

Are We Living in Depressing Times That Are Not NICE?

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The recent well advertised problems in the treatment of depression (*The Times*, February 2008)¹ raise important and difficult issues that will impinge upon the medico-legal interface. Antidepressant medicines, used for decades and considered by clinicians to have been effective, have been now deemed not only to be ineffective but to increase the rate of suicide, particularly, it is said, amongst the young. In the scientific literature not everyone agrees with that and there is the prospect of litigation both for *not* treating with antidepressants and *for* treating with antidepressants. This is symptomatic of a more profound trend affecting clinical practice and a paradigm for the same problems arising elsewhere in health care.

The problem was exposed when a meta-analysis of studies on treatment of depression appeared to indicate that antidepressants did not make much difference.² A meta-analysis essentially pulls together the results of several studies to give an overall larger number of subjects for statistical analysis. Meta-analysis is not without its critics.³ The analyst has no control over the sample cohort and purity of data in each study and there is a high risk of significant differences. A meta-analysis may be of assistance if no study is of reasonable sample size but caution is needed with its interpretation. In this respect a meta-analysis differs from a review of a number of studies which examines each study and draws conclusions from the differences and similarities in the samples studied, techniques and apparent outcome. With the latter the reader is better placed to use his or her critical judgment on the relationship between each of the studies.

Unfortunately there are long standing difficulties in the categorisations of disorders of mood. The result has been a shuffle between groupings for some decades. Depression as a “spectrum” as well as the recent proliferation of “bipolar disorder” is the current order of the day. The latter is now said to have five groups and some of these have several subdivisions. Overall the distinctions are unclear – and it may be that the wood cannot be seen for the trees.

A basic view of mood is that normally we have the capacity to become lively and excited when positive events occur – elevated mood – and on the same scale when disadvantageous things happen we become miserable. These mood changes occur frequently and within a range that does not impair our capacity to function. They may actually have advantages for us with regard to what is safe or dangerous for our survival. So far so good – but are there things that can go wrong with this process? It can at least be postulated that there are three different types of mood related problems that can appear similar.

Firstly, if the adverse stresses are cumulative or very severe and our mood goes down to the extent that the regulatory mechanisms cannot easily restore the status quo, we will remain severely miserable and unable to function properly, psychologically and physically. There is sustained lowering of mood, dysfunction and probably a chemical change. For the moment it is irrelevant whether there are symptom patterns that appear to merge imperceptibly with this. The central picture is relatively clear.

A second type of disorder involves the mechanism for mood control itself. In the first example – using the analogy of driving a car – we might hit a wall if we sneezed and thereby jerked the steering wheel unintentionally. By contrast, in this second example, if the steering linkage has been loosened, all the driver’s skills will not enable him or her to point the car in the right direction and, depending on the defect, the car may go to the right or to the left or lurch wildly from one side to the other. It might just run smoothly on a level road. This conforms to the original idea of bipolar disorder. There might be a number of reasons why the control mechanisms are wrong; it may well be that when the faulty control takes the mood down too far then the same chemical changes are invoked.

A third quite different possibility is that we can display the behaviours that occur in depression not because we are actively depressed but because we have a learned habit of

negativity in our way of thinking, a gloomy demeanour; functioning may be preserved. It is not depression, as given above, but could look as though it was. That conforms best to what has been called Dysthymic Disorder.

It remains probable that there are varying causes for each of these mood disorders, with different mechanisms involved with aspects of apparent mood disorder that do not fit into these postulated groups. However, let us suppose that the first responds to medication for chemically involved mood change, the second responds to the same if the mood has gone severely down, but also needs help in keeping the extremes of deviation in control. The third, however, is not the same at all as altered learned cognitions are more likely to respond to cognitive methods of treatment (e.g. CBT but also including placebo). If someone is not depressed, why should we expect a response to medicines designed to counteract the chemical changes involved in mood depression?

This may all be rather simplistic but the crunch comes if we try to examine response to treatment of all three taken together, the depressive spectrum and a meta-analysis.

Positive correlations that exist are likely to become very weak or are lost. The very opposite of what meta-analyses are intended to do. Even if those with Dysthymic Disorder have become depressed, which they can do, they would have to be excluded to obtain clarity. On this model some of their symptoms would respond to medication and some would not. This exclusion does not appear to have been done when aggregating studies for meta-analysis. Meta-analysis could therefore be misleading.

It might be argued that this is hypothesis and a bit technical and that the professions need to get their act together. Possibly, but this is where the greater concern begins to arise.

There are three areas that are central to good practice that appear to be in danger of misleading Medicine for decades to come: incorrect application of apparent diagnostic categorisation, distortion of evidence based practice and the control of Health Care provisions from a managerial rather than scientific clinical source.

Where does diagnostic confusion come into all of this? Making a correct diagnosis is important but the concept is often misunderstood and misused. There are two main types of diagnosis: conceptual and operational.

A conceptual diagnosis is a category based on knowledge of the causal mechanism, the abnormal process and the natural course of the problem. Hopefully it is also a basis for identifying the best treatment.

Diagnosis that is based on an operational definition means that if several clinical phenomena tend to occur together it is given a name. It has no other implication though correlations with other factors may be sought. Making a diagnosis changes nothing; it does not change the patient nor does it in itself change what happens to the patient. Action based on a diagnosis might. If by chance there is only one explanation for such a cluster of symptoms then we are in luck with regard to the important issue of patient management. Unfortunately, there is often a number of possible reasons for such a cluster of symptoms and this is particularly so in psychiatry. (It is also the case when attempting to diagnose the cause of physical symptoms, for example, cough, breathlessness and sputum tend to occur together but the causes may range from bronchitis to heart disease.)

To make matters more difficult, we are not very good at distinguishing one symptom from another similar looking symptom: the science of phenomenology.

Though essentially an operationally defined diagnostic category could characterise either a single entity or a wide range of disparate ones, it is very easy to slip into believing that diagnosis equates with or defines an entity. It is particularly seductive for those who are not trained to understand the derivation. Furthermore this form of diagnosis is solely a description, a shorthand means of giving information and if there is not an exact fit then there is no point in applying the diagnostic name; that is misinformation. But, alas, it is done.

Diagnosis and categorisation are closely linked in that we try to have a system for categorisation of disorder and hope that each category will indicate an abnormal entity within some grand schema. Unfortunately operationally defined diagnosis does not really help with classification.

It is now becoming clear that many diagnostic groupings are not valid single entities. More problematic is that they may well not even involve similar pathological mechanisms. In child mental health particularly there is considerable confusion about what should be included in categories such as ADHD, Asperger's Syndrome and dyslexia. There has been real progress in some relevant areas of scientific investigation and particularly with neuro-imaging and genetics it is possible to begin to look at the homogeneity or otherwise of the operational groupings. Genetic studies suggest that phenotypically similar appearances of Autistic Spectrum Disorder are genetically different.⁴

The idea that a diagnosis can be made is also now inbuilt into current social thinking. That diagnostic groups may contain fundamentally disparate entities and do not necessarily give understanding of the mechanisms involved is, to say the least, unsatisfactory and disconcerting to the lay public. Because of the difficulty in identifying entities by the outward appearance there is pressure to lump more things together and to hope that they form a kind of spectrum. That has some economic value when "prescribing by numbers". If A is observed you do X and if B is observed you do Y etc and the simpler the better.

Returning to the main theme it is hazardous to apply rigid guidelines for management of problems to a complex categorisation within which there are doubts about the nosological status of any one category – a major problem for operationally defined diagnoses.

Evidence based practice aspires to having a logical reason for treatment, not just relying on belief or "gut" feeling. Sackett, writing a decade ago, said that evidence based practice "whose philosophical origins extend back to mid-19th century Paris and earlier, is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients".⁵ By evidence, Sackett meant: "integrating individual clinical expertise with the best available external clinical evidence from systematic research". The danger comes when the first part of this requirement is dispensed with and evaluation of data is done for us irrespective of personal clinical experience and then regurgitated as "THE TRUTH". As Karl Popper says:

"One can sum up all this by saying that the criterion of the scientific status of a theory is its falsifiability, or refutability, or testability."⁶

How could this go wrong? We live in a modern age and the official versions must be right. Many but not all health care professionals receive training in the evaluation of data; managers probably not. That includes evaluating new information as it arrives. Regulation on what to do if you observe A, B or C removes the need for such case by case evaluation against the best evidence. Protocols for treatment are useful guidelines but become dangerous if they begin to act as rules for all treatment. There is increasing use of these protocols and those produced by the National Institute for Clinical Excellence (NICE) are examples. Useful guidelines for practice – yes, but dangerous if they become rigid direction and controls on practice, as they remove the facility for critical evaluation both of the guidelines and of each case. Could it be that such protocols are ever in question? It does seem so as there is for example criticism of the protocols for Irritable Bowel Syndrome,⁷ ADHD,⁸ Tuberculosis detection⁹ and Osteoarthritis,¹⁰ to cite but a few. The fears have been sufficient to provoke a stout defence that NICE "sees guidelines as guidelines, not as rules set in stone, adopts flexible approaches, and does not expect its pronouncements to be accepted without questioning" written by members of a NICE committee.¹¹ In practice, the guidelines appear to have very considerable power in their implementation in spite of the above intention.

The danger lies not in the production of guidelines but in the requirement in practice for rigid application irrespective of individual judgement. NICE may be well-intentioned and able to distance itself from compulsion but the employing Authorities and Trusts may feel that there is little choice but to require that they are followed rigidly. A clinician could now be in danger of litigation if he/she did not follow guidelines even if clinical judgment indicated otherwise. It is hoped that the above will be quotable as defence if a clinician is so accused. The basis on which guidelines are produced as well as their significance for practice has been challenged in the courts¹² regarding the treatment of Alzheimer's Disease and the judge is quoted as saying:

“It is important to stress that this is not, as has been suggested in some of the media, a challenge to a decision by NICE or the NHS not to fund treatment for certain Alzheimer Disease sufferers.”

Has the judge also misunderstood the significance of Guidelines? It seems generally accepted, seemingly erroneously, that NICE determines practice (e.g. *The Times*, 31 March 2008, p. 9, “NICE decides which drugs are available on the NHS”).

Does any of this need to happen? Probably not provided health care is directed and delivered by highly able and well trained professionals who are able to evaluate data for themselves. We have been training the most able to enquire and evaluate information and to cope with doubt. For medicine that training takes some 15 years and continues for a lifetime. That is expensive. We are in a “climate” of economic pressure to reduce the cost of treatment and there is economic rationale to “offload” tasks to those with a very different nature and length of training where the practice is of necessity more rigid and prescriptive. The more that health care is delegated to less “expensive” personnel the cheaper the whole service becomes but it also means that more prescriptive guidelines are issued and have to be adhered to – so round and round we go.

The warnings are present in the reactions to NICE guidelines; warning about the reduction in examination of complexity. There is a real risk of coalescing diverse problems into groups that “indicate” that one response fits all: the Sin of Procrustes. Of all the risks the greatest is a downgrading of medical education away from training doctors to make their own evaluation of data. It is to be hoped that is pure fantasy. It is crucial that able people continue to be trained to be enquiring and to accept doubt. Failing to ensure a throughput of high quality clinicians free to use critical enquiry will in the long run be far more costly than any savings.

Where does this take us? A seemingly minor issue over the treatment of depression is offered as one of the warning signs of pernicious and dangerous trends. Dogma versus understanding, direction versus careful observation, certainty versus useful doubt which will produce an open season for litigation. Is there precedence? Galen was an innovative researcher in the second century AD, but a non medical directive for adherence to his writings as being the true word led to almost 1,500 years of stagnation and that time scale makes it recent history. There is nothing to suggest that scientists and physicians during that time were any more or less stupid than now. Increasing prescriptive adherence to a written dogma, seeing the darkness and believing it to be the light, could take us into a new Dark Age. Beware though when Michael Servetus described the circulation of blood before William Harvey (towards the end of that era of darkness),¹³ he was burnt at the stake for trying to see the light – so should we just keep quiet?

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