglect.

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