

## Quaternary prevention: how to do, how to teach

Prevención cuaternaria: como hacer, como enseñar

*Prevenção quaternária: como fazer, como ensinar*

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### Abstract

Quaternary prevention or P4 is defined as any action taken to diminish the effects of unnecessary interventions generated when people interact with a health system. Methodology. The general objective was to develop a strategy to promote and spread P4 in Iberoamerica; to fulfill this goal a literature research was carried out, on the concepts related to P4; an exploratory survey was applied to inquire about the knowledge of the participates in the Summit and Congress, regarding P4 Results. There multiple literature sources that define the terms related to P4, which facilitated its delimitation. Regarding the survey, 69% knew about P4 and more that 50% declared that they where informed about the concepts related to P4; 92% considered that P4 is not only limited to family medicine; 15% assured that after the VI Summit publication regarding P4 where published in their countries; less than 20% stated that politicians knew about P4; 27% affirmed that family medicine doctors educate their patients about P4 Conclusions. It is recommended to expand the educational campaigns about P4; facilitate the access to information about P4 for professionals in the health field; include P4 in the academic programs of health professional for both graduate and post-graduate students; create alliances with political entities of each country to include P4 in public health policies.

**Keywords:** Quaternary Prevention; Teaching; Training; Overdiagnosis; Overmedication; Overtreatment; Family Medicine

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## Resumen

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La prevención cuaternaria o P4 se define como las acciones que disminuyen los efectos de las intervenciones innecesarias, generadas por el contacto de las personas con los sistemas de salud. Se planteó como objetivo general desarrollar una estrategia para promover y difundir P4 en Iberoamérica; para cumplir dicha meta se realizó una investigación bibliográfica sobre los conceptos relacionados con P4; se aplicó una encuesta exploratoria para indagar sobre el conocimiento que tenían los participantes en la Cumbre y el Congreso respecto a P4. Existe múltiple literatura que define los términos relacionados con P4, lo que facilita su delimitación. Respecto a la encuesta, de las 309 personas que contestaron; 34% tenían entre 36 y 45 años; 88% eran profesionales en medicina; 69% conocía sobre P4 y más del 50% afirmó estar informado sobre los conceptos relacionados a P4; 92% consideró que P4 no es exclusiva de medicina familiar; 15% aseguró que después de la VI Cumbre se hicieron publicaciones sobre P4 en sus países; menos del 20% consideró que los políticos conocen sobre P4; 27% afirmó que los médicos de familia educan a los pacientes sobre P4. Se recomienda ampliar las campañas de educación sobre P4; facilitar el acceso a la información sobre P4 para profesionales del campo de la salud; incluir P4 en los programas académicos de pregrado y postgrado de las profesiones de la salud; crear alianzas con las entidades políticas de cada país para incluir P4 en políticas públicas.

**Palabras clave:** Prevención Cuaternaria; Enseñanza; Formación; Sobrediagnóstico; Sobremedicalización; Sobretratamiento; Medicina Familiar

## Resumo

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A prevenção quaternária ou P4 é definida como ações que reduzem os efeitos de intervenções desnecessárias, geradas pelo contato das pessoas com os sistemas de saúde. O objetivo geral foi desenvolver uma estratégia para promover e disseminar o P4 na Ibero-América; Para atingir este objetivo, foi realizada uma pesquisa bibliográfica sobre os conceitos relacionados a P4; Uma pesquisa exploratória foi aplicada para indagar sobre o conhecimento que os participantes da Cúpula e do Congresso tinham sobre P4. Há uma diversidade de literatura que define os termos relacionados a P4, o que facilita sua delimitação. Em relação à pesquisa, das 309 pessoas que responderam; 34% tinham entre 36 e 45 anos; 88% eram profissionais de medicina; 69% conheciam o P4 e mais de 50% disseram que estavam informados sobre os conceitos relacionados ao P4; 92% consideraram que P4 não é exclusivo de medicina de família; 15% disseram que, após a VI Cúpula, foram feitas publicações sobre P4 em seus países; menos de 20% considerou que os políticos conhecem o P4; 27% disseram que os médicos de família educam os pacientes sobre o P4. Recomenda-se expandir as campanhas de educação sobre P4; facilitar o acesso à informação sobre P4 para profissionais da área da saúde; incluir P4 nos programas acadêmicos de graduação e pós-graduação das profissões de saúde; criar parcerias com as entidades políticas de cada país para incluir P4 nas políticas públicas.

**Palavras-chave:** Prevenção Quaternária; Ensino; Formação; Sobrediagnóstico; Sobremedicalização; Sobretratamento; Medicina Familiar

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## Introduction

Quaternary prevention or P4 is understood as “the set of actions that are carried out to avoid or mitigate the consequences of unnecessary or excessive interventions”<sup>1</sup> derived from the contact of people with health systems.

This conceptualization proposes a novel strategy in which the points of view of the doctor and the patient are combined, in order to conceive prevention based on this bond.<sup>2</sup> In addition, it allows the family doctor to have one more field of action, since it is the fourth form of prevention of the disease.<sup>3</sup>

However, it is necessary to emphasize that Quaternary Prevention is considered a transversal strategy, which goes beyond prevention, since it pretends to be inclusive, non-reductionist, integral and integrated, taking into account the human, social and political spheres, accepting the uncertainty within their work, as well as denounce and prevent the naturalization or normalization of situations such as hunger, exclusion, inequality, manipulation, violence, racism and exploitation.

Although this term is not known or dominated by a large majority of health professionals, in recent years there has been a growing and important rise of this concept and it has spread throughout the world.<sup>4</sup>

On the other hand, since the work of the doctor is framed in the disease, but is also present in health, a medicalization of life is inevitably produced, with the consequent increase in the possibility of excessive interventions and procedures, a situation that complicates the maintenance of a balance between benefits and damages; therefore, P4 must be present in the daily work of health personnel,<sup>5</sup> for which valid scientific evidence is required, which supports the approaches proposed by quaternary prevention.

Based on the above and as part of the work for the VII Ibero-American Summit of Family and Community Medicine, an analysis was carried out based on the most recent literature on P4 and the proposals arising from the 21<sup>st</sup> WONCA World Conference of Family Physicians, in Rio de Janeiro (November 2016) and the Sixth Ibero-American Summit of Family and Community Medicine, in San José, Costa Rica (April, 2016).

During this Summit, one of the axes was established as “Quaternary Prevention: Medical Ethics, Evaluation and Efficiency in Health Systems” for which the following actions were proposed:

1. Disseminate the concept of Quaternary Prevention as an essential approach in medical practice and management of the current health services.
2. Contribute to the implementation of the concept of Quaternary Prevention in the formal education of the health professions, in the undergraduate and postgraduate programs, in the continuous training, in the investigation, elaborating a document of recommendations that contributes to the discussion of the concept with the different organizations that define education policies.
3. Promote the non-medicalization of the events of the stages of life, through strategies developed together with the health teams and the community.
4. Encourage health interventions aimed at the population based on the best scientific evidence and ethically acceptable for the local context and focused on people.

In order to continue these actions and contribute to the dissemination of Quaternary Prevention, this document, which aims to be the starting point and reference to guide the work of the team during the Seventh Summit, was prepared.

## **General objective**

Contribute to the development of a strategy to consolidate quaternary prevention in Iberoamerica through clear and feasible proposals, to generate a positive and tangible impact on decision makers, users of the health system and the general population”.

## **Methodology**

In order to have an input that would serve the quaternary prevention group of the Ibero-American Family Medicine Summit, a qualitative and semi-quantitative cross-sectional research was carried out. In order to obtain information that would allow to assess the degree of knowledge of the P4 and its developments in the countries of Latin America, a questionnaire was elaborated with questions according

to the conceptualization of the quaternary prevention and the problems that it addresses, which were obtained with a bibliographic review on the concepts related to quaternary prevention, such as prevention, overdiagnosis, recommendations 'Do Not Do'. On the other hand, in order to assess the proposals raised and give continuity to the work done in the VI Ibero-American Summit of Family Medicine and the 21<sup>st</sup> World Conference of Family Physicians. The questionnaire was prepared by three experts on the subject and participants of the P4 working group. Internal validation was carried out through the application to the coordinators of each country and members of the board of directors of CIMF. The observations given by these people were collected to improve the questionnaire.

This pilot questionnaire was applied to the coordinators from each country, with the following questions: In your country, were articles about P4 developed after the Summit in Costa Rica?; Have P4 been incorporated into education at the Undergraduate or Postgraduate level?; Have P4 been incorporated at the Public Policy level?; Are the doctors educated about P4 with patients?; Do you already have something about P4 incorporated within your curriculum?; If your answer to the previous question is Yes, please send us the curriculum.

Subsequently, through the MonkeySurvey platform, a survey was drawn up including the following points: country of residence; sex; age group; profession; years of practice in the profession; mark the concepts you know: quaternary prevention, overdiagnosis, overmedicalization, Do Not Do, Choosing wisely; Do you consider that quaternary prevention is exclusively for family doctors? Are there publications on quaternary prevention in your country? Do politicians in your country know about quaternary prevention? After the Summit, held in April 2016 in Costa Rica, have results been developed?

The platform allowed to obtain the statistics of the answers of categorical variables. The researchers tabulated the answer options in Excel to graph the results. In the same way, they collected the qualitative observations to the answers that allowed to extend it. These answers were analyzed by the principal investigators, identifying key words and thematic guides, according to the theoretical elements of P4. In this way, we defined trend categories.

The analysis of the instrument was disseminated among the other researchers to consolidate the results.

The differences between the researchers were discussed in virtual meetings with the presence of most of them.

## Conceptual bases and related terms

The **research**, understood as those systematic, critical and empirical processes to analyze a specific problem or situation, allows the creation of knowledge and solution of difficulties<sup>6</sup> presented in daily clinical practice.

Over time, the concept of **prevention**, defined as the action to avoid the occurrence or development of a health problem or its complications, has evolved from primordial to quaternary prevention, although

these subdivisions overlap one another, according to the evolution of a disease.<sup>2</sup> In all cases, it is extremely important the explicit recommendation of health personnel, but also the perception by the patient of his own health and commitment that is willing to take to improve the situation have an enormous influence.<sup>7,8</sup>

Besides, **primordial prevention** is understood as the activities that foresee the incursion of risk factors in the population, through interventions to prevent the appearance of said factors.<sup>2</sup> In regard to the first three levels of prevention, they are defined as follows:<sup>7,9</sup>

- a. **Primary prevention:** measures that seek to prevent the appearance of a disease or health problem, by avoiding or eliminating its cause, in an individual or population, before it manifests; it implies health promotion and specific protection. That is, by controlling the causal agents or risk factors, it focuses on reducing the incidence of the disease.
- b. **Secondary Prevention:** actions aimed at detecting a condition at an early stage, in an individual or population, that is, when the person is asymptomatic, in order to facilitate the cure or reduce or prevent the advance or long-term effects. The actions are applied to apparently healthy people, through regular medical check-ups or screening tests, so it is intended to achieve a premature diagnosis through timely catchment, allowing appropriate treatment and control of the condition. In this case, it is aimed to reduce the prevalence of the disease.
- c. **Tertiary Prevention:** activities aimed at reducing the chronic effects of a health problem, in an individual or population, by reducing the functional disability caused by the condition, whether acute or chronic. Through work at this level, the recovery of the patient is attempted once the disease is diagnosed, which is achieved with the correct diagnosis and timely treatment; In addition, physical, psychological and social rehabilitation should be applied when there is disability or sequelae. It covers the control, care and follow-up of the patient.

Likewise, **Quaternary Prevention** is understood as those actions carried out to identify a patient or a population at risk of overmedicalization, protect them from invasive medical interventions and suggest ethical and scientifically acceptable procedures and care.<sup>10</sup>

Regarding the term **medicalization**, it is defined as the process of converting situations that have always been normal into pathological conditions and trying to solve, through medicine, situations that are not medical, but social, professional or derived from interpersonal relationships;<sup>5,11,12</sup> this situation takes the problems of the human being out of context, focusing on the individual rather than on the social environment.<sup>13</sup> Three levels of medicalization<sup>14</sup> have been described: **conceptual**, which refers to the use of the vocabulary or the biomedical model to refer to a specific problem; **institutional**, through which institutions adopt a biomedical approach, which leads health professionals to become a sort of goalkeeper to limit the benefits that patients have; and **interactional**, in which doctors define or diagnose a problem as a disease, in addition to providing medical treatment.

In addition, in recent years it has promoted a more effective use of available resources in health systems around the world, which has led to the emergence of different projects that would meet that objective.<sup>15</sup>

On the one hand, during the preparation of its guidelines in 2007, the National Institute for Health and Care Excellence found that some interventions in daily medical practice were counterproductive, because they lacked scientific studies to support their application, there was uncertainty regarding the benefits in contrast to the risks or do not favor the clinical evolution of the patient, for which reason it published a booklet called *NICE “do not do” recommendations*,<sup>15,16</sup> whose translation into Spanish could be referred to as the “no hacer” recommendations.

On the other hand, the model Choose with Prudence or **Choosing Wisely** (in Spanish, *Elegir Sabiamente*), began to be formed in 2012, by which multiple American societies asked their members to identify procedures or tests, commonly used in their field, whose need should be questioned and discussed.<sup>17</sup>

Likewise, during 2013, in Spain, the “**Recommendations Do Not Do**” approach was suggested, promulgated by the Ministry of Health, Social Services and Equality of that country, in order to reduce unnecessary interventions, understood as “those that have not demonstrated efficacy, have little or doubtful effectiveness or are not cost-effective”.<sup>15</sup>

The concept of **overdiagnosis** involves making diagnoses with little impact on the improvement in the quality of life or life expectancy of people, which can even produce adverse events; it includes the creation of diagnoses through screening tests, the marketing of diseases and the approach of risk factors such as diseases that an otherwise asymptomatic person receives a diagnosis that does not reflect a true disease and, therefore, does not involve a treatment that avoids a health problem or death.<sup>18-20</sup>

Below, the findings of the survey are detailed: from the 309 people who answered the form, 78% (242) completed it in its entirety. The majority of respondents were located in the age group of 36 to 45 years (34%), the distribution by age group of the respondents is summarized in Table 1; 88% worked as medical professionals, while 7% were students; 25% had 20 or more years of practice in the profession and 24% between 5 and 10 years. 92% considered that Quaternary Prevention is not exclusive to Family Medicine.

**Table 1.** Age group to which the respondents belonged.

Answer options	N	%
18 to 25 years	15	4.89
26 to 35 years	84	27.36
36 to 45 years	104	33.88
46 to 55 years	61	19.87
56 to 65 years	42	13.68
66 or more	1	0.33
Total	307	100

Among the respondents, professionals from different fields of health participated, which is shown in Table 2.

Figure 1 summarizes the findings about the knowledge that participants had regarding the concepts related to P4.

On the other hand, 25% said that in the country of residence there are publications on P4, while 15% said that after the VI Summit, publications on that concept were published.

**Table 2.** Profession of the respondents.

Answer options	N	%
Medicine	266	87.79
Nursing	5	1.65
Psychology	4	1.32
Social Work	5	1.65
Nutrition	2	0.66
Odontology	0	0
Student	21	6.93
Total	303	100

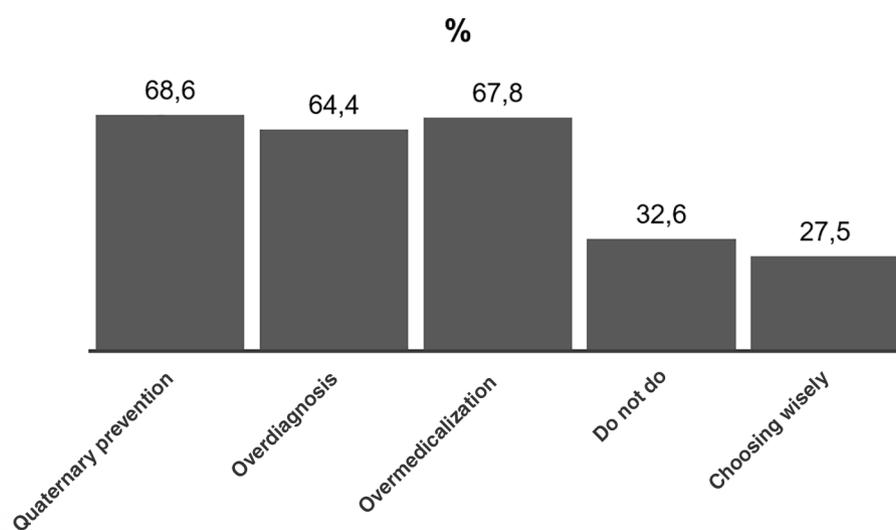
**Figure 1.** Concepts about which the respondents were aware (%).

Table 3 shows the findings about the knowledge of politicians regarding P4 in each country. Figure 2 shows the opinions of the respondents regarding the incorporation of P4 into public policies.

**Table 3.** Knowledge of politicians about Quaternary Prevention.

Answer options	N	%
Yes	19	7.88
No	128	53.11
I don't know	94	39
Total	241	100

Regarding the academic area, for 25% of the people who answered the survey, the topic of Quaternary Prevention is incorporated in the undergraduate studies; while in the postgraduate degree this figure reaches 43%. For 27% of respondents, family doctors educate patients about Quaternary Prevention.

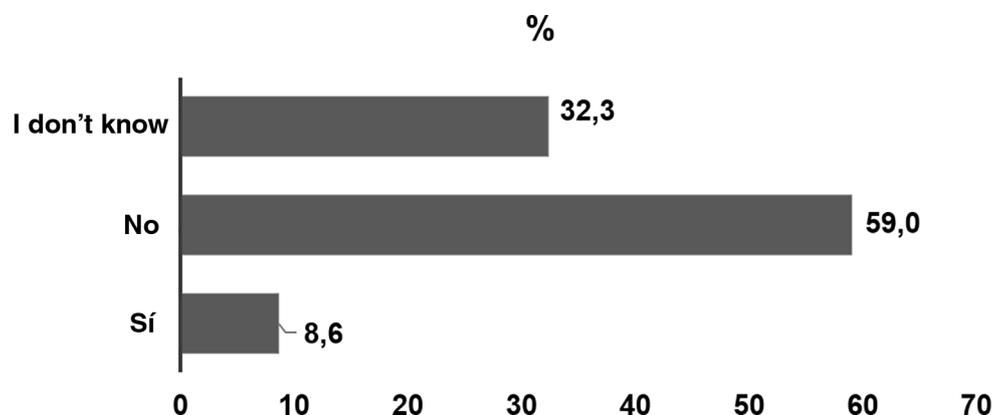


Figure 2. For two years, was P4 incorporated in public policies?

## General lines of action

In accordance with the specific objectives, the results of the survey on the dissemination of Quaternary Prevention, the recommendations generated in the VI Summit, the so-called Rio Manifesto and the preparation process for the work during the VII Summit, are proposed below:

- I. General Recommendations of the Working Group on Quaternary Prevention VII CIMF Summit.
- II. Specific Recommendations to continue and facilitate the consolidation of the concept of Quaternary Prevention in the General Population.
- III. Specific Recommendations to expand the Academic and Research Community among Family Physicians and Other Professionals in the Field of Health.
- IV. Specific Recommendations to Promulgate and Continue the Inclusion of Quaternary Prevention in the Academic Programs or Undergraduate and Postgraduate Curricula of the Health Professions.
- V. Proposal Curriculum for Teaching at the Residency Level of Family Medicine (Postgraduate Education).

## I - General Recommendations of the Working Group on Quaternary Prevention VII CIMF Summit

1. Quaternary prevention and public policy:  
Manage strategic alliances with decision makers, health personnel and citizens, in order to apply the principles of quaternary prevention and reduce overdiagnosis and overtreatment, thus contributing to quality health care.
2. Quaternary prevention and community:  
Disseminate in the health teams and in the community, through social networks, mass media, community leaders, schools and other support groups, the concept of Quaternary Prevention, in order to achieve “**empowerment for health**”
3. Quaternary Prevention and academic programs:

Include the concept of Quaternary Prevention in the undergraduate and postgraduate academic programs of the professions in the field of health, through the implementation of cross-curricular plans, stimulating research on the subject, in accordance with the proposals made in the Summits and according to the needs and regulations of each country.

## II - Specific recommendations to continue and facilitate the consolidation of the concept of Quaternary Prevention in the general population

1. Expand education campaigns on Quaternary Prevention to the general population and community organizations, so that they are strategic partners in the task of promoting and disseminating Quaternary Prevention.
  - a. It is necessary that the information addressed to the public be written in simple language, in a clear, concise and complete manner in terms of benefits and damages; In addition, you must contemplate that uncertainty is present in any daily situation.

**PREVENCIÓN CUATERNARIA**

**¿ESTAS HACIENDO PREVENCIÓN CUATERNARIA?**

CONJUNTO DE ACTIVIDADES O ACCIONES QUE EVITAN EL USO INAPROPIADO O EXCESIVO DE INTERVENCIONES PARA PROTEGER AL PACIENTE

**SOBREMEDICALIZACIÓN**

**SOBREDIAGNÓSTICO**

**¿QUÉ HACER Y QUÉ NO HACER?**

**¡Elige sabiamente!**

**CIMF**

**Wonca**

[www.nogracias.eu](http://www.nogracias.eu)  
[www.choosingwisely.org](http://www.choosingwisely.org)  
[www.preventingoverdiagnosis.net](http://www.preventingoverdiagnosis.net)  
[www.uspreventiveservicestaskforce.com](http://www.uspreventiveservicestaskforce.com)

- b. Websites that can be consulted by the general population:
  - i. Choosing wisely: <http://www.choosingwisely.org/patient-resources/>
  - ii. United States Preventive Services Task Force (USPSTF): <https://www.uspreventiveservicestaskforce.org/>
  - iii. Quaternary prevention: Blog Working Group on Quaternary Prevention, Uruguayan Society of Family and Community Medicine (SUMEFAC): <https://prevencioncuaternaria.wordpress.com/>
  - iv. Quaternary prevention: Patient safety. Medical Association of Spain. Available from: <http://www.cgcom.es/prevenci%C3%B3n-cuaternaria-seguridad-del-paciente>
  - v. Quaternary Prevention. Community Health. Available from: <https://saludcomunitaria.wordpress.com/category/prevencion-cuaternaria/>
2. Design and publish posters that promote Quaternary Prevention in health centers, doctors' offices, hospitals and others. (During the VII Summit and the Congress, participants will be able to see a poster (banner), which will serve to strengthen and relaunch the Quaternary Prevention campaign)
3. Enact that health information, aimed at the general population, avoid the use of frightening language; the use of messages that medicalize the normal stages of life and existential problems; the matching of risk factors with diseases; the imperatives for carrying out screening or diagnostic studies; multiple messages about various health problems, whose hierarchy is beyond the capacity of the general population.
4. Promote the priority use of messages on health issues that are related to the main causes of premature and avoidable death; campaigns that stimulate patients to ask, know their options, the benefits and possible adverse effects of health interventions.

### **III - Specific recommendations to enlarge the academic and research community among family physicians and other professionals of the health field**

1. Disseminate in Iberoamerica, based on the results of the work carried out during the Summit, the existing mechanisms and networks where doctors, population and politicians can find Quaternary Prevention information and education:
  - a. Family Medicine and Quaternary Prevention. Available from: <http://cimfwonca.org/grupos-de-trabajo/medicina-familiar-y-prevencion-cuaternaria/>
  - b. Quaternary Prevention: Medical Ethics, Evaluation and Efficiency in Health Systems. Pizzanelli M, Almenas M, Quirós R, Pineda C, Lamb E, Taureaux N, et al. Quaternary Prevention: Medical Ethics, Evaluation and science in Health Systems. Rev Bras Med Fam Comunidade. 2016;11(Suppl 2):75-85. Available from: [http://dx.doi.org/10.5712/rbmfc11\(0\)1388](http://dx.doi.org/10.5712/rbmfc11(0)1388)
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  - l. Less is More. How Less Health Care Can Result in Better Health. *Arch Intern Med*. 2010;170(9):749-750. doi:10.1001/archinternmed.2010.90
  - m. Right care. Available from: <http://www.thelancet.com/series/right-care>
  - n. Overdiagnosis Making People Sick in the Pursuit of Health – Dr. H. Gilber Welch
2. Establish a work team that is responsible for administering, enriching and monitoring the virtual library and the academic bulletin.

#### **IV - Specific recommendations for promulgating and continuing the inclusion of Quaternary Prevention in academic programs or curricula of undergraduate and postgraduate health professions**

1. Create an academic program or curriculum that serves as a basis for the inclusion of Quaternary Prevention in the training of students in the professions of the field of health, both undergraduate and graduate.
2. Establish a work team that provides follow-up, advice and evaluation of what is stated in the previous item.

Next, a curriculum proposal or academic program is presented, so that it can be taken as a reference model in the member countries of the Ibero-American Confederation of Family Medicine.

## **V - Proposal of curriculum for the teaching of Quaternary Prevention at the level of residences of Family Medicine (postgraduate education)**

### **Curriculum**

Quaternary Prevention is defined as the set of actions implemented to avoid medicalization and attenuate the consequences of unnecessary or excessive interventions in a patient or a population.

### **Objective**

At the academic level, the Quaternary Prevention curriculum aims for the Resident or Medical Student to obtain the knowledge of how to carry out correct practices to avoid unnecessary interventions and to reduce the iatrogenesis provoked by these interventions, as well as to avoid the overdiagnoses and overtreatments that this brings as a consequence.

### **Audience**

Residents and Medical Students.

### **Resources**

Articles, Workshops, Case Presentation, Interhospital Management and Ambulatory Care.

### **Method**

The study of the subject of Quaternary Prevention will be through a longitudinal curriculum based on articles, conferences and workshops that describe the different topics of interest of the Quaternary Prevention applying said knowledge in the medical practice and daily clinic.

The six (6) areas of general clinical competence established by the Accreditation Council for Graduate Medical Education (ACGME) will be taken into account so that the resident or student of Family Medicine obtains the necessary skills in: Patient Care, Medical Knowledge, Learning and Improvement Based on Practice, Interpersonal and Communication Skills, Professionalism and Practical Activities Based on a Health System Approach and so apply them correctly to the development of Quaternary Prevention.

### **Goals and Objectives**

1. Define the concept of Quaternary Prevention in medical practice.
2. Describe how overmedicalization affects the well-being of our patients.
3. Raise awareness about the concept of health and disease.
4. Identify areas to avoid overdiagnosis, excess preventive interventions and cancer screening tests.
5. Discuss the effectiveness and safety of vaccination.
6. Identify those pseudo diseases in which inappropriate marketing is carried out.

7. Identify medical conditions that may result in overmedicalization (**polypharmacy**, non-rational use of medications).
8. Study the factors that affect the diagnosis and treatment of diseases such as evidence-based medicine and the role played by research in the development of Quaternary Prevention applied to primary medicine.
9. Develop and implement Quaternary Prevention based on the safety of patients, residents or medical students.

## Topics

Through the research and study of the following topics, we intend to deepen and disseminate the concept of Quaternary Prevention in the practices of the Primary Medicine profession; promoting research and study in our residents, students and other primary health care providers.

- Medicalization
- Concept of Submedicalization
- Concept of health and disease
- Concept of timely detection of cancer
- Overdiagnosis
- Excess in preventive interventions
- Cardiovascular risk
- Executive checkups
- Effectiveness and safety of vaccination
- Disease marketing
- Excess of use of diagnostic images and incidental imaging findings
- Overmedicalization: polypharmacy, depression, rational use of drugs, adverse events and pharmacological cascade effect
- Patient safety
- Study of the factors that affect medicalization, evidence-based medicine: ethics of research and bioethics in current clinical practice
- Clinical method: effective communication, clinical method focused on the person. Clinical method focused on the relationship, care centered on the person, shared decision making and decision aids

## Evaluation

The evaluation of the result of the education in Quaternary Prevention is based on the appropriate care to the patient taking into account the following skills and competences:

- Patient Care: the clinical and professional skills of the doctor.
- Interpersonal and Communication Skills: How effective is the doctor in relating to the message of Quaternary Prevention.

- Professionalism and Ethics: Sensitivity to the diversity of the patient and their needs in knowledge of Quaternary Prevention.
- Medical knowledge: As it promotes knowledge of Quaternary Prevention and applies it to different health conditions.

### ***Tools used to assess competences***

- Oral and written examination
- 360 evaluation instrument
- Evaluation with patients
- Review of records
- Simulation and models
- Standardized patient examination
- Evaluations by clinical tutors
- Peer evaluation
- Evaluation issued by the patient

### **Conclusions**

Although the work of the Ibero-American Confederation of Family Medicine in quaternary prevention takes a few years, it has taken a global leadership; In addition, the theoretical and conceptual framework has been strengthened around all the problems involved in the concept of quaternary prevention, which has gained an indisputable space in the Congresses and Summits of the region.

After several Ibero-American and world meetings in the last four years, three lines of action have been consolidated: 1) Academic, 2) Community and 3) Policy; each of which has built some objectives and strategic tasks have been outlined to achieve them.

Quaternary prevention is a brief aside, a call to reflection from the founding traditions of medicine, in the midst of the dazzling technology of health care and sociocultural changes that push for the elimination of disease and suffering, for the certainty in the diagnostic and therapeutic medical work, among other demands impossible to fulfill.

This reflection calls the discussion about the medicalization of the inherent problems of the human being with the consequent overload of the health workers and the dominant frustration between patients and professionals, the alarming epidemic of over-diagnoses, to over-medicalization reflected in polypharmacy and excess of other interventions.

The research on the progress of the tasks carried out through the surveys made it possible to establish that progress has been made in the dissemination of the concept, especially in the professional networks and in the academic media. However, there is still a great deal of work ahead, to make known the implications of quaternary prevention in the general population, in order to win some strategic allies, perhaps the most important ones.

In the same way, we face the great challenge of including quaternary prevention in public health policies and in the discussion of clinical practice guidelines. The work team should be expanded and strengthened to achieve the proposed objectives.

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