

Quaternary prevention: the basis for its operationalization in the doctor-patient relationship

Prevenção quaternária: as bases para sua operacionalização na relação médico-paciente

Prevención cuaternaria: las bases para su operacionalización en la relación médico-paciente

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Abstract

The aim of this paper is to present the clinical and conceptual basis to operationalize quaternary prevention in primary healthcare services and teaching contexts and/or residency programmes in family medicine. The enhanced Calgary-Cambridge model of medical consultation is used as an organizational matrix to insert quaternary prevention in two moments: diagnosis and care plan. To strengthen quaternary prevention in these two consultation moments, the discussion explores: a) conceptual disease axes (pathological, physiopathological, semiological and epidemiological); b) illness explanatory approaches (ontological and dynamic); and c) suffering in relation to time (present and future), differentiating present lived suffering from concerns about future health. We conclude that despite limitations of the proposed framework, formalising quaternary prevention in the consultation process can help reduce the diagnostic and prescribing automatism, which has medicalized many illness expressions in the routines of primary health care services.

Resumo

O objetivo deste artigo é apresentar as bases clínicas e conceituais para se operacionalizar a prevenção quaternária na prática dos serviços de Atenção Primária à Saúde e no ambiente de ensino e/ou programa de residência em medicina de família. Utilizou-se o modelo aprimorado de Calgary-Cambridge como substrato organizativo da consulta médica, de modo a inserir a prevenção quaternária em dois momentos: diagnóstico e plano de cuidados. Para fortalecer a prevenção quaternária nesses dois momentos da consulta discute-se: a) os eixos conceituais das doenças (anatomopatológico, fisiopatológico, semiológico e epidemiológico); b) as abordagens explicativas do fenômeno do adoecimento (ontológica e dinâmica); e c) o sofrimento em relação ao tempo (presente e futuro), diferenciando o sofrimento vivenciado no presente das preocupações com a saúde futura. Conclui-se que apesar das limitações da proposta, a formalização da prevenção quaternária no processo de consulta pode auxiliar a reduzir o automatismo diagnóstico e prescritivo que muito tem medicalizado as expressões do adoecer no cotidiano dos serviços da atenção primária à saúde.

Resumen

El objetivo de este artículo es presentar las bases clínicas y conceptuales para operacionalizar la prevención cuaternaria en la práctica de los servicios de Atención Primaria de Salud y contextos de educación y/o programas de residencia en medicina familiar. Se utilizó el modelo mejorado de Calgary-Cambridge como sustrato organizativo de la consulta médica para insertar la prevención cuaternaria en dos etapas: diagnóstico y plan de atención a la salud. Para reforzar la prevención cuaternaria en estos dos momentos de la consulta la discusión explora: a) los ejes conceptuales de las enfermedades (anatomopatológico, fisiopatológico, semiológico y epidemiológico); b) los enfoques explicativos de las enfermedades (ontológico y dinámico); y c) el sufrimiento con respecto al tiempo (presente y futuro), para diferenciar el sufrimiento vivido en el presente de las preocupaciones con la salud futura. Se concluye que a pesar de las limitaciones de la propuesta, la formalización de la prevención cuaternaria en el proceso de la consulta puede ayudar a reducir el automatismo diagnóstico y prescritivo que mucho tiene medicalizado las expresiones del padecimiento en el cotidiano de los servicios de atención primaria de salud.

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Introduction

The theme of overdiagnosis and overtreatment has gained strength in English speaking countries, which usually lead the discussion and research on this medical field.¹ This context has blurred the theme of quaternary prevention, which has been undervalued even among family physicians. For instance, a quick search on PubMed using Boolean descriptors 'Quaternary prevention' and 'Overdiagnosis' found respectively 25 and 1630 articles. Despite quaternary prevention being officially defined more than a decade ago,² its development in the scientific-academic community shows a slow pace.

One possible explanation is that researches on overdiagnosis and overtreatment dialogue more directly with clinical trials and epidemiological studies that attempt to measure these phenomena.³ Another explanation could be the advent of evidence-based medicine (EBM), which has lowered clinician's authority (clinician experts' opinion), empowering researchers and those experts in analysing scientific articles, specially randomized clinical trials outcomes or metaanalysis.^{4,5} Both contexts reinforce a population-based approach as a source of sound evidence and best practice. Thus, quaternary prevention, which has a patient-centred approach by its own definition,² might have been affected by this hierarchical evidence based framework.

However, this hierarchy of evidence has configured itself more as a new quest for power over biomedical knowledge than a new scientific rigour approach to what is produced in biomedicine.⁶ This issue was recently brought to light in an article entitled '*Evidence-based Medicine: a movement in crisis*',⁷ published in the BMJ, highlighting the vested interests of pharmaceutical industries. Several pharmaceutical company biases can be found in clinical trials and their metaanalysis, such as manipulation drugs' dose-responses in both study arms (intervention and control); selective recruitment of patients most likely to respond to interventions; adoption of surrogate outcomes; and finally, not publishing negative research results.⁷ All these factors overestimate the benefits of biomedical interventions, making it difficult to replicate their results to the general population. In this context, quaternary prevention can gain prominence since it rescues clinicians' authority, who have now greater responsibility in the face of the uncertainty produced by the complex phenomenon of EBM.

This article aims to contribute to the operationalization of quaternary prevention - not in terms of its definition⁸ - but on how it can be integrated into consultation models, which can be used to improve doctor-patient relationships. Initially, it highlights the importance of doctor-patient relationship for defining family medicine. Then, it presents the enhanced Calgary-Cambridge medical consultation model as an organizational matrix to insert quaternary prevention in its second stage, comprising two moments: diagnosis and care plan. To strengthen quaternary prevention in these two consultation moments, the discussion explores: a) conceptual disease axes (pathological, physiopathological, semiological and epidemiological); b) illness explanatory approaches (ontological and dynamic); and c) suffering in relation to time (present and future) differentiating present lived suffering from concerns about future health. Within this proposed analysis, quaternary prevention entails the careful use of words, and the option for a dynamic explanatory model of health-disease phenomenon.

Doctor-patient relationship

The doctor-patient relationship is the cornerstone of family physician practices, one of the pillars that define family medicine as a medical specialty.⁹ By working with many undifferentiated cases, centred on the whole person and community, family medicine is the specialty that most supports and values doctor-patient relationships. It seeks for resources in other areas of knowledge such as psychology, sociology and anthropology to leverage this relationship in order to better comprehend health-disease diad.⁹ As McWhinney^{9,10} has stated, family physicians, besides understanding the physical nature of diseases, should seek to understand the patients and what meanings an illness bring to patients and their families.

This need to strengthen and improve the doctor-patient relationship has led to various models of consultation that were adopted across different medical schools at different times. For instance, in the 1970s, the Royal College of General Practitioners (RCGP), applied Balint's biographical model^{11,12} and Engel's biopsychosocial model¹³ in order to define the practice of the family doctors as patient-centred and concerned with patients' total illness experience.¹⁴

Clinical method: Calgary-Cambridge enhanced model

In Brazil, with the influence of Canadian family physicians, the patient-centred clinical method (PCCM), has largely been adopted both for undergraduate and postgraduate medical educational programmes. The PCCM is organised into six components, the first three in sequence: (1) Exploring disease and the disease experience; (2) Understanding illness process and the whole person; and (3) Negotiating a common management plan. These components are permeated by the last three ones: (4) Incorporating disease prevention and health promotion; (5) Strengthening doctor-patient relationship; and (6) Being realist.¹⁵

Nevertheless, this paper uses the enhanced Calgary-Cambridge consultation model,¹⁶ since, different from the PCCM, the Calgary-Cambridge explicitly integrates two important points: content (traditional clinical method) and process (ability to communicate effectively). Moreover, the format presented is operationally designed for a 10-minute consultation, the standard general practitioners (GPs) consultations time in the UK. Two axes organise the Calgary-Cambridge method. The first refers to *data gathering* and the second to *clinical care plan*.

- **Data gathering:** the patients are encouraged to talk about their problems or main complaints, as well as the context in which they occur, i.e. the biopsychosocial and/or biographical components. At the end of this first stage - usually when patients have expressed their ideas, concerns and expectations - is when the doctor does some closed questions exploring warning signs (Red Flags), as well as performing directed physical examination to close the data gathering stage (Subjective and Objective steps of SOAP acrostic).
- **Clinical care plan:** now, the doctor should share with the patient his/her impression about the problem and, together, they both can develop a care plan. It is in this second phase that the information gathered in the first stage, in regard to patients' psychosocial and occupational aspects, will be used to contextualize and individualize the care plan (Assessment and Plan steps of SOAP acrostic).

Thus, the method suggests exhausting the first phase and then, moving to the second (the same as recommended in the SOAP¹⁷ sequence in each clinical care). Therefore, the physician should try to maintain a unidirectional flow and not go back and forth crossing between these two moments of consultation.

Consultation model and quaternary prevention

In the proposed consultation model, the preventive and/or therapeutic activity is located mainly in the second step (clinical management) of Calgary-Cambridge model - or in component three (including components four and five) of the PCCM. Within this step there are two important moments: the first refers to the interpretation(s) of patients' problem(s) that have brought the patients to the consultation (diagnosis stage) and its socialization with them; the second refers to the formulation and sharing of a common care plan or management of patients' problem(s). Figure 1 schematically illustrates the Calgary-Cambridge consultation model and the inclusion of quaternary prevention in the second step of this model.

Quaternary prevention and the basis for its practice

The inclusion of quaternary prevention in the second stage of the Calgary-Cambridge model involves two moments in the consultation. The first is the diagnosis/explanation moment that requires an organization strategy of illness phenomena and their corresponding interpretative approaches; the second refers to a care plan and/or clinical management moment leading to a lower medicalization of disease processes. These two moments are discussed below.

First moment: the interpretation of patients' problem(s)

The practice of family doctors operates with the greatest degree of uncertainty, since these professionals are exposed to a spectrum of individuals and situations that commonly present themselves as undifferentiated cases.⁹ Rose explains this phenomenon statistically as a 'continuum of risk and severity',¹⁹ since nature expresses itself in a gradient that ranges from asymptomatic, oligo-symptomatic, symptomatic to frankly manifested. For example, hepatitis "A" in its fulminant form represents less than 1% in general population, the icteric form 15-20%, and the remaining occurring as oligo-symptomatic (i.e. nausea, nonspecific abdominal pain, vague febrile states, and so on) and asymptomatic.

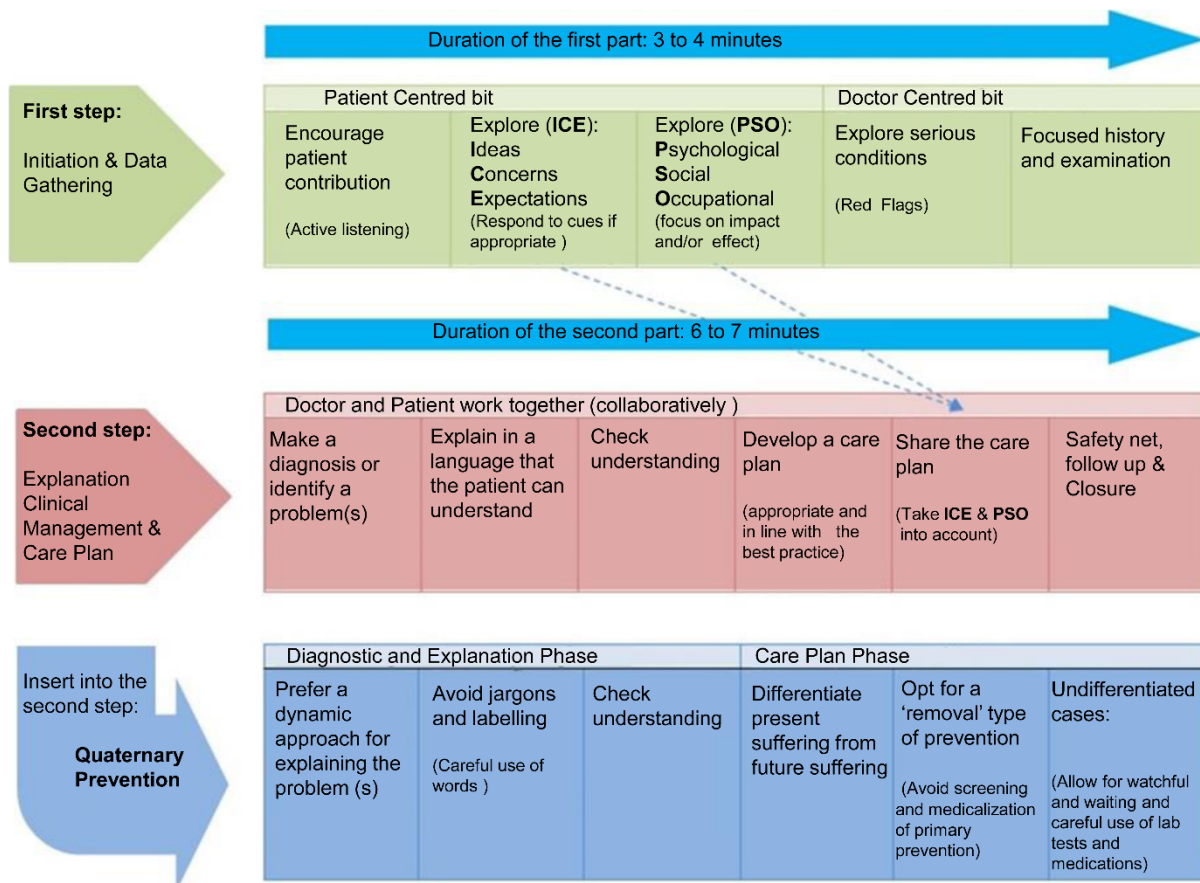


Figure 1. Enhanced Calgary-Cambridge consultation Model¹⁶ as a matrix for inserting quaternary prevention in medical consultation. Source: Durham and Tees-Valley GP Training Programme, England.¹⁸

Schematically, it is possible to use the analytical outline proposed by Camargo Jr²⁰ organised in four ‘diseases’ constituent axes: the anatomopathological; pathophysiological, semiological and epidemiological. The four axes exist in various degrees of disease explanation models conceptualized by medical knowledge, but it possible to make some operational considerations following Rose’s idea of continuum of risk and severity: from the more defined and crystallized to the more undefined, uncertain and volatile.

This analytical outline can help primary health care professionals in interpreting patient’s problems (the diagnostic phase), as well as can assist in developing a care plan. Thus, the more severe the symptoms or the more characteristic, localized and physical the expressions that define a condition, the more it is possible to understand illness through an anatomopathological approach, focusing on the ‘material injury’ and the biological body. Conversely, the more oligo-symptomatic, undifferentiated, volatile or without an identifiable ‘material lesion’ (or when the focus of consultation is concerned about the future health - prevention), the less there is a need for anatomopathological approach, which tends to cause more damage or medicalise the patients’ illness experience. Thus, in these cases, the interpretation should be more crafted, remaining closer to the pathophysiological and/or semiological axes - and in the case of prevention, the epidemiological axis (Table 1).

The classification in Table 1, besides categorising complex phenomena that present themselves as complaints and problems to family physicians, it also clarifies some of the elements commonly used as conceptual framework by health professionals to formulate their explanatory models about patient’s problems. In this regard, Table 2 summarises two conceptual approaches to illness that are underpinned by those elements discussed in Table 1, which usually are applied to elaborate on sickness processes. The **ontological approach** is associated with the anatomopathological axis (but tends to be applied widely), whereas the **dynamic approach** is more suitable for all axes, but especially to the pathophysiological, semiological and epidemiological axes.

Table 1. Disease constitutive axes.^{20,21}

Axes	Commentary	Examples
Anatomopathological (Imagetic-molecular-genetic)	This is the oldest axis of disease construction born from clinical anatomy, and is the most valued. It derives its power and legitimacy from the objectivity of lesions, images and objective specialized reports of material structures that describe and define the disease, and that are supposedly the basis of its manifestation.	The well established and obvious clinical conditions in medicine such as tuberculosis, renal colic, myocardial infarction, most cancers, and so on.
Pathophysiological	It proposes causal relationships (and theoretical models) involving material elements (usually microscopic, molecular, cellular and physicochemical) grouped into tissues, organs and systems, usually reductionist and with little interpretive power for most diseases and illnesses brought by patients in PHC.	Asthma, allergies, gastroesophageal reflux and so on, as well as some chronic diseases such as diabetes, retocolites, rheumatic and immunological diseases.
Semiological	The disease processes are characterised by constellations of signs and symptoms brought by patients to the consultation, and therefore the most empirically valued by them. These symptoms usually are little or not at all explained (physiologically) by the available theories. Nonetheless, they tend to be treated as a disease, whose treatments are characterised by symptoms' suppression or relief.	Most disorders or psychological distress (such as anxiety and depression), unspecified headaches; nonspecific low back pain, fibromyalgia, abdominal pain, irritable bowel syndrome and various other events that have been designated as medically unexplained physical symptoms (MUPS)
Epidemiological	Refers to statistical processes that map the population morbidity and mortality and seek to establish causal associations in order to plan preventive and/or public health actions, inducing preventive treatments (risk-based prevention).	It refers to risk factors or profiles, mainly associated to chronic noncommunicable diseases such as smoking, obesity, sedentary lifestyle, stress, dietary deviations, cholesterol, etc.

Source: based on Camargo Jr.^{20,21}

Table 2. Interpretative approaches of illnesses: ontological and dynamic.^{22,23}

Ontological Approach	Dynamic Approach
Conceives diseases as 'entities' exterior to people, that invade them locating themselves in body parts; or are defects (lesions) inside the body, whose meanings vary according to history and cultures. In modern medicine, they are related to bacteria, external agents, and genes lesions. The ontological conception has often been linked to a <i>medical practice that directs their efforts to the exact classification of disease processes (diagnostic definition)</i> , seeking to identify disturbed organs and lesions as sole causes and sources of symptoms.	Conceives diseases from an imbalance between the forces present in human beings, nature and society that are inside and outside the individuals. Thus, it focuses on the patient as a whole and in its environment, avoiding connecting disease disorders to particular body organs or sole causes. Addresses the situation in terms of <i>complex processes over which multiple influences are possible and co-exist</i> , considering the person as a whole unit and changeable complex whose psychological, social, and biological aspects are inseparable and inter-influencing, albeit often presented with localised symptoms.

Source: based on Albuquerque and Oliveira²², and Myers and Benson.²³

As most cases in PHC are undifferentiated and/or highly complex, the **dynamic approach** to illness assumes greater importance given its flexibility in addressing the illness phenomena, which entails lifelong changes and care processes over time. Hence, regardless the situation, as rule of thumb for practicing quaternary prevention, it is possible to state that, in general, there should be a preference over a functional and dynamic approach to illness. This approach addresses patients' problems and illnesses by valuing their illness experiences, managing a wide range of symptoms (usually not easily framed in terms of pathology) and constructing contextualised interpretations that give some meaning to the patients' experiences and contribute to therapeutic processes using time, easy access and continuity of care as allies.

In some acute cases, where the diagnosis is fast, the prognosis is known to be benign (due to the nature of situation and/or effectiveness of therapy), simplified and ontological approaches (tonsillitis or acute gastroenteritis, for example) may be appropriate. However, in the majority of undifferentiated cases seen in PHC and in many other clinical situations such as chronic rheumatic

conditions, endocrine, psychological, musculoskeletal (many of them with high levels of radiological-clinical dissociation),²⁴ relapsing cases, and in many acute cases as well, a functional and dynamic approach is much more protective. Additionally, the dynamic approach also allows for a constructive of a self-care participatory educative process for managing the situation than the ontological approach, which commonly focuses on defined pathologies and the quest for a proven accurate diagnose leading to a cascade of interventions.

Thus, it is advisable in most cases - when dealing with patients' complaints or discussing preventive measures – the use of a dynamic, physiological and processual concept of illness. This approach constitutes an instrument for the operationalization of quaternary prevention through the carefully use of language. Thus, the words used by doctors in the communication process should belong to the cultural universe of people (or patients) and need to be carefully applied so that their beliefs, anxieties and fears can be calmly accepted and processed together in order to ease the complexities and uncertainties inherent in the care process.

When including and organising the quaternary prevention activities while elaborating and socializing an interpretation about patient's complaints (diagnostic phase) health professionals should be careful with what they utter, because words can have important consequences: a) be iatrogenic through labelling and/or nocebo effects; b) make it difficult to understand the meaning of the interventions being proposed and, consequently, being detrimental to patient's participation in the care plan process (or vice versa). However, the words can also constitute a powerful therapeutic instrument for inducing the well-known 'placebo effect', since words can help to organise symbolic and affectively patient's experience, preparing him/her positively to the treatment. Unfortunately, the placebo effect is known to be undervalued in biomedicine, as highlighted by McWhinney concerning the biomedical model approach.¹⁰

Words are the greatest tools of quaternary prevention. For instance, avoiding popular terms or technical concepts reduce the chances of stigmatizing or medicalising. Often the diagnostic phase limits itself to a terminology conversion process where patients' symptoms become technical jargons: 'back pain' becomes lumbago, 'headache' becomes cephalgia, 'joint pain' becomes arthralgia, and so on. Some technical terms, which are being circulated in society may be misleading and need additional explanations. For instance, patients' should be informed that risk factors such as high cholesterol, hypertension, and obesity are not diseases. Thus, processual thinking and speaking in communication facilitate quaternary prevention, for example, communicating that the blood pressure is 'a little high' and deserves attention is better and different from using words like "hypertensive" or "hypertension", which imply a diagnosis of an incurable chronic 'disease', associated with the use of medications, lifelong dietary restrictions and laboratory check controls.

Second moment: the care plan

Regarding the development of a common therapeutic plan, Figure 1 illustrates that this moment is based on ICE (Ideas, Concerns and Expectations) and PSO (Psychological, Social and Occupational), which form the background against which a care plan is built for managing a clinical problem. For this reason, it is necessary to place suffering in relation to time, differentiating the present suffering from a potential or future suffering, and consequently optimizing quaternary prevention in a care plan through a present-future axis framework. The importance of this concept lies in its focus on the present and/or current severity suffering. This approach tends to improve the risk-benefit ratio of the medical intervention, as long as the intervention is supported by the best available evidence. Similarly, the more projected into the future the possibility of suffering, the worse the risk-benefit ratio and the higher the chances of harm by the medical intervention. Therefore, the practice of quaternary prevention requires this clarity in differentiating present illness/suffering from the probability of future disease or suffering.

In the first case (present suffering) the requirements for interpretation and therapeutic action is governed by ethical and social commitments regulating healthcare professionals that are not extensive to the second case (future suffering). The latter aims anticipatory process, an action performed on healthy people in the present with the intention of avoiding future illness, usually based on numerous predictor devices of morbimortality risk assessment (i.e. Framingham risk scores tables, clinical-decision support software, on-line self-assessment tests), in which individuals have to adjust themselves to routine odds and likely outcomes.²⁵ This abductive thinking 'moves reasoning temporally from data gathered about the past to simulations or probabilistic anticipations of the future that in turn demand action in the present'.²⁵

The abductive thinking, so promoted in recent decades, has encouraged the medicalization of risk either by introducing preventive treatment interventions into clinical practice (primary and secondary prevention) or by successive and progressive lowering of diagnostic and control targets thresholds for blood pressure, serum cholesterol, glycosylated haemoglobin, BMI etc.^{26,27}

This separation between present and future, often obscured by the general culture of medicalization and ontologization of risks (managed as diseases), should be clear to all family physicians. Hence, in regard to prevention – ‘future disease’ – one should intensify quaternary prevention action, particularly in primary prevention. Moreover, when it comes to prevention, it is useful the distinction between the ‘removal’ preventive measures and ‘additional’ preventive measures outlined by Rose,¹⁹ summarized in Table 3. In quaternary prevention it should prevail the general recommendation to avoid the ‘additional’ preventive measures, especially when it comes to primary prevention (and secondary, in the case of screening) unless it is very well justified.

Table 3. Preventive measures: ‘removal’ and ‘additional’.¹⁹

Prevention	Conceptualisation	Examples
‘removal measure’	According to Rose this measure ‘consists of removing or reducing some unnatural exposure in order to restore a state of biological normality’ (p. 148). Actions which seek to correct excesses or lacks in people’s behaviour, habits, dietary patterns or unhealthy ways of living. The ‘removal measure’ implies ‘less intervention’ indicating salutogenic actions well synthesized by the qualifying ‘less’. In practice, it means: less sedentary lifestyle, less chemicals, less smoking, less alcohol, less psychotropic, less psychoactive and chemical additives, etc. At the macro-social scale means: less violence, less hierarchy, and less inequality in wealth distribution.	Guidance, counselling and treatment (individual and collective) to smoke cessation, increase physical activity, reduce excessive alcohol intake, improve diet quality with agroecological fruits and vegetables, etc.
‘additional measure’	Rose defines this preventive measure as ‘adding some other unnatural factor in the hope of conferring protection’ (p. 148). Strange interventions to the usual ecology of organism and human beings, within which a technological solution is proposed without the corresponding changes in social determinants of health.	Intake or application of drugs, diagnostic tests, vaccines and other biological products (not habitual or autonomous use), physical or chemical hazards whose potential risk/harm ratio are significantly higher since the susceptibility before the intervention is low.

Source: based on Rose.¹⁹

In regard to the present illness, using Rose’s preventive approach, the dynamic approach, and biomedical constitutive ‘diseases’ axes summarised above, it is possible to develop interventions that are most suitable in family practice. What follows is a guideline scheme that aims to facilitate the care plan and to highlight areas where there may be excess of medical interventions. The biomedical constitutive ‘diseases’ axes presented in Table 1 are not dichotomous and their boundaries may overlap. When there is a consistent and equipotent correspondence amongst the interpretative constitutive illness axes, the medical knowledge with its ontological approach (more valued socially and scientifically) can be satisfactory in responding and explaining most of what is going on with the patient.

However, as there are a disproportion of explanatory power amongst these axes, with the predomination of semiological and pathophysiological axes - as in undifferentiated or poorly classifiable cases - the greater the need for a more dynamic approach to illness and the greater the attention to not cause harm to patients through labelling and/or unnecessary use of tests and medications. Thus, the more undifferentiated or nonspecific the signs and symptoms and/or the more functional and physiological condition, the greater the space and the need for a dynamic and craftsmanship approach to patient’s complaints, which singularize and medicalise less.

In such cases, the care plan should be based on continuity of care through watchful waiting, once the warning signs (red flags) have been ruled out and a safety net has been established, so that the patient can return in case of symptoms aggravation and/or the patient is well guided on what to do in case of changes in symptom patterns. In both diagnostic and care plan moments it is important to check with the patient if he/she understood and has agreed with what has been communicated. Figure 2 summarises the main ideas discussed in order to facilitate their applicability.

Quaternary Prevention	The need increases as it distances itself from the present suffering			
	Time	PRESENT ILLNESS		FUTURE ILLNESS
Axes	Anatomopathological	Physiopathological	Semiological	Epidemiological
Clinical feature	Well-defined	Moderately defined	Undefined/Complex	Immaterial/Risk
Approach	Ontological/Dynamic	Preferably Dynamic	Dynamic	Probabilistic Prefer 'removal' type of prevention
Care Plan Lab Tests & Treatments	Directed to the condition (i.e. tuberculosis, angina pectoris, COPD)	According to the degree of impairment and/or severity of symptoms (i.e. asthma: mild, moderate and severe)	Rule out red flags Avoid excess of symptomatic and wait disease progression (watchful waiting)	Discourage check-ups and/or screening (ex: PSA, mammogram <40 years, etc)

Figure 2. Quaternary Prevention: summary of guidelines for its operationalization in the practice of family medicine.

A particular cluster of health conditions, which is relevant and highly prevalent in PHC deserves a careful attention when applying Figure 2 scheme: the psychological suffering. Despite its subjective nature, the trend is to prioritise an ontological explanatory approach to the detriment of a more dynamic and contextualised explanatory approach. For instance, the prevailing understanding in depression is that it is caused by a lack of serotonin and that in schizophrenia there is a lack of dopamine, and consequently, making analogies with diabetes and the lack of insulin, suggesting that treatment with antidepressants only seeks to restore what is missing in the brain. However, clinicians should not forget that psychotropic drugs have a wide range of effects throughout the body, many of which are harmful, and thus this type of analogy to a 'chemical hormone-like replacement' must be strongly avoided. In fact, there is no scientific confirmation of this hypothesis, since little is known about the interactions between psychosocial conditions and biochemical processes (receptors and neural pathways) related to mental disorders as stated by Gotzsche:²⁸

'The truth is just the opposite. There is no chemical imbalance to begin with, but when treating mental illness with drugs, we create a chemical imbalance, an artificial condition that the brain tries to counteract. This means that you get worse when you try to stop the medication. An alcoholic also gets worse when there is no more alcohol, but this does not mean that he lacked alcohol in the brain when he started drinking [...] The vast majority of doctors harm their patients further by telling them that the withdrawal symptoms mean that they are still sick and still need the medication.'

Therefore, the mental suffering must be understood as complex symptomatic case (semiological) and its ontological construct into a 'disorder' is as fragile as medicalising (see criticism of the DSM-V). Thus, health professionals should make an interpretive effort (crafting effort) in order to promote a personalised care. In other words, health professionals should give preference to a dynamic approach when interpreting patients' psychological distress (i.e. formulating a diagnosis).

This approach has implications for the next stage of the care plan, because it tends to restrict the use of medication since mental symptoms are explained in terms of processes and not labelled as diseases. The use of symptomatic chemicals, especially psychotropic drugs, that interfere with people's consciousness and self-perception, should be judiciously prescribed.²⁸ Regarding symptoms - including the psychological ones - they are often the only indicative of an unknown underlying process, and their sedation may result in losing the contact with them and potentially leading to chronify the condition.²⁹ In the case of psychotropic drugs, this implies a risk of behaviour manipulation and patient's alienation.

Conclusion

The purpose of outlining a consultation process organised in two key moments (diagnosis and treatment plan) aims to clarify and operationalize the practice of quaternary prevention in the doctor-patient relationship. Certainly, the suggested structure is imperfect due to the complex nature of PHC settings and the inherent limitations of consultation models. However, it offers a conceptual framework for operationally discussing quaternary prevention from doctor-patient relationship perspective, which is relevant for both service practices and teaching settings such as family and community medicine residency programmes.

Quaternary prevention entails the strengthening and reconstruction of family physicians critical and epistemological reasoning, capabilities which are in frank decline as a result of recent changes in medicine increasingly regulated through protocols. This has induced a standardization and generalization of interpretations and treatments,^{30,31} assuming an homogeneity of patients, whose personal and social-psychological-existential uniqueness demand precisely the opposite direction, a tailored interpretation and personalised care plan. Therefore, quaternary prevention induces in health professionals the attitude of maintaining a close continued and personalised care which values patients' experiences, protecting them from the deviations induced by therapeutic eagerness and diagnostic automatism.

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