Life & Times

Quaternary prevention:

a balanced approach to demedicalisation

In 1982, the Journal of the Royal College of General Practitioners published Ivan Illich's article 'Medicalization in Primary Care'.1 Illich held a paradoxical belief that GPs could contribute to the healthy process of demedicalisation, that is:

"... to offer their patients the occasion to de-medicalize their own attitude to pain, disability, discomfort, ageing, birth and death."

In other words, 'unhooking [patients] from the health system'.1 This article presents WONCA's definition of Quaternary Prevention (P4) as a unifying framework that organises GPs' scope on demedicalisation.²

EXPLAINING QUATERNARY PREVENTION

Devised in 1986 by Marc Jamoulle, a Belgian GP, P4 is:

"... an action taken to identify a patient at risk of over-medicalization, to protect him from new medical invasion, and to suggest to him interventions which are ethically acceptable. 3

P4 was initially oriented to those patients who were feeling ill, but who had no clinically established disease: the worried well and those presenting with medically unexplained symptoms.3 The former are concerned about their health status and usually demand check-ups; the latter present with symptoms that lack pathophysiological explanations. Some of these symptoms stem from psychosocial circumstances. Both groups of patients are subjected to overmedicalisation.4

Box 1 provides a framework that organises the scope of P4. Its clockwise-arrow at the centre indicates that P4 impacts the other three preventive levels: primary prevention (P1), secondary prevention (P2), and tertiary prevention (P3). Box 1 also differentiates two demedicalisation scenarios: 1) P1 and P2, which deals with symptomless individuals; and 2) P3 and P4, which comprises disease/ illness dimensions, merging clinical care with preventive activities.

Individuals undergoing P1 and P2 might be subjected to overdiagnosis and overtreatment (that is, overmedicalisation). Overdiagnosis is 'the diagnosis of a condition that would have remained indolent in the patient's lifetime if left undetected'.5 Thus,

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patients end up dying from competing diseases and not gaining in longevity.

The main problem of overdiagnosis is overtreatment: treating pseudo-diseases that bear no prospect of benefit.6 This represents harm both to individuals' wellbeing and to health systems as it generates unnecessary costs and waste of resources. Potential sources of overdiagnosis are disease screening, altering cut-off points for defining a risk factor or a disease, and financial incentives example, pay-for-performance schemes).5

FIRST DO NO HARM

An example of controversial P1 is prescription of statins for individuals with 10% cardiovascular mortality risk in

10 years. This increases the overdiagnosis effect and offers minimal individual benefit. Regarding P2, there are lots of instances of overmedicalisation due to non-evidencebased screening for thyroid, prostate, and ovarian cancers. Breast cancer screening also needs to be readdressed. After an average of two decades of breast cancer screening in Canada⁸ and the US, ⁹ there are considerable overdiagnosis rates (roughly 30%), minimal (if any) impacts on mortality, 10 but known potential harms such as an increase in heart disease (27%) and lung cancer (78%) mortality.11

Concerning P3, diabetes care provides a good example. The belief in 'the lower the better' Hb1Ac levels has potentially done more harm than good due to polypharmacy, reduction in quality of life, and an increase in

Box 1. Quaternary prevention framework as an organising principle for demedicalisation

Clinicians' perspective (biomedical gaze) Demedicalisation No disease Disease P1 and P2 originally belong to public health tradition, as An action taken to avoid or An action taken to detect a they deal with population remove the cause of a health health problem at an early outcomes. Patients need problem in an individual or stage in an individual or to be informed about population before it arises. population, thereby facilitating Feeling It includes health promotion potential harms of each its cure, reducing or specific intervention due and specific protections (for preventing its spreading, to overdiagnosis and example, immunisation) and/or long-term effects (for overtreatment example, screening and early diagnosis) Patients' P3 P3 and P4 are the realm of perspective personalised clinical care. An action taken to An action taken Clinicians' art of relieving identify a patient or population to reduce the chronic effect patients' suffering and/or at risk of overmedicalisation, of a health problem in an reassuring their wellbeing to protect them from invasive individual or population by Feeling medical interventions, and to minimising the functional suggest interventions that are impairment of an acute or ethically acceptable chronic health problem (for example, prevent the consequences of diabetes), including rehabilitation

mortality.¹² Therefore, distinction between clinical and preventive activities is essential to circumvent the excesses of biomedicine. In prevention, the bioethical principle of non-maleficence should prevail as we are dealing with healthy or asymptomatic people, and the oath First Do No Harm should guide GPs' practice. 13 P4 implies an attitudinal shift of self-containment, caution, and reassurance of patients' integrity when dealing with preventive interventions. It requires a critical appraisal of current biomedical knowledge, inviting GPs to be more autonomous, proactive, and to follow protocol less slavishly.

CONCLUSION

Quaternary prevention is a well-devised concept that embeds three main points: risk of overmedicalisation, patients' protection, and ethical alternatives. This definition is more comprehensive than the recent initiative to redefine it in terms of the harm/benefit ratio.³ P4 provides a platform that may help GPs to realise the vital task of demedicalising by sorting out what can or should be demedicalised in clinical care.

To realise this task, as paradoxically envisioned by Illich, P4 needs support and further research to be globally disseminated in primary care.

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