

Symptoms and the perception of disease

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ABSTRACT – Any symptom represents a perception of an abnormal internal body state. The threshold for perceiving the internal body state as abnormal varies and depends particularly on psychological influences. As a result, a symptom can either reflect pathology, whether serious or not, or be generated wholly psychologically. Intuition allowing discrimination between these possibilities is central to the physician's art. Particular difficulty arises in differentiating between those psychologically generated symptoms which are produced unconsciously, often as a result of anxiety or depression, and those that constitute deliberate deception. Such malingering has the unstated intent of accessing a secondary gain, such as welfare benefit.

The art of diagnosis includes estimation of whether symptoms resonate with known pathophysiological processes, using history-taking as a story which unfolds logically towards a diagnosis, assessing how a patient reacts to their symptoms compared to neutral matters, detecting exaggeration or falsification, and documenting evidence of psychologically generated abnormalities during examination. Scientific ability is only one of the attributes of a good diagnostician; equally important are abilities to notice things, to weigh up human nature and to recognise dilemmas. Our procedures for selecting medical students and physicians need to assess these skills as well as scientific qualifications.

KEY WORDS: hysteria, malingering, medically unexplained symptoms, selecting medical students, symptoms, training clinicians

Introduction

The biomedical model of disease has transformed the ability of doctors to detect and influence pathology but, concomitantly, it has encouraged public opinion to cast doctors in a role akin to car mechanics. As a result, politicians and policy makers have promoted simplistic views of the relationship between the experience of illness, its biomedical cause, and therapeutic effect. The result is endless one-dimensional models for delivering medical care. But this approach fails to appreciate the immense

variability of the psychological processes whereby patients generate their symptoms. In particular, it fails to take account of symptoms in patients who do not harbour significant underlying pathology. Also, the biomedical model has dictated that scientific description dominates the education of medical students and doctors. It has diminished the equally necessary art of the physician's judgement in assessing whether symptoms are likely to reflect underlying biomedical disease. More often than not, a physician needs to reach a pragmatic diagnostic conclusion, furnished by incomplete biomedical definition of the patient's disorder.

Of course, this diagnostic skill is but one of the intuitive arts which we all recognise in the make-up of 'a good doctor'; others include detached sympathy, an easy manner of communication, and the ability to generate trust and hope in the distressed. If those who shape policy for the provision of healthcare and the education of doctors continue to ignore the hugely complex process by which symptoms are generated and interpreted, they will perpetrate an expensive and inefficient healthcare system founded on the belief that all symptoms represent pathology. Over-investigation will be encouraged instead of reliance on the sound judgement of doctors. And excessively materialistic approaches to medicine run the risk of consolidating a patient's notion that they are diseased even when that is not the case.

Social forces influencing symptom production

It is always timely to consider those contemporary forces that shape how patients generate their symptoms. At the beginning of the twenty-first century, the challenges are produced particularly by the growth of scientism and the demise of religion, the medical knowledge available through journalism and the Internet, the growth of personal injuries litigation, the availability of benefits in liberal democracies, and the inability of diminished family structures to defuse concern without recourse to doctors. Correspondingly, many patients have symptoms that cannot be attributed to any underlying biomedical pathology. Members of this College are only too familiar with the atypical chest pains, feelings of breathlessness, gastrointestinal symptoms, headaches or soft tissue

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and joint discomforts which constitute more than 20% of most medical outpatient clinics and goodness-knows-what proportion of general practice consultations. It is generally easy for experienced doctors to reassure about the lack of underlying biomedical disease. Most difficult are the many patients who superimpose psychologically generated symptoms upon a known underlying biomedical disease.

In some instances, symptoms reflect anxiety generated by popular sources of information. Journalism or the Internet may deluge patients with information, which is often of uncertain provenance and not honed to the problems posed by their own actual disease. What doctor's heart does not sink when a patient pushes a thick printout across the desk, proceeding to discuss the points arising therein, often deflecting the thrust of the consultation away from issues of greater importance? But an increased role for patients in determining the agenda will be a fact of the future. It embodies an important trend of self-determination about diagnosing, managing and preventing disease. Patients are testing themselves with kits at home, and genetic self-profiling is not far away.¹ Patients bring test results, or an already medicalised description or interpretation to the doctor, sometimes without having any symptoms at all. Which healthy medical students have not convinced themselves of disease by reading their undergraduate texts?

In the future, doctors will need particular skill in explaining that there is no evidence for pathology, or putting its severity in context, when the patient believes that he himself has already established the factual basis for serious disease. Furthermore, the ready availability of information about disease makes it easier for patients to fabricate plausible symptoms. Although this process of self-delusion is usually unconscious, it can represent malingering; a common sign of this is the overuse of medical jargon without correct context or understanding. On balance, we should welcome the increasing general availability of medical information as enhancing self-understanding and self-determination for an increasingly informed population. But we need to adjust our patient-handling skills accordingly. The generation of educational 'patient page' websites by specialist societies may be one way forward.²

Psychologically generated symptoms

Psychologically generated symptoms go under a variety of names such as 'medically unexplained', 'hysterical', or 'non-organic' symptoms.³ Mostly, they seem to be generated unconsciously, as in the classic notion of hysteria. Some such patients may have underlying psychiatric disease such as depression, anxiety or post-traumatic stress disorder. Others simply lack self-confidence or may be hypochondriacal. 'Stress', itself a psychological concept, is becoming an increasingly prominent reason for being unable to work.^{4,5} Outwardly, many of these patients seem quite normally balanced. So how can the occurrence of psychologically determined symptoms be explained?

Any symptom is simply a perception of some aspect of one's internal body state. It is self-evident that there is no such thing as a stable psychophysical threshold for a bodily sensation below

which nobody notices anything, and above which everybody experiences identical symptoms. Soldiers injured on a battlefield may feel no pain whatsoever initially; others in civilian life may show histrionic reactions to trivially painful trauma; most people lie somewhere in the midst of this spectrum. So it is clear that the perception of one's internal body state occupies a continuum, with the brain having the ability to shift that threshold beyond which some perturbation may be perceived as being abnormal. The deciphering of symptoms is further complicated by the fact that many of our internal bodily sensations do not carry a descriptive vocabulary. So a physician often has to distil notions of altered organ physiology from the halting, gestured, and at times embarrassed or circumlocutory accounts of the sufferer. This is the time when it is all too easy to refer on to specialists, and initiate multiple investigations. But such prevarications can consolidate notions of illness, further fuelling anxiety, engender distrust of doctors whose indecision is interpreted as incompetence, and can sometimes entrench disability.

An interesting characteristic of the human mind is its need to provide explanations so as to rationalise events such as illness. Religiosity may be an artefact created by the human mind to provide definitive, self-contained explanations for events as 'acts of God' or 'fate', or sometimes as 'retribution'. This agnostic's view, nonetheless, recognises those benefits of spiritual sustenance, social loyalty, and moral codes also generated by religious belief. Religiosity declined as scientism grew in Western democracies in the twentieth century. As a result, patients have had to find new ways to explain changes in their bodily state, whether or not these are due to underlying pathology. The growth of biomedical science was expected to replace religion as a provider of rational explanation, and to allow these explanations to connect logically and directly with cures and treatments. In some areas of biomedical disease, science has been immensely effective in doing just that. In many others, science has simply dispersed attempts at all-embracing explanations into a series of subsidiary scientific questions, equally unresolved. But it is those patients with psychologically generated disorders who particularly risk falling between scientific or spiritual explanations for their symptoms. Doctors trained in the contemporary biomedical approach to medicine can be found particularly wanting when they try to explain psychologically determined symptomatology to a patient. The blunt assertion that 'there is nothing wrong with you' is usually not the best way. This must be one reason for the popularity of so-called 'alternative medicine'. Such practices often provide analyses based in the symptom, with a correspondingly direct approach to its treatment, eschewing the need for biomedical explanation.

Malingering

Not all psychologically determined symptoms are generated unconsciously. Malingering is the process of deliberate deceit, by which symptoms are fabricated. Given the potential benefits, it is hardly surprising that lying about symptoms is commonplace. Deception is a common and ingrained human behaviour, often high risk, which can lead to secondary gains of varying complex-

ions: in warfare manoeuvres, in acquisition of lovers, in tax evasion, in scoring goals, in revenge, and in benefit fraud. Occasionally malingering involves the deliberate induction of apparent disease, so-called factitious disease. Self-administration of insulin is a well known example. But much more frequently, patients claim to have entrenched and disabling symptom complexes such as pain, which allow access to the disability benefits of the welfare state, to personal injury litigation, and to insurance and pension benefits. And at the softer, non-fiscal end, such symptoms may confer social benefits such as help and sympathy from dependents, friends and work colleagues. Wessely⁶ argues, from an historical perspective, that malingering moved into the medical sphere in the early twentieth century as a result of permissive social legislation in Bismarckian Germany and Britain. This allowed claims of dispensations, financial benefits, and avoidance of military duties.

Yet to diagnose malingering has become something of a no-go area for doctors. The conceptual framework of their scientific training tends to render them unconfident in making this diagnosis. They fear the opprobrium of disgruntled patients, and the undermining of their professional position by complaints and legal procedures. Furthermore, most doctors like most of their patients. Little surprise that they often give the benefit of considerable doubt when certifying claims for benefits, or early retirement on medical grounds, given that the providers are faceless agencies such as the State, and insurance or pension companies. Many regard the extent of malingering to be vastly underestimated,⁶ with corresponding implications for absenteeism and inefficiency at work, the future viability of the welfare state in liberal democracies, and the justification for asylum and immigration applications. Not uncommon is the patient who uses biomedical disease of trivial severity as the template for disability. But we should be clear that it is not the role of doctors to act as gatekeepers for the overall extent of these problems. Ultimately, it is our politicians who need to determine a desirable balance in society between the provision of legitimate welfare benefits to support the needy, and the extent to which their availability encourages psychologically generated illness behaviour.

The art of diagnosis

What is the physician's art in analysing symptoms to decide whether they reflect biomedical disease, or whether they are psychologically manufactured, be it through malingering or through unconscious processes?

First, the current tendency to diminish the rigour of anatomical, physiological and pathological education should be questioned. For it is only by reference to clearly imbued scientific principles that the physician can decide whether a patient's story resonates with known pathophysiological principles of biomedical disease.

Second, we should strengthen the notion of taking the history as a story, rather than reducing it to a banal list of presenting symptoms. One of the beauties of a good story, or indeed of any work of art, is that it develops an internal thread of direction,

Key Points

A symptom represents a perception of some aspect of one's internal body state

A symptom can reflect either biomedical pathology, or be generated psychologically, be it unconsciously as in hysteria, or consciously as in malingering

Psychological and psychiatric states, the availability of social benefits and other opportunities for personal gain are major determinants of psychologically-determined symptoms

The art of diagnosis is the intuitive skill of estimating whether a symptom reflects known pathophysiological processes, and the selection of medical students and training of clinicians should estimate their potential for this

which indicates from the beginning that it is heading towards a conclusion, in this case a diagnosis. It is very characteristic of histories in those with psychologically determined disorders that the story's internal thread is jumbled and wayward, without the clear tension that reaches towards a coherent pathophysiological conclusion.

Third, do not underestimate the importance of small talk and humour before taking the history. Good policemen know the value of engaging a suspect in small talk, so as to gauge their attitudes and reactions to non-controversial matters. That was the crucial reference point against which to gauge their responses to the stuff in question. Taking the background history before that of the presenting complaint, along with some friendly banter, is a way of similarly establishing this reference point by conversational rapport before estimating the cogency of a patient's symptoms.

Fourth, doctors need to be able to detect exaggeration or falsification of symptoms. Mismatch is an important clue. A patient's facial expressions and demeanour may be incompatible with the symptoms and disabilities he or she is describing. Collateral information from observers may be revealing. Inconsistencies in the nature, timing and severity of symptoms, and premature, overeager or repetitive introduction of secondary gain concepts can also be indicative.

Fifth, physical examination can provide clear-cut evidence of psychologically generated abnormalities. These should be calmly regarded as physical signs similar to any other, and certainly should not become the substrate for a battle of wits between patient and doctor. Inconsistencies in the use of the affected area of the body under different circumstances, and when seemingly unobserved are important. Less obvious are markers of intentionality. For instance, a patient complaining of pain may wince theatrically before any significant manipulation, or even before gentle touch, has occurred. A limb held out strongly may collapse enthusiastically when the examiner applies the merest resistance. Sometimes, patients may fake gaze shifts or trunk movements in advance of planned give-way movements of limbs, much as a footballer may feint to deceive a tackler.

Teaching the skill of diagnosis

When talking to students after observing examples of these behaviours in the clinic, the responses are often interesting. It is not that they have not noticed them. It is simply that they have not been introduced to a conceptual framework for applying what they have noticed to an analysis of the medical situation in front of them. Students need to be taught how to assess the meaning of a history and examination from an intuitive standpoint. They need to attend to the manner in which symptoms are proffered, so as to come to a justifiable opinion about the relative likelihoods of biomedical disease, or psychologically determined symptoms. During clinical assessment, it is a good discipline to make a formal record of the examples that justify an opinion of psychologically determined symptoms in just the same way as we record typical symptoms and signs of pathology.

The biomedical model has come to dominate the manner in which we train medical students and doctors, and to dominate medical research. And of course, it has been crucial to the development of diagnostic techniques, and effective treatment for patients with biomedical disease. Yet, many patients seen in unselected clinics do not have biomedical disease, and the handling of such patients is an art of medicine. Teaching about these intuitive skills should be at the front of our mind in training medical students. Most of us learned it on the hoof after a decade or more in the clinic. But it is not simply a question of how we train awareness in medical students and junior doctors. It is also to do with the type of people we select for medicine. Increased reliance on ability to tread the dreary track of science 'A' levels means we may be missing an important group of those who, whilst perfectly good at science, also show talents in the important extra dimensions of intuitive thought and practical human psychology.

So how can we select medical students with those prospects? It is doubtful whether it can be done by exams or psychological profile testing. There should be more reliance on admissions interviewing by experienced doctors able to detect those candidates who are good at noticing things, who can analyse the same problem from different vantage points, who can converse perceptively about tricky human dilemmas, and with interests and abilities in those sensitive arts which provide insight into the less tangible reaches of human psychology. Malingering and unconsciously determined psychological symptoms are common. Doctors are the sieve through which they are detected. We need doctors with the skills to decide how each patient should be handled so as to detect disease or provide reassurance, whilst also avoiding unnecessary expenditure on investigation or benefits.

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