

Medicalisation in the UK: changing dynamics, but still on-going

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The UK is becoming a thoroughly medicalised nation, *with various players: patients, doctors, other professionals, government and public health, acting in some cases to increase or in others to decrease medicalisation*

Over a single professional lifetime general medical practice has reversed from being mainly reactive work with doctors responding to patients' symptoms, to a pro-active mass assessment of risk with extensive issuing of treatments, increasingly for people without symptoms at all. Statins are the model, already prescribed for about seven million people, with current proposals from the National Institute for Health and Care Excellence (NICE) that would more than double the number of people receiving them. There are also calls for mass medication to reduce cardiovascular deaths through a "polypill," containing several drugs.

The medical literature, mainly written by doctors, described numerous advantages of medical treatments, whereas historically, the social science literature, mainly written by social scientists, often described adverse effects and critiqued medicalisation. The previous gap between the literature of the medical and social sciences has closed, and instead there are changing dynamics in medicalisation which create conflicts between different players.

Medicalisation in the medical literature

Medicalisation mainly developed in the mid-twentieth century and has continued progressively. It includes primary prevention, preventing diseases like diphtheria and polio. Immunisations against several diseases are now given to every British baby. These have successfully eliminated most of these diseases and greatly reduced the incidence of others. Mass screening of healthy people is generally accepted as medicalisation. Cervical cytology and breast cancer screening involve virtually all adult females. Diabetes is common (5% of the population), but prediabetes is commoner still, affecting millions and indicating treatment.

Fig 1 about here

Medicalisation is driven by the progressive lowering of treatment thresholds in diseases like hypertension. Taking the blood pressure of symptom-free people is screening. Finding high blood pressure and treating it turns approximately 13% of the population into patients. Medicalisation means medication for millions. Similarly, lowered thresholds for behavioural disturbance have increased the frequency of diagnoses of childhood disorders such as autism. Anxiety states and depression are so common that in our general practice, 20% of all adults have been diagnosed.

Life-style medication is virtually an industry with people being advised continually what to eat (five portions of fruit and vegetables, daily) and how much to drink, with limits for men and women. Smoking cigarettes, the biggest single preventable cause of ill health, is subject to public health legislation now preventing smoking in public places. People are now advised to take regular exercise which is associated with significant extension of life, even in the elderly.

Contraception is a big form of medicalisation, including the Pill, IUCDs, and implants. Pregnancy and childbirth provide powerful evidence of reproductive medicalisation. Pregnant women now receive a whole series of professional assessments and tests. Childbirth is thoroughly medicalised, including hospitalisation. Although women are taller (indicating better nutrition) and fitter than ever before, a quarter now have their babies by major surgery.

Fig 2 about here

The National Health Service (NHS), a Government run service, fosters medicalisation. Many drugs now can be bought in pharmacies directly by patients. Pharmacists are an under-recognised source of medicalisation. In Europe, every second package of medicine received is non-prescription. People are mass medicating themselves.¹

Computerisation of general practice records is a little understood driver. At risk groups are now routinely identified and sent appointments. One general practice, with which EW and DPG are associated, recently posted 1,400 appointments for preventive procedures. GPs have thus become leading agents of medicalisation.

Medicalisation in the social science literature

Medicalisation, the process by which moral, social, or legal problems become medical issues, has been studied in social science for nearly half a century.^{2,3} There are many commentaries on old age,⁴ sex⁵ and disease mongering, and non-medical conditions being pushed by commercial interests.⁶ Social scientists have been concerned first with the mechanisms of medicalisation, and second with its consequences, both positive and particularly negative.

Social scientists have described several mechanisms: the rise of biotechnology, commercial and market interests, claims by doctors, and professionalisation. These mechanisms promoted the idea that clinicians and scientists act as the central force in medicalisation and in the early sociological literature clinicians were often portrayed as sinister agents of social control.^{2,3} In the older literature, medicalisation became a pejorative term, employing a top-down model, where groups of experts with socio-economic advantages were foisting it on disempowered populations. Increased intervention was characterised as the miscategorisation of normal reactions and behaviours as medical problems,⁷ and the feminist critique spoke of doctors, especially males, removing control from females of their own bodies, particularly for pregnancy and childbirth.^{8,9}

Psychiatry received sustained attack, some radical psychiatrists denying the existence of mental illness, suggesting such illnesses were individual traits or behaviours that society deemed deviant.¹⁰ Social labelling theory was influential, suggesting iatrogenic effects of psychiatric labelling: through self-fulfilling prophecies and expectancy bias.

Criticisms were that psychiatric diagnostic criteria were too arbitrary to meet scientific standards, leading to ineffective, potentially counter-productive and costly interventions, with increased diagnoses stigmatising large numbers.

Conditions like depression are strongly associated with socio-economic disadvantage, and sociologists maintain that medicalisation acts to personalise and de-politicise what are essentially social problems¹¹ i.e. if conditions are associated with socio-economic disadvantage they should be tackled by policies to address inequality, not by prescribing pills. Today, social science literature has converged with medical literature and has shifted from the top-down model to one where patients have an active voice and a say in determining their own destiny. Medicalisation is accepted as being actively sought by some patients (e.g. extensive self-medication with over-the-counter drugs). Now, clinicians actively resist medicalisation, for example, in chronic fatigue syndrome, where many doctors are reluctant to diagnose, whereas many patients actively seek the medical label.¹² Patients coalescing in social health movements are now seen as dynamic advocates, sometimes promoting and sometimes resisting medicalisation.

The same is true of government authority. Although UK law gives patients right to access treatment, case law has limited doctors' rights to impose treatment on conscious patients with mental capacity, so Jehovah's Witnesses can decline even life-saving treatment and recently one died in front of doctors after refusing blood transfusion.¹³ The picture has become complex with changing dynamics.

Social movements have succeeded in demedicalising some conditions, classically, homosexuality, which was listed as a disorder in the second edition of the DSM. Hormone treatments and castrations were used to treat it and even commitment to mental institutions.⁵ Sustained pressure from gay activists repositioned homosexuality outside the medical domain. Diagnoses of Gender Identity Disorder and Autism Spectrum Disorder have been subject to similar campaigns for demedicalisation and/or reframing of diagnostic categories.

What health movements share is a rejection of 'victim' status and seeking equality with experts, including clinicians. They demand greater involvement in determining research priorities and policy decisions. The power and credibility of the voice of affected individuals is firmly acknowledged in both social science literature and health policy.

Medical Responses

The essential critique of medicine by social scientists has been its tendency to take over the lives of patients and to control them inappropriately. Medicine is responding in six different ways:

1. Legislation

Public health legislation imposes health promotion on citizens like compulsory wearing of seat belts and banning smoking in public places. This authority is from a democratically-elected, predominantly lay Parliament, and not from doctors.

Secondly, case law has limited doctors' rights to impose treatment on conscious patients with mental capacity, so Jehovah's Witnesses can decline even life-saving treatment and recently one died in front of doctors after refusing blood transfusion.¹³

2. Recognition of adverse effects of medical treatment

Following the Institute of Medicine (2001) report, *To Err is Human*¹⁴ medicine now openly discusses the adverse effects of medical treatment. One estimate is 44,000 to 98,000 deaths each year in US hospitals are due to medical errors.¹⁵ Similarly, up to third of people in US hospitals suffer a significant adverse effect.¹⁶ The previous assumption that medical treatments were almost inevitably beneficial has been punctured and they are now seen as a balance of gains and losses - a historic change.

3. Overuse of medical treatments

Research has revealed that many US patients receive therapy for cancers which do not respond and a review of angioplasty procedures found over 10% had been "inappropriate."

4. Patient Participation

Following the key research of Kaplan *et al.*¹⁷ which showed that actively informed and participating patients have better outcomes, medicine is making a big effort to inform patients better and seeking active engagement. There are now Patient Participation Groups in thousands of general practices and a National Association for Patient Participation (NAPP) promoting them.

5. Enablement/empowerment

The term 'enablement,'¹⁸ or empowerment, is an overarching theme of modern general practice care i.e. helping the patient cope with whatever the medical problems are, which is the opposite of the doctor taking over control.

Indeed nowadays some older patients complain that GPs don't give clear advice, but keep giving options, asking the patients to decide.

6. "Choosing wisely"

There is now a growing international campaign to reduce medicalisation. This started in the USA and is led by doctors, who are vigorously promoting policies to investigate less (not to request x- rays without red flag symptoms) and to reduce antibiotic use.¹⁹

Social science literature converging on medicine

The convergence of medicine towards the social sciences is mirrored in reverse. Today sociologists remained concerned about the widening net of medicine (for example, screening generates many false positives) but the great benefits medicine has brought patients is also recognized and openly discussed in social science literature.

Some articles in the social sciences now acknowledge that some earlier writings like those of Illich³ were polemics. Ballard and Elston²⁰ accept that 1970 articles “over-emphasized medical domination and underemphasized the benefits of medical care”. They believe we are now in postmodern society and the role of patients is much more important. They write: “we might expect a reduction in medicalisation.” However, we predict the opposite.

New dynamics

Traditionally medicalisation was conceived as a balance between patients and doctors, as the two principal players. However, new developments, like citizen empowerment, with “expert patients” the internet access, and television discussions are enhancing the role of patients. Doctors and nurses have been empowered to medicalise through new treatments and new indications.

Government is an influential new player, which promotes medicalisation through numerous programmes and incentives like the Quality and Outcomes Framework. These three players can sometimes promote and sometimes resist medicalisation, creating new dynamics and complexity.

Patients, sometimes call for more medical action, whilst others resist it. Doctors, the main agents of medicalisation, are also increasingly trying to limit their own role for example through the ‘Choosing Wisely’ campaign. Government, sometimes fosters medicalisation, but at other times seeks to reduce “demand”.

Adding to the complexity, some NHS services, introduced to reduce demand proved, unexpectedly, to be additive not substitutions. NHS Direct was expected to reduce GP consultations. Despite its several million telephone consultations annually, GP consultations simultaneously rose.

Similarly, despite a national campaign to promote cognitive behavioural therapy and the appointment of thousands of therapists, prescriptions for antidepressants have simultaneously increased from 15 million to 40 million items, between 1998 and 2012.

Conclusions

The previously diametrically different views in the medical and social science literatures have converged.. Today's picture is complex as different players take different roles in the process. More diverse and dynamic roles of more players will interact with advancing technology and higher expectations of better-informed and more involved patients. Medicalisation has continued progressively and we believe will continue to do so.

Key messages:

- **Medical practice is moving to meet the main social science criticism that it disempowers patients and the social sciences now recognise patients are sometimes drivers of medicalisation.**
- **A range of different players have been both driving medicalisation and resisting it.**
- **General practice has become one of the main contributors to medicalisation.**
- **Some argue medicalisation will diminish: we believe it will continue.**

References

1. Association of European Self Medication Industry 2011-2013 Market Data <http://www.aesgp.eu> [Accessed 2 August 2014]
2. Zola IK. Medicine as an Institution of Social Control. *Sociol Rev.* 1972 Nov 1;20(4):487–504.
3. Illich I. *Limits to medicine: Medical Nemesis, the Expropriation of Health.* London: Marion Boyars Publishers Ltd; 1976.
4. Ebrahim S. The medicalisation of old age. *BMJ* 2002 Apr 13;324(7342):861–863
5. Hart G, Wellings K. Sexual behaviour and its medicalisation: In sickness and in health. *BMJ* 2002 Apr 13;324 (7342):896–900.
6. Moynihan R, Heath I, Henry D. Selling sickness: The pharmaceutical industry and disease mongering. *BMJ* 2002 Apr 13;324(7342):886–91.
7. Conrad P. *The Medicalisation of Society: On the Transformation of Human Conditions into Treatable Disorders.* London: JHU Press; 2008. 224 p.
8. Stanworth M. *Reproductive Technologies: Gender, Motherhood and Medicine.* Cambridge: Polity Press; 1987. 236 p.
9. Sawicki J. *Disciplining Foucault: Feminism, Power, and the Body.* New York: Routledge; 1991. 144 p.
10. Szasz TS. *The Manufacture of Madness: A Comparative Study of the Inquisition and the Mental Health Movement.* NYC/London/Evanston: Harper & Row, Publishers; 1970. 363 p.
11. Brown GW and Harris T *Social Origins of Depression : A Study of Psychiatric Disorder in Women.* New York : Free Press; 1978.

12. Woodward RV, Broom DH, Legge DG. Diagnosis in chronic illness: Disabling or enabling-the case of chronic fatigue syndrome. *J R Soc Med* 1995 Jun;88(6):325–9.
13. Pooririsak P, Schroeder AM, Greisen G, Zachariassen, G. Intravenous iron administration together with parenteral nutrition to very preterm Jehovah's Witness twins. *BMJ Case Rep* Jun 2;2014. pii: bcr2013202167. doi: 10.1136/bcr-2013-202167
14. Institute of Medicine *To Err is Human* Washington: IoM 1999
15. Hayward RA, Hofer TP. Estimating hospital deaths due to medical errors: Preventability is in the eye of the reviewer *JAMA* 2001;286(4): 415-420.
16. Classen DC, Resar R, Griffin F, *et al* 'Global trigger tool' shows that adverse events in hospitals may be ten times greater than previously measured *Health Affairs* 2011;30; 4:581-99.
17. Kaplan SH, Greenfield S, Ware JE. Assessing the effects of patient –physician interactions in the outcome of chronic illness *Medical Care* 1989;27:S110-117.
18. Howie JGR, Heaney DJ, Maxwell M. *Measuring Quality in General Practice Occasional Paper 75* London:RCGP; 1997
19. Hurley R. Can doctors reduce harmful medical overuse worldwide? *BMJ* 2014 348:g4289
20. Ballard K, Elston MA. Medicalisation: A multi-dimensional concept. *Social Theory & Health* 2005 3(3): 228-241.

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Acknowledgment

We thank Dr Philp Evans, St Leonard's Research Practice, Exeter for support and advice.

Conflicting interests

None of the authors have any conflicting interests. There was no grant funding for this work.