The clinical observer — on the up or over the hill?

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INTRODUCTION

The reason we remember Mackenzie at the Royal College of General Practitioners' Annual General Meeting is that he demonstrated the importance and potential of general practice at a time when it was poorly developed and commonly regarded as the lowest form of medicine.[1,2,3] At the end of the 19th and beginning of the 20th centuries, Mackenzie made the case for the GP, both in his writings and through the example of his world-leading research in the community. He also exemplified an important aspect of the GP's role, that of the clinical observer. But general practice has experienced many changes since the days of Mackenzie. Is the era of the clinical observer coming to a close?

WHAT IS CLINICAL OBSERVATION?

Clinical observation, the term employed by Mackenzie, has two elements, the first being initial patient assessment and the second the long-term observation of people.

With respect to the first element, the clinical observer is a medical practitioner skilled in the assessment of people who are concerned about their health. Since GPs provide care at the first point of contact with the health service for people with undifferentiated problems, they must have this skill to a high level. On entering general practice, Mackenzie discovered that his training had not adequately equipped him for this challenge. He set about learning as much as he could, from the patients who consulted him, through observation and detailed record keeping. From this experience, he recognised that general practice has a unique perspective that could contribute new knowledge about diseases and their origins.

The second element consists of the continuing clinical relationship. Mackenzie regarded this as the close monitoring by the personal doctor of people with certain conditions, signs or symptoms, over many years.

The provision of personal care by a familiar and trusted medical practitioner is often seen as a key feature of general practice, although one that is becoming less easy to provide. A shortage of GPs has led to an increasing number of nurse practitioners providing first contact care. Their role could be extended even further by the use of computerised decision support. If this process continues, the GP will become a doctor to whom patients are referred after initial assessment. These new GPs will have less exposure to undifferentiated problems, and will be less likely to have long-term relationships with the people they care for. They will have become primary care specialists, and surrendered much of their role as clinical observers.

Although we don't have precise data, continuity has almost certainly declined. The introduction of nurses in response to the shortage of doctors, the increasing size of group practices, the rise in part-time general practice and the increased movement of doctors between practices are all likely to accelerate this trend.[4] So, the continuing clinical relationship that permits clinical observation over an extended period is surely going to disappear almost entirely in the near future.

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There is a key difference between Mackenzie and the modern GP. Mackenzie was a very biological GP, whose focus was very much on the illness. The situation is decidedly different today. Our patients live healthy lives for longer, and the treatments available to us are more numerous and effective. And our perspective has expanded: for example, the purpose of general practice was described by John Berger in the influential *A Fortunate Man* as showing through action what a human life is worth, life including not only the quantity and quality of life, but also the individual life as it is lived.[5] To adequately fulfil this purpose, the doctor and the patient must come to an understanding of each other, and this is most readily achieved in a longitudinal relationship.

Mackenzie's writings have a strong biological slant, and what he would have made of Berger's perspective of general practice is difficult to predict. Nevertheless, occasional tales of Mackenzie's clinical practice suggest that we would have regarded him as a genuine GP. In 1908, Osler referred the novelist Henry James to Mackenzie. Mackenzie's diagnosis was that Henry James was suffering from 'dread of the unknown', a condition he had described in his story *The Turn of the Screw*.[6] Most GPs will recognise this condition, although 'dread of the unknown' is a diagnosis that cannot be found in the International Classification of Diseases.

DIAGNOSIS

Diagnosis is a fundamental task for the GP, but a diagnosis is not merely a medical name for a biological disorder, nor is it an end point. A diagnosis is more commonly a biopsychosocial theory about a patient's problem that points to a reasonable course of action. In reaching a diagnosis, the practitioner must have an appreciation of the significance of symptoms and signs, and the conditions with which they are associated. An understanding of disease processes can assist in interpreting symptoms and signs, and some understanding of the individual with the symptoms and signs also helps.

Diagnosis can be difficult. An analysis of delay pattern audits submitted by applicants to the Royal College of General Practitioners' Fellowship by Assessment indicates that the median delay between first presentation of classical symptoms to the GP and diagnosis was 47 days in 63 patients with breast cancer and 49 days in 38 patients with colon cancer.[7] Because conditions may first present with non-specific, mild symptoms, it may never be possible to avoid diagnostic delay in every case, but any help to improve diagnostic precision should be welcomed. Yet although Mackenzie pointed out long ago the potential of general practice research to address this problem, evidence about the significance of symptoms and signs remains remarkably poor.

Three phases of research into the diagnostic value of symptoms and signs can be identified, and colorectal cancer will be used as an example. In the first, specialists collected data about the patients referred to them, and the findings from these case series found their way into textbooks. The disadvantage of this approach is that patients who did not have colorectal cancer, or were not referred, were excluded, and therefore the findings provide only limited information to help the GP distinguish those with benign conditions from those with cancer. It is important to remember that the predictive value of symptoms or signs is influenced by the prevalence of the illness in the population concerned.[8] In the next phase, specialists and GPs worked together to investigate symptomatic patients in detail, for example, the use of colonoscopy in all adults presenting to GPs with rectal bleeding.[9]

In the current phase, GP researchers have taken the lead. By recruiting all patients with the symptom of interest, and following them up over a prolonged period, it is possible to relate symptoms in primary care populations to final diagnoses. In the case of abdominal pain, for example, it is clear that the symptom is benign in most patients consulting with this problem in primary care. In one study, only 1% of patients turned out to have cancer.[10]

The findings of such studies may be presented with a statistical flourish that conveys the impression of precision, for example the symptoms of bleeding, change in bowel habit and abdominal pain have been reported to have sensitivities of between 25 and 68%, and specificities of between 25 and 53%.[11] However, the practical utility of this information in daily clinical practice is uncertain. How do you relate these abstract numbers to the individual? Is the type of abdominal pain of the people in the studies the same as that in the patient? Abdominal pain is a term that can include an enormous variety of symptoms. To investigate the initial symptoms in detail would require a very large sample of patients because so few will have cancer. But the widespread use of electronic records in general practice presents an opportunity to overcome this problem. Research is underway by teams led by GPs, and involves the analysis of data from the record systems of large numbers of general practices. Routine records do not always contain detailed descriptions of symptoms and it may sometimes be necessary to ask GPs to record more information than they normally would, or to ask

patients themselves for more details. But, with such collaboration between GPs, GP researchers and patients, it will be possible to refine our knowledge of the significance of symptoms and signs.

In addition to the prospect of better information about the meaning of symptoms and signs, understanding of the cognitive processes involved in reaching a diagnosis is improving — and most commonly this is in the context of the consultation in general practice, which Robin Fraser called the 'core of medicine'.[12] There are various ways of thinking about the process of diagnosis.[8] These range from pattern recognition[13,14] or use of rules of thumb,[15] to the more systematic processes of hypotheticodeductive reasoning and the use of prior and past estimates of probability using Bayes' theorem. You may even opt to replace the clinician with an electronic machine if you regard diagnosis as an essentially mechanical process. In general practice, however, diagnosis is not mechanical. The new science of clinical diagnosis must be designed to meet the needs of the practitioner, and that means a closer relationship between researchers and practitioners. A formal association between a network of practitioners and interested researchers is needed, in which the practitioners will tell the researchers what information they require and whether, and how, the information the researchers eventually provide may be best used. Through such developments, it is possible to see that Mackenzie's goal of early diagnosis by expert clinical observers could be achieved at last.

FOLLOWING PATIENTS' LIVES

Is the opportunity for longitudinal observation through continuity coming to a close? The national policy on access to primary care appears to be founded on the belief that patients are more concerned about access than continuity,[16] and that doctors want to relinquish long-term continuity of care. This once core feature of general practice is no longer required by patients, doctors or policymakers. But, is this really true?

The three national patient surveys commissioned by the Department of Health and undertaken in 1998,[17] 2002[18] and 2003[19] provide some evidence to challenge this belief. Although the surveys did not include questions about continuity, the findings of all three surveys indicate that having a 'usual doctor' remains a central feature of health care. In the 1998 survey 75% of men and 86% of women in England reported visiting their general practice in the last 12 months; 74% had been registered with their GP for 5 or more years. In the 2002 survey, 82% of the 145 000 responders had seen a doctor in their own surgery in the last year. Only 8% had phoned NHS Direct and 3% had been to a walk-in centre. Eighty-two per cent reported that they had been treated as they would wish at all times by GPs, 85% that the doctor knew enough about their condition, and 95% were confident in the GP's actions. In 2003, 58% reported that at their last consultation they had seen their usual GP, 28% another GP in the practice, and 11% a practice nurse. Eighty-five per cent thought the person they saw knew enough about their medical condition and 77% had confidence and trust in the person they saw.

These findings indicate that most patients still believe they have a usual GP, their usual GP is most likely to be the person they consult, and they have confidence in the care that they receive.

Evidence that most patients still claim they have a usual GP can be found in other studies.[20] This claim does not reveal anything about the quality of the relationship, but there is evidence on this point as well. Reported levels of trust tend to be high and trust in GPs is associated with continuity. Remarkably high levels of satisfaction with consultations have been reported by patients who trust their doctor and who are able to consult that doctor.[21] In addition, there is evidence of an association between the development of trusting clinical relationships and being able to consult the same doctor.[22]

Some patients do not place a high value on relationship continuity. They should have the option of easy access when they require it; but many still want continuity. For many patients, the idea that primary care can, and should be, re-structured again, with the introduction of numerous different providers, confusing networks, and instant access to unknown and impersonal professionals, is nonsense.

In comparison with patients' preferences, the clinical value of longitudinal continuity is less clear. There may be disadvantages: the classic example is delay in the diagnosis of hypothyroidism, in which familiarity with the patient dulls the doctor's alertness to the condition. Continuity may, however, be associated with increased recognition of other diseases. In a review, Pereira Gray and colleagues have summarised evidence about the benefits and harms of continuity.[23] Evidence in relation to diagnosis and long-term care of people with chronic conditions is patchy. The limited evidence available points to associations, but is inadequate to allow conclusions about causation. We do not know with confidence that longitudinal continuity has benefits or harms in terms of diagnosis, treatment or long-term management. Here is a challenge to today's GP researchers — to discover whether the longitudinal aspect of the clinical observer's role has clinical benefits.

IMPLICATIONS

I have made two main points. Firstly, the science of clinical diagnosis is attracting the attention of new research, both in explaining the significance of selected symptoms and signs, but also how they are made use of by GPs in the process of clinical reasoning. If front line GPs were to take charge of the research agenda, determining the questions to be asked and the practical utility and applicability of the findings, it will be possible to design the process of diagnosis around GP and patient.

Secondly, longitudinal continuity, we are often told, is something that can now be dispensed with, but most patients do not agree, and neither should their doctors. Provided the preferences of patients are heeded, the clinical observer is on the up, not over the hill.

There were two implicit objectives behind my decision to revisit Mackenzie's idea of the clinical observer. The first was to emphasise the existence of continuity from one generation of GPs to the next in the core features of our discipline, namely the task of diagnosis at the point of first contact with health care, and the observation of, and increasingly participation in, the clinical life histories of our patients. Through reflecting on the role of the clinical observer, two core features of general practice have become clear, and they may be stated in the form of principles for our discipline:

- A person who is ill, or believes him or herself to be ill, should be able to consult a medically qualified practitioner;
- Those patients who prefer to develop a continuing, trusting relationship with a medical practitioner, should be able to do so.

In preserving these principles, we preserve the foundation of general practice, handed down to us from the age of Mackenzie and his forebears.

The second objective was to show that each generation of GPs has added something to our understanding of these two principles, and consequently to developing the idea of general practice — that is, what it is, what it does, and its purpose in both health care and the wider community. It may sometimes appear that in these difficult times we are no longer adding to the discipline, but instead are witnessing its gradual decline and fall. I have tried to show that this depressing view is far from the truth. The key attributes of first contact care with early diagnosis, and continuing care by the clinical observer not only remain central to general practice and the patients it serves, but new research confirms their significance and is showing how we can strengthen them.

REFERENCES

1. Mackenzie J. On the teaching of clinical medicine. *BMJ* 1914; **3:** 17–23.
2. Mackenzie J. An address on clinical research. *BMJ* 1920; **24:** 105–111.
3. Mackenzie J. A defence of the thesis that 'The opportunities of the general practitioner are essential for the investigation of disease and the progress of medicine'. *BMJ* 1921; **4:** 797–804.
4. Baker R. Will the future GP remain a personal doctor? *Br J Gen Pract* 1997; **47:** 831–834.
5. Berger JA, Mohr J. *A Fortunate Man.* London: Allen Lane, 1967.
6. Bliss M. William Osler. *A life in medicine.* Oxford: Oxford University Press, 1999.
7. Holden J, Pringle M. Delay pattern analysis of 446 patients in nine practices. *Audit Trends* 1995; **3:** 96–98.
8. Sackett DL, Haynes RB, Guyatt GH, Tugwell P. *Clinical epidemiology. A basic science for clinical medicine* (2nd edn). Boston: Little, Brown and Company, 1991.
9. Mant A, Bokey LE, Chapuis P, *et al.* Rectal bleeding. Do other symptoms aid in diagnosis? *Dis Colon Rectum* 1988; **32(3):** 191–196.
10. Muns J, Stamans R, Fitjen G, *et al.* Abdominal pain in general practice. *Fam Pract* 1993; **10(4):** 387–390.
11. Metcalf JV, Smith J, Jones R, Record CO. Incidence and causes of rectal bleeding in general practice as detected by colonoscopy. *Br J Gen Pract* 1996; **46:** 161–164.
12. Fraser RC. The core of medicine. *The Hong Kong Practitioner* 2002; **24:** 354–361.
13. Norman GR, Eva KW. Doggie diagnosis, diagnostic success and diagnostic reasoning strategies: an alternative view. *Med Educ* 2003; **37:** 676–677.
14. Bordage G. Why did I miss the diagnosis? Some cognitive explanations and educational implications. *Acad Med* 1999; **74 (suppl):** 5138–5143.
15. Andre M, Borgquist L, Molstad S. Use of rules of thumb in the consultation in general practice — an act of balance between the individual and the general perspective. *Fam Pract* 2003; **20:** 514–519.
16. Department of Health. *The NHS Plan.* London: Department of Health. http://www.dh.gov.uk/assetRoot/04/05/57/83/04055783.pdf (accessed 3 May 2005).
17. NHSSurveys.org. The National Surveys of NHS Patients: general practice 1998. http://www.nhssurveys.org/categories.asp?parent=64 (accessed 3 May 2005).
18. NHSSurveys.org. The National Surveys of NHS Patients: general practice 2002 — national report. http://www.nhssurveys.org/show_doc.asp?id=136 (accessed 3 May 2005).
19. National Patients Survey Programme: 2003. Primary care trusts: patient survey 2003. http://www.healthcarecommission.org.uk/NationalFindings/Surveys/PatientSurveys/fs/en?CONTENT_ID=4004644&chk=V%2BlTtB (accessed 3 May 2005).
20. Tarrant C, Stokes T, Baker R. Factors associated with patients' trust in their general practitioner: cross-sectional survey. *Br J Gen Pract* 2003; **53:** 798–800.
21. Baker R, Mainous AG III, Pereira Gray D, Love MM. Exploration of the relationship between continuity, trust in regular doctors, and patient satisfaction with consultations with family doctors. *Scand J Prim Health Care* 2003; **21:** 27–32.
22. Tarrant C, Windridge K, Bolton M, *et al.* Qualitative study of the meaning of personal care in general practice. *BMJ* 2003; **326:** 1310–1312.
23. Pereira Gray D, Evans P, Sweeney K, *et al.* Towards a theory of continuity of care. *J R Soc Med* 2003; **96:** 160–166.