

La investigación en Atención Primaria

Research in general practice: co-morbidity, referrals, and the roles of general practitioners and specialists

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Increasing complexity of the challenges of medical practice demands new modes of organizing practice. Both the processes of diagnosis and of clinical management are becoming more challenging as a result of ageing (and hence more prevalent biological deterioration) of populations, increasing co-morbidity (as a result, in part, of more effective treatment and, hence, greater survival of people with more problems), increasing iatrogenesis (as a result of more invasive treatment modalities), and increasing recognition of the myriad influences on health (and, hence, of myriad alternatives for prevention and management of ill health)¹.

Many countries, as well as the World Health Organization, have recently adopted the strategy of improving primary care as a response to the challenges of improving the quality of care while minimizing rapidly increasing costs of care. However, the burden of meeting these mounting challenges cannot be shouldered by primary care alone. Whereas health services in general have been responsible for a substantial proportion of the increase in life expectancy in the most recent half century², at least one-third of this is solely attributable to primary care³. The additional degree to which primary care (particularly in an increasingly specialized medical environment) has contributed, through its referral patterns, to the overall positive effect of health services is unclear. How much are the benefits of health services attributable to the relationship between primary care and specialty care?

There is little information that addresses this question or, even, that considers the way in which the relationship should be envisaged. Little attention (at least in Anglophone countries) has been devoted to developing either

consensus-based or evidence-based guidelines for referral from primary care to specialty care and, in fact, the need for evidence on relative degrees of benefit does not appear to have been recognized.

This paper provides a general framework for starting a process of rationalization and some preliminary evidence that could inform strategies to proceeding further. The data come primarily from national samples in the United States; the better organization of general practice in the UK may be associated with far better communication between primary care physicians and other specialists in the UK. Nevertheless, the data presented herein raise questions that are more generally applicable in all countries, and the US data provide a basis for cross-country comparisons.

A DIFFERENT LOOK AT MORBIDITY

The case for a better primary care orientation or, at least, for better continuity of care in health systems, is generally justified by the increasing burden of chronic illness in populations. In fact, the case is more compellingly made on the basis of co-morbidity of illness, whether acute or chronic. There is little doubt that illnesses are not randomly distributed in populations but, rather, that they cluster in particular individuals and in population subgroups. Concepts borrowed from genetics are more generally relevant; etiologic heterogeneity (one disease can have a range of 'etiologies'), penetrance (the likelihood that illness might not be manifested even in the presence of the presumed 'cause'), and pleiotropism (the existence of different illnesses, given a particular 'cause') apply more generally to illness in populations. The reason for this is that the nature of 'causation' (or, more appropriately, influences) is multifactorial (except for rare Mendelian disorders), both in individuals and in populations⁴. The different influences potentiate and modify each other, leading to the likelihood not only of additive effects but also multiplicative effects, thus explaining the 'clustering' of illness.

Co-morbidity is the norm in people with an illness. That is, more people have multiple diagnoses than be accounted for by random distribution of illness in the population⁵. Although there is increasing morbidity with increasing age, the extent of co-morbidity in the youngest age groups (children) is much greater than expected by chance distribution than is the case in older people⁵. Co-morbidity is a burden on the health services system as well as on the individual or subpopulation. Co-morbidity has a major impact on hospitalizations and on the rate of occurrence of adverse effects. In 1999, for example, 65% of the US elderly (age 65 or older) had two or more types (gene-

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rally categorized by an organ system involvement or etiology) of chronic conditions. Inpatient admissions for ambulatory care sensitive conditions (conditions for which hospitalization should be avoidable with good primary care) and hospitalizations with preventable complications increase much more than linearly with each additional comorbid condition. Those with four or more types of conditions were 99 times more likely than those without any chronic conditions to have an admission for ambulatory care sensitive condition. Per capita expenditures increased similarly, from \$211 for individuals without a chronic condition to \$13,973 for those with four or more types⁶.

The current focus on importance of chronic illnesses in contrast to acute ones may be exaggerated. Having a diagnosis in a year, even a non-chronic one, increases the likelihood of having it in subsequent years, even 2-3 years later. For example, individuals who have a URI are 60% more likely to have a diagnosis of URI 2-3 years later than individuals who do not have that diagnosis in a year. The increased likelihood of recurrence rises to twice as likely for pneumonia, 2.3 times as likely for sinusitis, almost 3 times as likely for abdominal pain, over 3 times as likely for otitis media, 4 times as likely for urinary tract infection, and 4 and a half times as likely for headache. Contrariwise, even frankly chronic conditions are not uniformly 'present' (diagnosed) in subsequent years, even 2-3 years later. For example, the diagnosis of auto-immune disorder in subsequent years is 641 per thousand people who had it in one previous year (Starfield B. Unpublished data). Admittedly, part of this may be a result of the tendency of 'rule-out' diagnoses to be coded as the diagnosis itself in many data systems.

Clustering of unrelated diagnoses (co-morbidity), its impact on costs, hospitalizations, and outcomes, and continuity of all morbidity (persistence or recurrence over time) suggests the utility of new types of interfaces between primary care and specialty care. A major challenge, however, is that we know very little about the utility of current interfaces, and, in fact, about the nature of specialty care and the contribution it makes to dealing with the continuity of morbidity.

We do, however, know a few things. For example, primary care physicians have professional relationships with very large number of specialists. Robert Reid and colleagues, using data from British Columbia, Canada, have shown what the distribution of this phenomenon is. The modal number is 100-124; the distribution tails off but not until over 400 is reached! We still understand very little about the nature of these relationships and why their frequency should vary so much (Reid R, et al. In preparation, 2003).

REFERRALS FROM PRIMARY CARE TO SPECIALTY CARE

A recent comparison between the US and the UK in the percentage of people referred from primary care to at least one specialist in a year showed a large difference, such that

the percentage was about three times higher in the US than in the UK, even after control for degree of morbidity burden, age, and gender⁷. The actual differences may even be underestimated as the US data are drawn from managed care organizations which attempt to reduce the occurrence of referrals. The findings are consistent with earlier findings from the European referral study⁸ which showed the variability in referral percentage in 15 European countries and provided detail on the percentage that were for medical, surgical, and other reasons. (The variability was even greater to specialists in ob/gyn, psychiatry, emergency, and oncology specialists). It is also of interest that referral rates vary indirectly with the frequency of the problem encountered in primary care as well as directly with the degree of co-morbidity (as noted above). More uncommon problems are more frequently referred at each level of co-morbidity⁹.

The importance of adjusting for morbidity burden was shown previously in a study of referrals in a large HMO. Variability in referral rates among physicians was greatly reduced when their patient populations were adjusted for differences in case-mix characterized by the Johns Hopkins ACG system of diagnosed morbidity burden¹⁰.

A variety of studies in the US have shown that practice-based approaches to restricting access to specialists have little effect on referral rates^{11,12}; key determinants appear to be frequency of the problem as encountered in primary care case mix (with higher degrees of co-morbidity related to higher rates of referral) and policies in specific health care systems, for example, the UK vs. the US.⁷ In the Netherlands, where the 70% of individuals with public health insurance require a referral each time they see a specialist, overall rates of specialty visits are lower than is the case for the 30% of people with private insurance, who have more flexibility in their ability to visit specialists without repeated referrals¹³.

WHO NEEDS TO SEE SPECIALISTS?

Seeing a specialist is not a random affair nor is it associated with differences in the frequency of illness in different populations. For example, rates of visiting specialists are directly associated with social class: the higher the social class the greater the rates of seeing specialists even in countries where rates of seeing generalists are inversely related to social class, and even though rates of illness (and especially severe illness) are inversely related to social class¹³⁻¹⁷. The extent to which this is a result of differences in referral rates or differences in self-referrals to specialists is unknown.

In some countries (such as the US), about half of the total number of office-based visits involve specialists¹⁸. However, when viewed from the perspective of people rather than visits, the number of visits to primary care physicians in a year for almost all specific conditions exceeds the number of visits to specialists for these conditions, both for specific common conditions as well as for co-morbid conditions in the same people. This pattern is

found across almost all conditions in the non-elderly population¹⁹. (The exception is for some uncommon conditions, such as diabetes mellitus in children, for which the number of visits to specialists for diabetes exceeds the number of visits to generalists, but only for the diabetes¹⁹). Figure 1 provides an example, for adults with asthma. The number of visits to generalists for co-morbidity is greater than the number of visits for the selected condition; also, the number of visits to generalists for co-morbidity is greater than the number of visits for co-morbidity to specialists. That is, primary care providers are the major providers of care BOTH for particular chronic conditions as well as other conditions, for all degrees of co-morbidity, except in the case of a few unusual chronic conditions, where specialists tend to provide the majority of care for the conditions themselves¹⁹. It is also true that the greater the co-morbidity, the relatively greater the number of visits to specialists.

Even when viewed from the episode perspective, specialists are involved in only a minority; cardiologists in 36% of those with cardiac disease, orthopedists in 22% of those with musculo-skeletal conditions, and neurologists in 40% of those with nervous system disease (Spitzer M. Personal communication, 2001). Although all of these data derive from patients in managed care plans and hence probably underestimate the percentage of people who consult specialists, they undoubtedly overstate the amount of specialist use in health care systems where referral rates are lower and where patients either may not or do not go to specialists without a referral from primary care.

Thus, with the possible exception of long-term management of very uncommon conditions, specialists appear to play a lesser role in the care of patients (although not necessarily diseases) than do primary care physicians, at least in the non-elderly. In the elderly, it is becoming clear that, at least in the US, there is very high use of specialists for both conditions and for co-morbidity, except in people with low overall burdens of illness (mss in preparation).

ROLES OF PRIMARY CARE AND SPECIALTY CARE

Primary care plays a well defined role within health services systems. It is first contact care, person-focused care over time, comprehensive, and coordinating. First contact care means that it is the locus of care for all new or newly-recurring problems or needs for care in the population. Person-focused care over time means that it is devoted to care of individuals in a population. It deals with the constellation of diseases or disease-states (co-morbidity) rather than focusing on specific diseases. Comprehensiveness includes caring for all health-related problems in the population except for those that are too uncommon for competence to be maintained. It coordinates care for those in the population who require services outside of primary care.

The role of specialists is not so well understood. Among the functions are short-term advice, or definitive interventions where primary care physicians do not have needed

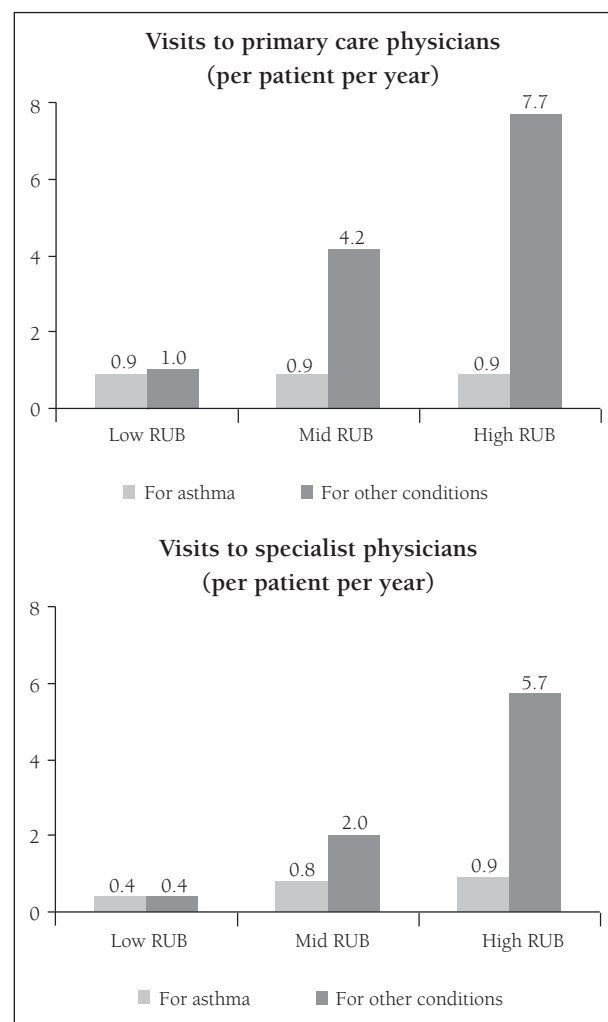


Figura 1. Adults with asthma.

equipment, skills, or experience to perform them. It may also be continuing long-term care when primary care physicians need ongoing advice in the management of certain problems in particular patients, or it may involve transferred management when the problem is too uncommon to be managed by primary care practitioners. Another level of specialty care is for short-term, highly skilled interventions usually carried out in high-level medical institutions such as teaching hospitals.

Figure 2 depicts the complexity of referrals. In some places, patients may go directly to specialists without a referral from primary care without financial penalty. This is the case, for example, in the US, Germany, Belgium, France, and Japan and, for particular specialties, in Denmark and Spain, or Finland (according to insurance type). Where referrals emanate from primary care, the basis for the referral may be simply the reason for encounter, a need for help or confirmation of a diagnosis, a need for help with management decisions or short-term management itself, or a need for ongoing management; it may also result from a specialist's decision that a referral from another specialist

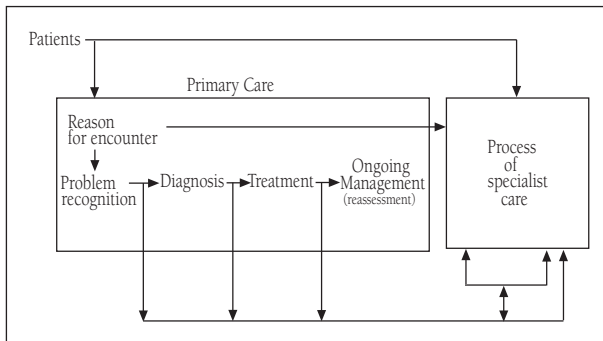


Figure 2. Referral from Primary Care. Source: R. Reid. Adapted from Starfield. *Primary Care*, 1998.

is required for any of these reasons. Sometimes, referrals may result for a multiplicity of these reasons.

In the case of referral for definitive treatment, the need may be for the short-term only, or it may be for the long-term; if the latter, the primary care physician may anticipate sharing the responsibility for the patient or, alternatively, may transfer all management (at least for the particular problem generating the referral) for ongoing management.

REASONS FOR REFERRAL- EMPIRICAL OBSERVATIONS

In the United States, at least, most referrals (48%) from family practitioners are for advice on treatment, followed by advice on diagnosis (44%). The same is the case (about 62% and 47%, respectively), for treatment advice and diagnosis advice for referrals from office-based pediatricians (most of whom are primary care practitioners for children in the US). Definitive management provides the basis for referral in about 40% of referrals from family practice, and about 30% in pediatrics. Patient requests are present in 16% of referrals from pediatricians, followed by failed treatment, mental health counseling, and multidisciplinary care.²⁰⁻²¹ For family physicians, these combined reasons are present in about a third of referrals. In this sample of family practitioners and pediatricians participating in collaborative practice-based research, about half of all referrals were to surgical specialists, and the expected duration for completion of the referral was less than 3 months for 60% of the family practice referrals and 40% for those from pediatricians^{20,21}.

Considerably more referrals are for consultation than for transfer of responsibility, even in the short term. The percentages for consultation in family practice and pediatrics is, respectively, 56% and 40%. Referrals where shared responsibility is anticipated are 29 and 35%, respectively, and for referral with transferred management, they are 15% and 25%, respectively^{20,21}.

The types of referral by family practitioners vary by the specialist to which the patient is referred. For 11 of 15 specialist-types, more than 50% are for short-term consultation. Short-term referrals for definitive diagnosis or man-

agement account for 25-30% of referrals to dermatologists, neurologists, pulmonologists, otolaryngologists, orthopedic surgeons, psychologists, psychiatrists, and non-physician practitioners²².

Expectations for referral also vary by the type of specialist²². In family practice, consultations for advice account for about a third of referrals to neurologists and about 25% to psychiatrists. Consultations for tests and procedures account for at least 30% of referrals to all specialists except psychologists and psychiatrists, and are particularly high in the case of general surgeons, urologists, and obstetrician/gynecologist specialists.

More than a quarter of family physician referrals are expected to be associated with shared management for referrals to all specialties except general surgery, urology, and ob/gyn; referrals with transferred management occur in less than a quarter of referrals to every specialist type. In pediatric practice, short-term consultations account for more than 50% of referrals to cardiologists, allergists, and gastroenterologists. For general surgeons, ophthalmologists, urologists, and dermatologists, more than 25% of referrals from pediatricians are for transferred management. For the remainder of the specialty referrals, more than 25% are for shared management – a finding similar to referrals in family medicine referrals, where the predominant expectation in at least six of the specialty types is referral with shared management²².

COORDINATION OF CARE BETWEEN PRIMARY CARE AND SPECIALIST PHYSICIANS

If the frequency of referrals from primary care is as high as 15% to 30% of people in a year, coordination of care is an important consideration; for this reason, coordination (or integration) of care is one of the key features of primary care practice²³.

Efforts at coordination by the primary care physician are greater in family practice than in pediatric practice, at least in the US. More than two-thirds of family physicians actually scheduled the specialist visit, more than four of five sent pertinent information, and less than one in ten had no communication. In contrast, less than four in ten pediatric referrals were associated with making the appointment and sending information; in about four in ten, there was no communication reported by the pediatrician.

Communication about the result of the referral was relatively high in both family practice and pediatrics. The referring physician was aware that the visit was made in 43% of referrals from family practice and 65% of pediatric practice; feedback about the results of the referral (when the visit was made) was received in 81% of family practice referrals and 55% of pediatric referrals, and this feedback consisted of a letter from the specialist in 77% of family practice and 44% of pediatric referrals²¹ (Forrest et al, in preparation). UK doctors might react with surprise at these apparently low figures. However, it is not clear that they are any higher in the UK, and existing referral studies do not appear to have addressed the issue.

There was a strong relationship between communication at the time of the referrals and communication post-referral, at least in pediatric primary care practice. The odds ratio for getting some feedback about referrals from pediatrics was 3 when the referring physician scheduled the appointment and sent information, 1.8 when the appointment was scheduled but no information was sent, and 1.5 when information was sent but the appointment was not made by the referring physician²⁴.

Greater benefit from the referral was achieved when coordination was better (table 1). When both a letter was received and there was telephone feedback, all three measures of benefit (satisfaction of the primary care physician, perceived benefit to patient management by the primary care physician, and perceived educational benefit to the primary care physician) were ranked the highest. When there was neither a letter nor telephone contact, ratings of all four were lowest, with intermediate values when there was either a telephone conversation or a letter²⁴.

IMPLICATIONS FOR RELATIONSHIPS BETWEEN PRIMARY CARE AND SPECIALTY PRACTICE

The findings of the reported studies make it clear that primary care practitioners are central to the care of people with all illnesses, whether because the illnesses themselves are common and therefore in the purview of primary care, because of the high tendency of all illnesses (including acute ones) to persist or recur, and because of the large extent of co-morbidity within the population, especially within subgroups, including the socially disadvantaged and those with more uncommon illnesses²⁵.

Therefore, new roles for primary care physicians and other specialists are in order. One alternative is to allow or encourage family physicians to subspecialize in certain aspects of primary care (as is being done in the UK), but there is continuing concern that such specialization will undermine the more important role of generalist primary care. In the case of common conditions (perhaps more than 2 per thousand in a practice population), there is strong imperative, when the disease is likely to be serious and persist or recur over time, for a shared mode of relationship between primary care physicians and specialists. In these instances, more thought might be devoted to considering the role of the specialist as a consultant to the primary care physician rather than referring the patient to

the specialist when there is no need for a definitive intervention, i.e., for diagnostic tests or specific therapeutic procedures for which primary care physicians have no expertise. There may even be justification for training primary care physicians to carry out diagnostic and therapeutic procedures now in the province of specialists, when the need for these is common and primary care physicians could therefore maintain competence in dealing with them. This seems particularly promising in the case of common dermatologic conditions as well as minor surgery, which, in the United States at least, are often referred to specialists. In fact, in some places, specialists visit primary care practices on a periodic basis to see groups of patients with the same common condition, although the frequency and nature of such approaches is poorly documented and not well evaluated. Such a practice would have the advantage of greater convenience for patients as well as an educational value both to primary care physician as well as to specialists, who learn better what common diseases look like when they appear in the community rather than in the relatively more isolated world of specialist practice. This type of practice would also make specialists more aware of co-morbidity in patients with conditions in their sphere of special competence and could greatly inform the development of guidelines for evidence-based medicine, most of which have been developed from trials in patients without co-morbidity. Co-morbidity is common¹⁹; it also has a major impact on need for care. On grounds of effectiveness and efficiency, guidelines need to be relevant to people with co-morbidity as well as to those without it.

A recent report from the UK of a randomized controlled trial of joint telecommunications²⁶ indicated a reduction in the number of tests and procedures in the group of patients 'seen' jointly by the primary care practitioners and a specialist. Although more patients in this group were offered the opportunity of a subsequent specialist consultation, there was no increase either in the number of subsequent specialty contacts or the number of primary care contacts. In addition, patients expressed greater satisfaction with care, and no worse health status, than in the group referred initially by the primary care physician to a specialist.

A previous report from the UK of an evaluation of the increasing number of specialist outreach clinics (conducted in primary care physician offices approximately every four weeks) showed that patients spent less time on waiting lists for specialists' appointments, had shorter waiting times in clinics and fewer follow-up appointments, and were more likely to be discharged than patients seen in hospital outpatient clinics, although total costs to the health system were greater²⁷.

The issue of equity in health services, based on differences in equity of health needs, bears recognition and study. The several studies that have explored the nature of care across the socio-economic spectrum indicate clearly that, while some health systems have succeeded in equalizing the use of primary care services (with some even achieving the goal of more services in populations with

Table 1. Referring physician benefit from referral (ranking), selected US pediatricians, mid-1990s

Feedback	Satisfaction	Benefit to management	Educational benefit
Letter and telephone	1	1	1
letter only	2	3	3
Phone only	3	2	2
None	4	4	4

Source: Forrest et al²⁴.

greater needs), there still remains a gap in receipt of specialty services by socially-deprived groups¹³⁻¹⁷. On grounds of equity alone, the relationship between primary care and specialty services demands more attention.

An unresolved issue is the benefits of referral to specialists. Although evidence is sparse, it is consistent in suggesting that population health (as distinguished from processes of care for specific disease) is worse when specialist/population ratios are high^{28,29} or when use of specialist services is highest.³⁰ However, it is possible that certain aspects of specialist care (such as disease-oriented prevention) may be enhanced by appropriate use of specialty services³¹.

It appears essential that health policy deliberations increasingly pay attention to the appropriate balance between primary care and specialty services. It appears self-evident that the diagnosis and management of rare conditions, or rare manifestations of common conditions, be in the province of specialists, as primary care physicians will not see enough of these to maintain competence in dealing with them. Preliminary data suggest that perhaps 1-2 per thousand population may be an appropriate threshold for rarity, but this estimate is not based on any firm evidence. Moreover, it may be that at least some proportion of these could be managed in primary care, once diagnosis and initial therapy are instituted, with adequate consultation from specialists. The vast majority of needs for specialty care will occur, however, in the case of common conditions, when there is a need for specialized services (diagnostic or therapeutic) in the short-term. Preliminary estimates are that 12-15% of people may need such services in a year. As the data presented herein indicate that some countries (e.g., the US) have far higher use of specialty services, the issue of over-utilization of specialty services becomes relevant for policy consideration. Attempts to reduce unnecessary use of specialists in the US have not proven to reduce the use of specialists, either because of uninformed public opinion about the value of specialty care where it is not needed or because of fears of malpractice regarding under-treatment among physicians.

Nevertheless, there is a point at which unnecessary care-seeking from specialists becomes dangerous to health. When the actual prevalence of a problem is low, diagnostic interventions have high false positive rates, leading to additional diagnostic and therapeutic interventions that have unintended adverse effects on morbidity and unnecessary deaths. Referrals for common and relatively undifferentiated problems, will lead to unnecessary and dangerous interventions when the intent is to rule out an uncommon condition. It may be hypothesized that more advantaged populations are more susceptible to such effects because of their easier access to specialty services. Conversely, socially disadvantaged populations are likely to be compromised because of their lower rates of use of specialists for appropriate diagnostic and therapeutic interventions for both uncommon as well as common conditions. Populations deprived of adequate financial access suffer declines in both appropriate as well as inappropriate services³².

Thus, referral policy is critical both with regard to effectiveness of services as well as equity in their distribution. With increasing worldwide attention to both of these issues, greater attention to the relationship between primary care and specialty services is warranted.

CONCLUSION

Morbidity is a continuing process in most people, a result of genetics interacting with environment in very complex ways involving a large number of interactions at the molecular as well as social, physical, material, and psychological characteristics at the individual, community, and policy levels.

As a result, person and population focused health care requires continuity, both within primary care as well as across different levels of care. This paper shows what little is known about the nature of the interface between primary care physicians and specialist physicians. The imperative now is to assess the generalizability of the findings, develop a framework (or adopt the suggested one) for guiding new policies, and making changes based on evidence of effectiveness, efficiency, and equity.

REFERENCES

1. Starfield B. New paradigms for quality in primary care. *Br J Gen Pract* 2001;51(465):303-9.
2. Bunker J. *Medicine Matters After All: Measuring the Benefits of Medical Care, a Healthy Lifestyle and a Just Social Environment*. London: Nuffield Trust, 2001.
3. Bunker J, Horder J, Starfield B. Can the benefits of primary care be measured? Lessons from America. 2003, submitted.
4. Starfield B. Equity and health: a perspective on non-random distribution of health in the population. *Rev Panam Salud Publica* 2002;12(6):384-87.
5. van den Akker M, Buntinx F, Metsemakers JF, Roos S, Knottnerus JA. Multimorbidity in general practice: prevalence, incidence, and determinants of co-occurring chronic and recurrent diseases. *J Clin Epidemiol* 1998;51(5):367-75.
6. Wolff JL, Starfield B, Anderson G. Prevalence, expenditures, and complications of multiple chronic conditions in the elderly. *Arch Intern Med* 2002;162(20):2269-76.
7. Forrest CB, Majeed A, Weiner JP, Carroll K, Bindman AB. Comparison of specialty referral rates in the United Kingdom and the United States: retrospective cohort analysis. *BMJ* 2002;325(7360):370-1.
8. Fleming D. The European Study of Referrals from Primary to Secondary Care. Report of Project. Birmingham, UK: Concerted Action Committee of the Committee of Health Services Research for the EEC, 1991.
9. Forrest CB, Reid RJ. Prevalence of health problems and primary care physicians' specialty referral decisions. *J Fam Pract* 2001;50(5):427-32.
10. Salem-Schatz S, Moore G, Rucker M, Pearson SD. The case for case-mix adjustment in practice profiling. When good apples look bad. *JAMA* 1994;272(11):871-4.
11. Joyce GF, Kapur K, Van Vorst KA, Escarce JJ. Visits to primary care physicians and to specialists under gatekeeper and point-of-service arrangements. *Am J Manag Care* 2000;6(11):1189-96.
12. Forrest CB, Weiner JP, Fowles J, Vogeli C, Frick KD, Lemke KW et al. Self-referral in point-of-service health plans. *JAMA* 2001;285(17):2223-31.
13. Bongers IM, van der Meer JB, van den Bos J, Mackenbach JP. Socio-economic differences in general practitioner and outpatient specialist care in The Netherlands: a matter of health insurance? *Soc Sci Med* 1997;44(8):1161-8.
14. Dunlop S, Coyte PC, McIsaac W. Socio-economic status and the utilisation of physicians' services: results from the Canadian National Population Health Survey. *Soc Sci Med* 2000;51(1):123-33.

15. Frohlich N, Fransoo R, Roos N. Health services use in the Winnipeg Regional Health Authority: variations across areas in relation to health and socioeconomic status. Health Care Management Forum, Manitoba Centre for Health Policy 2002; Winter Supplement:9-14.
16. Veugeler P, Yip A. Socio-economic disparities in health care use. Does universal coverage reduce inequalities in health? J Epidemiol Community Health 2003. In press.
17. Lorant V, Boland B, Humblet P, Deliege D. Equity in prevention and health care. J Epidemiol Community Health 2002;56(7):510-6.
18. Cherry D, Woodwell D. Ambulatory Medical Care Survey: 2000 Summary. Advance Data from Vital and Health Statistics No. 328. Hyattsville, MD: National Center for Health Statistics, 2002.
19. Starfield B, Lemke KW, Bernhardt T, Foldes SS, Forrest CB, Weiner JP. Co-morbidity: implications for the importance of primary care in 'case' management. Ann Fam Med 2003;1:8-14.
20. Forrest CB, Nutting PA, Starfield B, von Schrader S. Family physicians' referral decisions: results from the ASPN referral study. J Fam Pract 2002;51(3):215-22.
21. Forrest CB, Glade GB, Baker AE, Bocian AB, Kang M, Starfield B. The pediatric primary-specialty care interface: how pediatricians refer children and adolescents to specialty care. Arch Pediatr Adolesc Med 1999;153(7):705-14.
22. Starfield B, Forrest CB, Nutting PA, von Schrader S. Variability in physician referral decisions. J Am Board Fam Pract 2002;15(6):473-80.
23. Starfield B. Primary Care: Balancing Health Needs, Services, and Technology. New York: Oxford University Press, 1998.
24. Forrest CB, Glade GB, Baker AE, Bocian A, von Schrader S, Starfield B. Coordination of specialty referrals and physician satisfaction with referral care. Arch Pediatr Adolesc Med 2000;154(5):499-506.
25. Perrin JM, Kuhlthau KA, Gortmaker SL, Beal AC, Ferris TG. Generalist and subspecialist care for children with chronic conditions. Ambul Pediatr 2002; 2(6):462-9.
26. Wallace P, Haines A, Harrison R, Barber J, Thompson S, Jacklin P, et al. Joint teleconsultations (virtual outreach) versus standard outpatient appointments for patients referred by their general practitioner for a specialist opinion: a randomised trial. Lancet 2002;359(9322):1961-8.
27. Bowling A, Bond M. A national evaluation of specialists' clinics in primary care settings. Br J Gen Pract 2001;51(465):264-9.
28. Shi L. Primary care, specialty care, and life chances. Int J Health Serv 1994;24(3):431-58.
29. Roetzheim RG, Pal N, González EC, Ferrante JM, Van Durme DJ, Ayanian JZ, et al. The effects of physician supply on the early detection of colorectal cancer. J Fam Pract 1999;48(11):850-8.
30. Fisher ES, Wennberg DE, Stukel TA, Gottlieb DJ, Lucas FL, Pinder EL. The implications of regional variations in Medicare spending. Part 2: health outcomes and satisfaction with care. Ann Intern Med 2003;138(4):288-98.
31. Lorant V, Boland B, Humblet P, Deliege D. Equity in prevention and health care. J Epidemiol Community Health 2002;56(7):510-6.
32. Brook RH, Ware JE, Rogers WH, Keeler EB, Davies AR, Sherbourne CD, et al. The Effect of Coinsurance on the Health of Adults: Results from the RAND Health Insurance Experiment. Rand Publication No. R-3055-HHS. Santa Monica, CA: Rand Corporation, 1984.

Reflexiones en torno a la investigación en Medicina General

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INTRODUCCIÓN

El médico general se debe al paciente y al alivio de su sufrimiento. Para ello precisa una base científica (técnica y hu-

mana), una actitud y unas habilidades concretas que se adquieren en el pre y postgrado y se perfeccionan de continuo.

Además, el médico general debería ser tolerante a la incertidumbre y piadoso consigo mismo y con sus compañeros, de modo que aprenda de los errores propios y ajenos sin dejar de buscar la perfección ni perder la autoestima y la estima de los colegas.

Por último, el médico general debería trabajar de forma que ofreciera: longitudinalidad (atención a lo largo de la vida al conjunto de los problemas de los pacientes) y continuidad (atención de principio a fin de los procesos concretos, crónicos o agudos), adaptado a un contexto geográfico, demográfico, social y cultural concreto y con un sentido de responsabilidad tanto hacia los pacientes que consultan como hacia aquellos que no toman contacto con el sistema sanitario, y que normalmente lo necesitan más (ley de cuidados inversos).

DE LA NECESIDAD DE LA INVESTIGACIÓN

Constituye un reto personal y corporativo el cumplimiento, siquiera parcial, de las características básicas señaladas en esta introducción. Hace falta, como mínimo, inteligencia, coraje, constancia, empatía, ecuanimidad y alegría. ¿Quién pide más? Pide todo ello, y más, el grito desesperado del paciente en su dolor, en su sufrimiento, bien por la enfermedad propia bien por la de los familiares, bien por los abusos del sistema sanitario. Ese grito sin consuelo pide y exige lo mejor de los médicos generales, la búsqueda serena de la perfección, de la calidad en la prestación de la atención. Deberíamos vernos como miembros de una medieval orden de caballería, compuesta por quijotes benevolentes y bien preparados, dispuestos a "desfacer entuertos", a ofrecer alguna curación, mucho alivio y siempre consuelo. Pero es difícil el cumplimiento de esa visión, de ese orden caballeroso, pues partimos de una base endeble, de una conceptualización escasa, de una atención primaria "débil", y de un entorno especializado bárbaro y hostil que amenaza tanto a la población como a los pacientes y a nuestra profesión.

¿Cómo revertir la pérdida de autoestima de los médicos generales españoles? ¿Cómo introducir ciencia, humanidad y tecnología en las consultas diarias? ¿Cómo utilizar las oportunidades que ofrece el trabajo clínico diario para superar el agobio que genera la propia actividad?

Necesitamos, al menos,

1. Liderazgo, en el sentido de promoción de los mejores y de las mejores ideas para que sirvan de ejemplo y acicate que ensanchen y afirmen la práctica clínica hasta los límites de la Medicina General.

2. Transformar la teoría y los conocimientos en práctica diaria, sin dilación ni esperas, pues la exigencia de un trabajo de calidad exige la actualización continuada que va desde el uso simple y adecuado del ácido acetilsalicílico al consejo contra el tabaquismo, por ejemplo, y a la mejor organización de los servicios de enfermería, manifiestamente mejorables, en otro ejemplo.

3. Plantear y resolver preguntas relevantes en la búsqueda de la perfección clínica, o siquiera de la mejora de la misma, tanto en su vertiente personal (el paciente enfermo y no sólo la enfermedad), como en la familiar (la enfermedad en el núcleo de convivencia) y en la social (los enfermos que no consultan, las oportunidades para revertir la desigualdad en salud, la conceptualización cultural del enfermar y de los servicios sociales y otras cuestiones clave, por mucho que las ignoremos).

LA DIFICULTAD BÁSICA DE LA INVESTIGACIÓN EN MEDICINA GENERAL

La tenaza que ahoga la profesión del médico de cabecera la apretamos nosotros mismos cuando aceptamos sin criterio ni crítica las cuestiones y los métodos que plantean los especialistas. Es una tenaza que nos impide pensar libremente, que nos convierte en ciegos en el país de los tuertos. Tuertos son los especialistas, incapaces de ver a los pacientes en su conjunto, con su familia y en su entorno cultural. Ciegos somos los médicos generales cuando seguimos la cuerda de tuertos para imitarlos en su preocupaciones y formas de respuesta.

Por ejemplo, ¿qué otra cosa es sino ceguera creer en la “medicina basada en pruebas” como fórmula mágica para resolver los problemas del trabajo diario? De hecho, y para dejar las cosas claras, lo llaman “medicina basada en la evidencia”, pese a que en español lo evidente es, justo, lo que no requiere demostración. Los especialistas, y los laboratorios farmacéuticos emplean los ensayos clínicos como forma de manejo del poder científico, como forma de no tener que justificar el pensar en el paciente concreto. Da igual la mala calidad de la aleatorización (lo llaman “randomización”), el defectuosísimo desarrollo del seguimiento de los pacientes, o el interesado análisis de los resultados. Asimismo, se ignoran por completo los problemas de la validez externa, o la ausencia de pacientes “reales” (por ejemplo, con enfermedades múltiples o con insuficiencia renal o hepática). Se “olvidan”, también, de las clases sociales y de la estructura familiar. Así, los ensayos clínicos reflejan fielmente la torticera visión de los especialistas, tuertos que se interesan por una simple cuestión que se ajusta bien a su mundo sencillo, orgánico y mecánico. Los médicos generales, en lugar de utilizar lo que hay de bueno en las ideas filosóficas del ensayo clínico y su crítica al dogmatismo, aceptamos como buena la interpretación de los especialistas y pretendemos imitarles, tanto en la teoría como en la práctica. Es decir, aceptamos los protocolos, guías de práctica clínica, consensos y demás parafernalia con la que se nos intimida para introducir en la práctica diaria la rutina absurda de los ensayos clínicos sin tamizar.

Los especialistas imponen sus cuestiones, y sus métodos de respuesta a los mismos. Así, no es sólo la patológica veneración de los ensayos clínicos, la estadística y la epidemiología, sino la radical mutilación mental que conlleva el hacerse sólo las preguntas que resultan aceptables para dicho métodos. Por ejemplo, no se plantean cuestiones en

torno a la forma de pago a los profesionales de Atención Primaria, o son muy escasas. Las preguntas se hacen como reflejo del mundo de los especialistas, y la elegancia del método para responderlas predomina sobre el interés de las propias cuestiones. Buen reflejo es la producción científica que se publica en las revistas de investigación en Atención Primaria, que resulta una mala copia de la mala investigación que hacen los especialistas.

Atenazados y cegados por las cuestiones y los métodos de los especialistas, ¿cómo podríamos salir al mundo en el que viven y mueren los pacientes?, ¿cómo podríamos responder a las cuestiones que nos duelen y nos conmueven?

CUESTIONES RELEVANTES EN MEDICINA GENERAL (Y FORMAS DE RESPONDERLAS)

Puesto que hemos aceptado el desarrollo de la especialización como un progreso, y no como una vuelta a la barbarie (en expresión afortunada de Ortega), lo fundamental es revertir esa forma de pensamiento para poner las cosas en su sitio. Lo que los pacientes necesitan es una Medicina General fuerte, capaz y humana, y sólo ocasionalmente, los cuidados especializados de los especialistas, que deberían actuar habitualmente como asesores. Es absurdo negar la necesidad de la visión especializada en la atención de algunos problemas de salud, infrecuentes o subsidiarios de técnicas complejas. Es tan absurdo negar la necesaria visión tuerta, focal y especializada para algunas enfermedades como el aplicar esa visión al conjunto del enfermar, o a la investigación en Medicina General. No es sólo una cuestión práctica, pues la investigación es tanto teórica como práctica, por más que los especialistas médicos desprecien a la primera. ¿Qué pensarán, por ejemplo, los físicos teóricos, o los matemáticos, de nuestro afán de picapedreros de responder con el mazo a las grandes cuestiones que no sabemos plantear en un contexto teórico general?

¿Qué necesitamos los médicos generales?

Necesitamos:

1. Una clara conceptualización del trabajo en Medicina General. Carecemos de un marco teórico que defina con claridad el campo de trabajo del médico general. A todos nos parece evidente el ámbito y el contexto en el que nos movemos como médicos de cabecera, pero no podemos responder con propiedad y concisión a preguntas tan simples como, por ejemplo, ¿qué conjunto de problemas de salud requieren cuidados de Medicina General a domicilio, en qué circunstancias familiares y sociales, y con qué intensidad de consumo de recursos? Es más, carecemos, para seguir con el mismo ejemplo, de una urdimbre, de una estructura mental que defina y centre lo que un médico general hace a domicilio. El desarrollo teórico es esencial para el progreso conceptual y para la mejora de la práctica clínica. Sabemos que somos esenciales, pero no sabemos definir nuestra esencia. Es decir, no sabemos definir nuestro contenido y los límites cambiantes de nuestra actividad.

2. Un planteamiento general de la cuestiones y problemas acuciantes en Medicina General, que ayuden a “rellenar” los vacíos del marco teórico previo, y a dar respuesta operativa a lo más inmediato y necesario. Puesto que no podemos desarrollar trabajo de investigación profundo, complejo y simultáneo para resolver todos los problemas que nos acucian, lo lógico es el planteamiento teórico del conjunto de las preguntas, y la búsqueda de un orden en la selección apropiada de su necesidad de respuesta. Este trabajo teórico no es cuestión baladí, pues exige el conocimiento de todo lo hecho hasta la fecha, tanto en nuestro campo como en el de los especialistas, y el planteamiento honrado de lo que podría ser el futuro de nuestro trabajo de investigación. Por ejemplo, y como ya he señalado, no hay apenas conocimiento del impacto en la forma de trabajo (cantidad y calidad) de la forma de pago a los profesionales sanitarios. Una cuestión aparentemente simple, pero clave en la organización de los servicios sanitarios. Por supuesto, tampoco sabemos nada del impacto de la forma de pago en la autoestima de los profesionales, en su tolerancia a la incertidumbre, en la frecuencia, tipo y gravedad de errores, en su tolerancia a la frustración, o en su productividad científica. Cuestiones, por supuesto, de nulo interés para los especialistas, epidemiólogos y salubristas, pero fundamentales para el desarrollo de una Medicina General fuerte y resolutive. Sabemos que trabajamos en una economía de mercado pero desconocemos la mejor forma de participar en la misma, que quizá debiera ser cambiante y flexible según el entorno. Si ni siquiera podemos responder a esta pregunta sencilla, ¿no precisaríamos de un conjunto ordenado de cuestiones que deberíamos responder para ser útiles y mejorar nuestra oferta de cuidados?

3. Combinar adecuadamente los métodos griegos y babilónicos de responder apropiadamente a las cuestiones acuciantes de investigación. Lo que se lleva, lo que se ha convertido en norma, es el método babilónico; es decir, las grandes sumas y los grandes números, la estadística como forma de demostración y de respuesta a todos los problemas. No cabe duda de que algunas veces necesitamos contar, sumar y trabajar con grandes números; pero esta no es la única respuesta. También podemos pensar, observar y analizar un solo caso, un solo ejemplo (o una pequeña serie de casos), y deducir respuestas generales; es decir, necesitamos también el método griego. Sirve de ejemplo el suizo Piaget, que del análisis del desarrollo de su hijo dedujo el desarrollo de los niños en general. Hoy, sin embargo, se considera que la capacidad de observar y pensar sólo produce, como mucho, ideas que se aceptarán tras ponerlas a prueba con algún método babilónico. Es decir, los hábiles en los métodos estadísticos consideran inhábiles a los simples observadores y pensadores. Pitágoras, pues, no podría establecer su teorema si no lo acompañara de su demostración en miles de casos prácticos. Se resta así, el goce de enfrentarse a los casos de la práctica como retos clínicos y, simultáneamente, retos intelectuales. Es hora de reivindicar la capacidad investigadora de los médicos clínicos en su trabajo diario, y de aceptar respuestas basadas en métodos griegos y babilónicos. Aun-

que sólo sea para evitar agravios comparativos, como los fracasos absurdos tipo variabilidad en los calendarios vacunales autonómicos que dejan perplejo al médico general de a pie, tan convencido de la superioridad y bondad única y excluyente de los métodos babilónicos.

4. Crear un clima en el que se reconozca y premie la investigación en Medicina General, englobada en un contexto teórico y que da respuesta a preguntas importantes y acuciantes, con métodos adecuados. No necesitamos que todos los médicos investiguen, y por supuesto, lo que se debería premiar básicamente es el buen trabajo clínico. Pero la labor investigadora debería contar con un reconocimiento social y profesional. Sobre todo, se deberían promocionar e incentivar el planteamiento y la respuesta a nuevas ideas con nuevos métodos. No necesitamos repetir rutinariamente la investigación políticamente correcta, anodina, que no aporta nada nuevo y que jamás se cita ni se utiliza en la clínica. El objetivo no es mejorar o engordar el *curriculum* personal, sino ayudar a mejorar la calidad de la atención. La Medicina General necesita nuevas ideas y nuevos métodos; hay muchas preguntas que se pueden responder con los métodos clásicos, pero otras requieren una nueva visión. Por ejemplo, ¿cómo abordar el impacto en el médico de la muerte de un paciente en que se equivocó?, o ¿cuándo derivar un paciente con rectorragia?, o ¿cuándo pasar el control de la coagulación desde el hematólogo al médico general y al paciente, si se aplican las nuevas tecnologías?, o ¿cómo tratar la fiebre en un lactante, si es que hay que tratarla?, o ¿en qué situaciones es preferible el trabajo en solitario del médico de cabecera?, o ¿cuál es el número adecuado de habitantes por médico de cabecera y por los distintos especialistas?, o ¿cuál es la historia natural del dolor abdominal inespecífico?, o ¿en qué grado y forma los especialistas han conseguido “medicalizar” el climaterio, y cómo combatirlo?, o ¿qué significa para el paciente ser diagnosticado de diabetes en su vida personal, familiar, laboral y social?, o, para finalizar, ¿qué aplicaciones de las nuevas tecnologías pueden cambiar y en qué forma la atención clínica, como la tele-consulta, la cámara digital para el seguimiento de la retinopatía diabética y otras? Son sólo ejemplos del tipo de preguntas cuya respuesta sería clave para el progreso de la Medicina General. Necesitamos apoyar a los que se hagan estas preguntas y a los que las respondan con métodos adecuados.

CONCLUSIÓN

La Medicina General tiene una historia milenaria y se ha organizado en España según la evolución cultural y económica de la sociedad. Hemos aceptado la situación en la que nos ha ido colocando la progresiva especialización de la Medicina, una posición débil que no se sostiene con investigación adecuada a los problemas de los pacientes ni de los profesionales. Es hora de que promovamos un cambio que permita hacer la investigación que necesita la población y los médicos generales. Es hora de que hagamos preguntas relevantes y las contestemos adecuadamente, con independencia de la elegancia de los métodos. Nece-

sitamos establecer un nuevo marco que sitúe a la Medicina General en su lugar natural. La tiranía de los especialistas y de su investigación es perjudicial para la salud.

BIBLIOGRAFÍA RECOMENDADA

- Cochrane AL. Eficacia y eficiencia. Reflexiones al azar sobre los servicios sanitarios. Barcelona: Salvat, 1985.
- Gérvás J. Experiencia, ciencia y "medicina basada en pruebas" en atención primaria. SEMERGEN 2002;28:302-4.
- Gérvás J, Palomo L, Pastor-Sánchez R, Pérez-Fernández M, Rubio C. Problemas acuciantes en atención primaria. Aten Primaria 2001;28:472-7.
- Howie JGR. Investigación en Medicina General. Madrid: Díaz de Santos, 1992.
- Mesa redonda. Asistencia, docencia e investigación: ¿son compatibles? Colección Debate Sanitario, nº 2. Barcelona: SCM, Fundación Farmacia; 2002.
- Ortún V. La economía en sanidad y en medicina: instrumentos y limitaciones. Barcelona: Escola Universitària de Treball Social, 1991.
- Ortún V, Gérvás J. Fundamentos y eficiencia de la atención médica primaria. Med Clin (Barc) 1996;106:97-102.
- Payer L. Medicine and culture. London: Victor Gollanz, 1989.
- Starfield B. Atención primaria. Equilibrio entre necesidades de salud, servicios y tecnología. Barcelona: Masson, 2001.
- Starfield B. Quality of care research. Internal elegance and external relevance. JAMA 1998;280:1006-8.
- Tanembaum S. What physicians know. N Engl J Med 1993;329:1268-71.
- White KL. The task of medicine. Menlo Park: Henry J Kaiser Family Foundation, 1988.