

The main intention of this issue is to try to address a range of questions. What is the impact of eHealth innovations on the health system? Are we healthier because of them? What are the most promising innovations? What are the toughest barriers hindering their adoption? What do we know about strategies to overcome these barriers? Will eHealth applications lead to a fairer world?

We would like to encourage researchers to submit original articles before 15 October 2003. The scope of the issue is purposely wide, as we see it as a unique opportunity to illustrate the diversity of eHealth applications and the ways in which they could transform health and health services.

We would like to see studies on the effects of health information portals, multimedia applications and virtual reality, portable computers, wearable or implanted devices, electronic health records and other health information systems, telehealth initiatives, or any other emerging technologies. We would also like to see studies addressing the use of information and communication technologies for and by diverse groups of people, including health professionals and other caregivers, researchers, policy makers, journalists, lawyers, insurers, marketers, patients, and the public in a variety of different countries, cultures, and settings.

We are very interested in learning about the role of eHealth innovations in improving health or health care in all age groups, the healthy and the very sick, the illiterate and the highly educated, the very poor and the very affluent. We would like to learn more about how these innovations could enable people of different ethno-cultural backgrounds to optimise their health or to help level the playing field across groups. We are interested in different settings, as we would like to see evidence of the impact of these technologies when they are used at home, at school, in the workplace, and in health institutions. We would also like to see how eHealth applications are changing the notion of place, presence and time.

So, anything goes, as long as the studies provide new, interesting, and valid evidence that could shed light on how eHealth applications could help people, regardless of who or where they are, to optimise their health while making efficient use of resources.

Submit your manuscript to <http://submit.bmj.com/>, mentioning in your covering letter that your article is intended for the eHealth theme issue.

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Endocrine treatment of physiological gynaecomastia

Tamoxifen seems to be effective

Gynaecomastia is a common condition among normal healthy men of varying ages. Tenderness may be one of its symptoms, but the usual reason for presentation is that young men don't like having breasts and older men are worried about the possibility of cancer. Diagnosis is primarily by clinical examination and where necessary ultrasound and needle biopsy. Traditional methods of management of gynaecomastia have included simple analgesia for pain, and surgery. The most common reason for the patient to request surgery is cosmetic. However, although surgery in experienced hands is safe and effective, with minimal stay in hospital, the cosmetic results cannot always be guaranteed—noticeable scars, permanent pigment changes in the breast area, and mismatched breasts or nipples have been reported.¹ An uncommon but particularly ugly effect is tether of the subareolar area to the chest wall. These possible complications are balanced by the immediate therapeutic effect of surgery on gynaecomastia, especially in adolescents, for whom any form of prolonged treatment may not be appropriate.

At our hospital we recognise two forms of gynaecomastia; "lump" and "fatty" types. The former is a single firm retro-areolar lump, often tender, whereas the latter is a diffuse fatty lesion in the whole breast area. Adolescents usually have the lump form, and elderly people often have the fatty type.

Most cases of gynaecomastia have no known cause, especially in patients presenting in adolescence. Gynaecomastia secondary to underlying pathologies

such as testicular tumours (very rare), liver dysfunction, or to a broad spectrum of drugs (notably oestrogens, cimetidine, and spironolactone) tends to be bilateral (by no means always) and is of the more diffuse fatty type.²

Primary breast cancer, although rare, is an important differential diagnosis. It usually presents as a lump—not centrally placed—and in male patients often shows skin tether. Ultrasound examination and core biopsies confirm the diagnosis.³

An altered ratio between serum free oestradiol (which stimulates mammary epithelium) and testosterone (which inhibits it) is believed to underlie the pathophysiology of physiological gynaecomastia.² Antioestrogens such as tamoxifen have therefore been suggested in the non-surgical treatment of this condition. Other suggested endocrine treatments have included clomiphene⁴ and danazol,⁵ both given for one to three months. Clomiphene is a non-steroidal agent with a weak oestrogenic activity. It acts on the hypothalamic-pituitary axis to increase gonadotrophin releasing hormone and therefore luteinising hormone releasing hormone and follicle stimulating hormone release. Its efficacy as a satisfactory medical treatment for gynaecomastia has not been proved. Danazol inhibits the production of oestrogen by suppressing the pituitary-ovarian axis due to the inhibition of the output of both follicle stimulating hormone and luteinising hormone from the pituitary gland. It also has androgenic side effects. It has proved effective in the management of gynaecomastia compared with

Previous studies of tamoxifen on physiological gynaecomastia

	Tamoxifen dose (daily dose in mg)	Duration (months)	No of patients	Success No/ total (%)
Ting ⁶	20	3	23	Lump: 18/23 (78) Pain: 19/23 (82)
Parker ⁷	10	2	10	Lump: 7/10 (70) Pain: 4/4 (100)
McDermott ⁸	20	2-4	6	Lump: 3/6 (50) Pain: 5/6 (83)
Alagaratnam ⁹	40	2	61	Lump: 49/61 (80) Pain: 49/61 (80)

placebo,⁵ but adverse effects such as weight gain limit its application in general use.

The use of tamoxifen for gynaecomastia has been studied previously in several centres. The table shows the various published studies on the use and efficacy of tamoxifen for physiological gynaecomastia in the English literature.⁶⁻⁹ Only two of these studies^{6,9} have more than 10 patients and both showed resolution of lump and pain in 80% of cases. A recent study from our own unit in 36 cases confirms this figure (83% resolution of lump).¹⁰ Ting et al also found tamoxifen to be more efficacious than danazol.⁶ Importantly only minor and reversible side effects were reported. This confirms findings that tamoxifen used in male breast cancer

appears to have no serious side effects.¹¹ Tamoxifen appears to be successful, safe, and avoids operation and on present evidence should be regarded as the first line treatment of gynaecomastia.

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General practitioners and occupational health professionals

Consensus statement to improve interaction is timely and welcome

Occupational Medicine (the journal of the Society of Occupational Medicine) recently published a consensus statement on the interaction between general practitioners and occupational health professionals in their roles in vocational rehabilitation.¹ This was derived by using a Delphi technique to solicit the views of interested and influential individuals from industry, insurance, academia, representative organisations, government departments, and universities.^{2,3} The statement emphasises the potential benefits of work and the importance of vocational rehabilitation in restoring an optimal lifestyle to individuals recovering from illness and injury.

Anecdotally, examples of excellent communication between general practitioners and occupational health professionals exist, but poor or non-existent communication is common. At times the relationship may become adversarial, with the patient unable to understand the respective roles. This has an impact on patients' rehabilitation to useful work. Poor communication is not restricted to the United Kingdom and has been shown to act as an impediment to rehabilitation elsewhere.^{4,5} The consensus statement implies a role for occupational health professionals as case managers, coordinating efforts from healthcare providers, employers, and other agencies in facilitating a return to work. It ends with an exhortation for better communication from all to help establish interdisciplinary collaboration for the ultimate benefit of patients.

Vocational rehabilitation is an important issue. In Britain it is estimated that some 2.7 million people are currently economically inactive and receiving state incapacity benefit.⁶ The issue has recently received increased attention from several organisations,^{7,8} and all in health care have seen the damage that ensues from losing a job and income as a consequence of ill health. Successful vocational rehabilitation has the ability to promote health and limit the financial burden on the state and pension funds. It is important that it is done well.

General practitioners have an important role. They exercise an enormous influence during the treatment and recovery of their patients, but their role in assessing fitness for work and facilitating return to work may be handicapped by a limited knowledge of their patients' work and a lack of access to workplaces and managers. There is often an apparent conflict between the general practitioner's role as a patient's advocate and the requirement to provide objective information to an employer while maintaining patients' confidentiality. General practitioners act successfully as case managers for their patients in so many areas, but loyalty to patients can be perceived as potentially affecting their impartiality when considering employment and benefit entitlement.

Occupational health professionals, who do not have continuing responsibilities for family care, may be better placed to adopt an objective and proactive approach to vocational rehabilitation. Occupational

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