The Review

First do no harm:

data gathering and interpretation

First Do No Harm is a series of 12 brief monthly articles with internet footnotes about harming and healing in general practice. Each article is based on one of the 12 RCGP competency domains, this month's being:

3. Data gathering and interpretation: the gathering and use of data for clinical judgement, the choice of physical examination and investigations, and their interpretation.[1]

'I would first of all tell you simply to make a rule of having a good look at every patient as he walks into your presence or sits or stands or lies before you.'[2]

INTRODUCTION

Information gathering and interpretation don't take place sequentially but simultaneously. And as information gathering takes place it's not only the doctor but also the patient who does the interpreting. In the world of computers we have coded data — dichotomous, unchanging.[3]

In the world of humans we have not only symptoms and signs elicited during formal history and examination but also descriptions of the patient's gait, behaviour, appearance, smell, and feel. Amid all of this we seek objectivity and hope to find it in test results. But while investigations remove some uncertainties (the pale, tired patient turns out to have normal haemoglobin and thyroid function) they introduce others (GGT and white cell count outwith the normal range). And these results, now divorced from the patient, often don't tell us much. In order to decide what they mean we have to go back to the patient and repeat the history and examination. Indeed, it's the history and examination that enable us to approach a shared understanding with the patient as to the nature of the problem and what needs to be done.[4]

HARMING

Assuming a test will give the answer,[5] investigating at the first consultation, demanding certainty, thinking worrying thoughts aloud, being melodramatic, informing the patient of un-interpreted or un-interpretable test results.[4] Finding a pattern where there is none.[6] Sticking to conclusions (I can't do anything to help) without questioning premises (this patient's a heartsink).[6]

HEALING

Using only appropriate tests and treatments.[7] Tailoring examination and investigations to the personal and medical needs of the patient in a step-wise fashion.[1] Being calming.

ATTITUDE

Being quietly, humbly, and patiently confident about the diagnostic power of serial history and examination, both formal and informal.[4]

KNOWLEDGE

Investigations sometimes give answers but often raise further questions. Among patients presenting with fatigue, the odds (probability) of a range of blood tests done on any one patient giving a false positive are 1:1 (56%) and of giving a true positive are 1:12 (8%).[8] Among patients having blood tests done to reassure them, the odds (probability) of any one patient having an abnormal result are 1:1 (56%) and a markedly abnormal result are 1:8 (12%).[9]

SKILLS

Always taking a history and performing an examination. Having a repertoire of temporising techniques such as: 'I'd like to have a think about how best to help and see you again next week'.[4] Repeating the history and examination.

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Supplementary information
The internet footnotes accompanying this article can be found at:
http://www.darmipc.net/first-do-no-harm-footnotes.html

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