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7<sup>a</sup> Cumbre Iberoamericana de Medicina Familiar

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## 7<sup>th</sup> Ibero-American Family Medicine Summit

The Summits are scientific and technical-political events, held every two years, among the countries of Ibero-America. They are organized by the Ibero-American Confederation of Family Medicine (WONCA-Iberoamericana-CIMF), with the Ministry of Health of the host country (MS) and the Pan American Health Organization (PAHO).

WONCA-Iberoamericana-CIMF is an international non-profit scientific organization that constitutes the VI Region of WONCA, a global organization that integrates more than 130 countries and more than five hundred thousand family doctors worldwide. Its interest is focused on the qualification of health systems through the adequate development of their first level of care, with actions aimed at the prevention of the diseases, education and management of health problems of individuals, families and communities, from a comprehensive and integral perspective, leaving behind the old individualistic healing model, which besides being more expensive, is inequitable and little resolute.

During March 12 and 13, 2018, the 7<sup>th</sup> Ibero-American Family Medicine Summit was held, with the axis “40 years of Alma-Ata: Family Medicine and Primary Care as a Path for Peace”. Theme of great relevance for the situation that the Region and the world are experiencing. They emphasize the role of Family Medicine and Primary Care (PC) in the promotion of a peace policy. Likewise, the approach of people, families and communities that suffer with all types of violence.

The other topics analyzed in the 7<sup>th</sup> Summit were: Research in the Territory; Economic Impact of Family Medicine in Health Systems; Family Medicine as a Source of Mental Health Care; Quaternary Prevention, how to do, how to teach, and the Health of Migrants and Health Services in Ibero-America (IBA).

WONCA-Iberoamericana-CIMF made a call to the representatives of the twenty countries that are part of it, in order to integrate six working groups with academic experts, researchers, clinicians and representatives of educational and health institutions to develop a situational diagnosis of the Region, in each one of the topics.

In the execution of the research projects, the consolidation of the international working groups was greatly favored by the requirements and the innovative nature of the selected topics, some of them representing the social and economic reality of many Ibero-American countries (violence, migration, economic impact) and other indicatives of the training needs of the family doctor (quaternary prevention,

research, mental health). These researches form a body of knowledge that contributes to the strengthening and advancement of family medicine, at the same time that it establishes the bases for subsequent studies that will contribute to the human, social and economic development of Ibero-America countries.

One of the main qualities of these studies is that without intending to be exhaustive researches, the cooperative work of the representatives and delegates of the participating countries, in a first approximation, resulted in a synthesis of the most relevant theoretical referents of each topic, and second, it provided an overview of each situation, establishing some differential patterns among the different regions that are part of CIMF, so that our specialty is enriched by the publication of these documents of great scientific quality.

During the Summit, in addition to the conferences and round tables, working groups were also held to analyze the situational diagnosis of each country on the aforementioned topics. Delegates were received at the working groups coming from seventeen countries (Argentina, Bolivia, Brazil, Chile, Cuba, Colombia, Costa Rica, Ecuador, Spain, Panama, Paraguay, Peru, Puerto Rico, Mexico, Dominican Republic, Uruguay and Venezuela).

It is important to mention that the 7<sup>th</sup> Summit was attended by six representatives of Ministries of Health of the region, namely: Argentina, Colombia, Cuba, Nicaragua, Panama and Paraguay, a situation that allowed reaching a Ministerial agreement during the Summit, called "**CALI DECLARATION**", promoted by the Ministry of Health and Social Protection of the host country. In said Declaration, agreements and commitments are reached by the signatory countries, in favor of the development and consolidation of Family Medicine and Primary Care in the Region.

Equally, as foreseen in one of the central objectives of the VII Summit, the "**CALI LETTER**" was also issued. Both documents were signed by the Ministers and ministerial representatives; WONCA authorities; WONCA Iberoamericana-CIMF and OPS: Dr. Jaime Matute Hernández, Dispatch Advisor to the Minister of Health and Social Protection, Ministry of Health, Colombia; Dr. Temístocles Díaz, Minister Counselor of the Presidency of the Republic of Panama; Guillermo José González González, Minister - Director of the National System for the Prevention, Mitigation and Attention of Disasters of Nicaragua; Dr. María Teresa Barán Wasilckuk, Vice-Minister of Public Health and Social Welfare of Paraguay; Dr. Maria Inez Padula Anderson, President of CIMF; Dr. Liliana Arias Castillo, President of the VII Summit; Dr. Amanda Howe, President of WONCA; Dr. Héctor Corratge Delgado, National Director of Organization of the Ministry of Public Health of Cuba; Dr. Sandra Fraifer - National Director of Family and Community Medicine, Ministry of Health of Argentina and Dr. Ricardo Fábrega, Advisor, Integrated Health Services Delivery, PAHO/WHO.

In this issue of the Brazilian Journal of Family and Community Medicine (*Revista Brasileira de Medicina de Família e Comunidade*), the 8 products of the VII Summit described so far are presented: The "Cali Ministerial Declaration", the "Cali Letter", and the manuscripts of the six situational diagnoses developed by the Working Groups, whose conclusions and analysis led to specific recommendations described in the "Cali Letter".

The results represent an exploratory approach to the situation of the IBA Region, requiring a deeper investigation and analysis of the topics studied. However, it makes clear the urgent need for both federal and state governments to promote reforms and public education and health policies in the field of PC, from

the perspective of Family Medicine, developing strategies to address the problems and shortcomings of the people in the Region. It also evidences the opportunities to improve the use of resources and increase the quality, equity and efficiency of health systems.

The products of this publication urge decision-makers in the field of health and education to broaden their understanding of the scope of Family Medicine as a specialty, as well as the origin of the health problems that are faced in the first level of care. This will be the basis for constructing reforms and consistent education and health policies, in which it is observed that both the infrastructure and the resources allocated to the first level of care, such as the training of specialists in Family Medicine, are coherent for the health model adopted.

Finally, it is essential that the specialists in family medicine and general practitioners, direct executors of the actions related to the subjects reviewed, be aware and responsible in increasing their efforts to improve the lives of the people, families and communities to which they owe.

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## The Cali Declaration Colombia, 2018

The VII Ibero-American Summit of Family Medicine was held in Cali, Colombia, on the 13<sup>th</sup> and 14<sup>th</sup> of March 2018, with the theme **FORTY YEARS OF ALMA-ATA: FAMILY MEDICINE AND FAMILY HEALTH, A PATH FOR PEACE**.

The event, aimed to contribute to the strengthening of health policies in Primary Care and Family Medicine in Ibero-America, was organized by the Ministry of Public Health of Colombia; the World Organization of Family Doctors (WONCA); the Ibero-American Confederation of Family Medicine (CIMF); the Colombian Society of Family Medicine (SOCMEF), Municipality of Santiago de Cali; and the Pan American Health Organization (PAHO/WHO). Representatives of Health Ministries of Ibero-America, representatives of WONCA, representatives of WONCA Ibero-American CIMF, representatives of SOCMEF, representatives of the health of municipal governments of Colombia, and of other Latin American countries, coordinators of medical programs of Medicine of Family, civil society delegates, and representatives of PAHO/WHO, gathered to discuss the following topics:

1. Forty Years of Alma Ata: Family Medicine and Family Health, a Path to Peace;
2. Research applied to the Territories;
3. Economic Impact of Family Medicine on Health Systems;
4. Family and Community Medicine as a source of Mental Health Care;
5. Quaternary Prevention: How to do and how to teach it;
6. Family and Community Medicine and the Health of Migrants.

The following definitions and recommendations were generated, as a result of the analysis of the working groups, made up of experts from the above mentioned areas, and coming from the organizations convened by the institutions that endorse this Summit:

1. To include, in the undergraduate courses in Medicine and postgraduate in Family Medicine, both theoretical and practical contents, necessary and appropriate to each level of training, for the development of competences (knowledge, skills, abilities and attitudes), including family and community approaches and communication, in order to better deal with the diversity of violence in a professional practice context.

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2. To urge authorities (in the areas of training and professional practice) to promote self-care and inner peace for families and communities, aiming at the construction and implementation of transversal public and educational policies to human development, focused on a culture of peace, from a human rights perspective, based in an intersectoral and transdisciplinary work.
  3. To establish funding policies that stimulate research that identifies the factors of protection and deterioration linked to violence, promoting the empowerment of the population, through participatory methodologies, and using tools to address the community scenario in Primary Care.
  4. To contribute to the strengthening of the IBIMEFA Network, aiming at the integration of researchers from the Region, as well as to identify and disseminate opportunities for training, financing, and to generate information and periodic meetings for specific protocols.
  5. To improve the communication channels of theses, undergraduate/field work, carried out by students/residents, for a better acquaintance of the region, in order to monitor the results and knowledge of this type of research and establish thesis/research repositories, and databases, for defining lines.
  6. To encourage/promote clinical and epidemiological research in a differentiated way, with Fundamentals and principles of family medicine (use of Health and Family Medicine tools) and to get back in touch with subgroups of previous summits, as well as group coordinators of the IBIMEFA network, identifying real possibilities of financing.
  7. To emphasize the importance that each family physician should have a population as signed to it, in a specific territory and in all sectors of the health system, in order to guarantee access and equity.
  8. To recommend that there should be a minimum of 30 family doctors for 100,000 inhabitants, a goal that can be achieved in the next decade.
  9. To recommend that common strategies should be developed for member countries to obtain standardized indicators that measure the professional performance and economic impact of the family doctor.
  10. To form strategic alliances with decision-makers, health personnel and citizens in order to apply the principles of quaternary prevention and reduce over-diagnosis and over-treatment, thus contributing to quality health care.
  11. To disseminate the concept of Quaternary Prevention, to achieve health empowerment through community networks, mass media, community leaders, schools and other support groups.
  12. To incorporate and/or strengthen, as the case, mental and community health training, necessary for the healthcare spaces in which family physicians work, without endangering vital situations, through the development of self-care strategies for sustainable people, both in the time and in the financial capacity of the Ibero-American countries; in order to develop the capacity to face stressful every day situations that allow the development of strengths for emergencies and disasters.
  13. To strengthen community work, so that the empowered community itself establishes networks of support in mental health problems and is prepared, as a whole, to deal with everyday situations, and enable it to take immediate action in emergency situations and natural or unnatural disasters.

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14. To prioritize cost-effective self-care strategies, guided by personal and families development tools, including health teams, and teachers, tutors of Family Medicine in such a way that virtuous relationships, oriented towards a cordial and constructive manner, can be established. The staff of FM residencies should take charge of actions aimed at self-care of students, which are prone to facilitate the learning process and preparation for the practice of the profession in a complex environment such as primary health care centres or in any context work with the PC strategy.
  15. To include the concept of quaternary prevention in undergraduate and postgraduate academic programs of the health professions, through the implementation of cross-curricular study plans, encouraging the investigation of the subject, in accordance with the proposals presented at the Summits and according to the needs and regulations of each country.
  16. To recognize the right to health of migrants and their families, ensuring equal access under the same conditions of protection, shelter and rights of native citizens.
  17. To incorporate in the curriculum of undergraduate, postgraduate and continuing education programs the necessary skills for the integral attention of the migrant population and their families.
  18. To recommend the creation of a migration health observatory, with reliable and validated information, to analyse and monitor effective, family & people-centered decision-making processes.

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## Cali Statement

The Ministers participating in the VII Ibero-American Summit of Family Medicine, held in Cali, Colombia, with the aim of reflecting on the role of Family Medicine in Health Systems based on Primary Care, and specifically on the care of complex situations of people, families and communities as the centre of these Systems:

Aware of the importance of health and family and community medicine for the guarantee of universal health coverage within the framework of the Sustainable Development Goals, and the importance of taking a regional assessment of the commitments implementation of the declaration of Alma-Ata.

Recognizing that the Alma Ata declaration constitutes a milestone in the history of the Global Health Conferences, with the purpose of establishing Primary Health Care as the fundamental strategy to stop health inequities and guarantee health rights worldwide.

Considering the results of the First Meeting of the High Level Commission "Universal Health in the 21<sup>st</sup> Century: 40 years after Alma-Ata" with the theme "Achieving Universal Health: Challenges and Strategic Alliances for Advocacy, Social Dialogue and the intersectorial participation".

Recognizing that Health and Family Medicine are essential in the care of people's health during their entire life course, as well as the care of families and communities, guaranteeing health services with a focus on rights, intercultural and gender which consider the biological, psychological, economic, social and cultural factors.

Considering what is recorded in the Letters of San Jose of Costa Rica (2016), Quito - Ecuador and other Letters generated in the previous Summits.

Aware of demographic changes, the epidemiological transition, natural disasters, the increase of mental health problems, changes in climate, consumption and life habits, demographics and the epidemiological transition, among other phenomena that determine the health of the population of the countries; as well as the challenges in terms of policies, plans and programs for comprehensive health care with a focus on family and community health.

Considering that in September 2017, the Regional Strategy on Human Resources for Universal Access to Health and Universal Health Coverage was approved by the member countries, within the Pan American Sanitary Conference (document CSP29/10) given the challenges persistent, especially in terms of staff availability and distribution, planning, governance, articulation between sectors and training, according to the needs of the health system in relation to universal access to health and coverage universal health.

### We agree to:

1. Promote public health policies for the strengthening of mental health, family and community medicine approaches within the framework of Primary Health Care, according to the guidelines and norms of each country, as well as education and training programs.

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2. Strengthen collaboration among the participating countries, for the exchange of experiences and for the availability of human resources with competencies in health, mental health and family and community medicine.
  3. Join forces among the participating countries to generate strategies that respond in a timely manner to the health needs of individuals, families, communities, the migrant population and vulnerable situations.
  4. Promote policies for the management of knowledge in family and community medicine to increase the availability of scientific evidence of this medical specialty, and its economic impact on health systems, strengthening programs of specialization in family medicine.
  5. Strengthen the skills and role of family physicians in health teams, to increase resolutivity at the primary level of care, ensure continuous and comprehensive care, invigorate intersectoral coordination and community participation.
  6. Set up a technical cooperation network between the Ministries of Health of the participating countries, with the support of the Pan American Health Organization, in the field of family medicine and primary care, to develop at least the following thematic areas: Research in the territory; Economic impact of family medicine on health systems; mental health; Quaternary prevention, disaster relief, and migrant health.
  7. Request the Ibero-American General Secretariat to include this network in the registry of Ibero-American networks, in order to involve the other Ibero-American countries and mobilize technical and financial resources for the development of the network's activities.
  8. Use and take advantage of the results of these technical cooperation actions and knowledge exchange, for the strengthening of public health policies and health systems in our countries.

Signed in the city of Cali, Colombia, March 14, 2018

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## Family Medicine, Primary Care and Violence: training and action in Latin America

Medicina Familiar, Atención Primaria y Violencia: formación y acción en Iberoamérica

*Medicina de Família, Atenção Primária e Violência: formação e ação em Iberoamerica*

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### Abstract

**Objective:** To identify the perception of family and community doctors - as well as other professionals in 20 countries that make up the Ibero-American Confederation of Family Medicine (CIMF) - on the most prevalent forms of violence in their country and in the communities they attend. Also, to identify the perception about their own motivation and ability, as well as that of family physicians from their countries, to address violence and contribute to the culture of peace. **Methods:** Cross-sectional, exploratory study, descriptive and quantitative approach, carried out in the 20 member countries of CIMF, between the months of September 2017 to March 2018. A survey was designed based on a literature review of the study phenomenon, discussion and validation with different family medicine professionals considered to be experts in the subject. It was disseminated with the support of the different scientific societies of Family Medicine that make up the 20 countries of the CIMF, reaching 242 responses. **Results:** More than 92% of professionals consider that they lack sufficient training to deal with violence in their daily work and only 24% consider that they have received sufficient training in the Culture of Peace. On the other hand, the perception of prevalence of the different types of violence from the personal, family and community point of view in the region is alarming. **Conclusions:** It is necessary to integrate in the training of family doctors and primary care professionals, as well as in the undergraduate curricula of Medicine, contents related to the approach to violence and the contribution to the culture of peace to overcome violence. The knowledge gap on these issues is visible by family doctors and other professionals who work in Primary Care. On the other hand, the potential benefit of having these professionals acting in this serious and prevalent health problem is remarkable, especially considering their frequent and longitudinal contact with people, families and communities who have been victims of violence.

**Keywords:** Training; Family Medicine; Primary Care; Violence; Culture of Peace

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## Resumen

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**Objetivo:** Identificar la percepción de médicos de familia y comunidad, así como de otros profesionales de Atención Primaria, en los 20 países que conforman la Confederación Iberoamericana de Medicina de Familia (CIMF), sobre las formas de violencia más prevalentes en su país y en las comunidades que asisten. Además, identificar la percepción sobre sus propias capacitación y motivación, además aquellas de los médicos de familia en sus países, para abordar la violencia y contribuir a la cultura de la paz. **Métodos:** Estudio exploratorio, corte-transversal, de carácter descriptivo y enfoque cuantitativo, realizado en los 20 países miembros de CIMF, entre los meses de septiembre de 2017 a marzo de 2018. Se construyó un instrumento tipo encuesta, a partir de revisión bibliográfica del fenómeno de estudio, discusión y validación con diferentes profesionales de la medicina familiar considerados expertos en el tema. Se divulgó con el apoyo de las diferentes sociedades científicas de Medicina Familiar que componen los 20 países de CIMF, alcanzando 242 respuestas. **Resultados:** Más del 92% de profesionales consideran carecer de formación suficiente para abordar la violencia en su cotidianidad laboral y solo 24% considera haber recibido formación suficiente en la Cultura de Paz. Por otro lado, es alarmante en la región la percepción de prevalencia de los diversos tipos de violencia desde el punto de vista personal, familiar y comunitario. **Conclusiones:** Es necesario integrar en la formación de los médicos familiares y profesionales de la Atención Primaria, asimismo en los currículos de pregrado de Medicina, contenidos relacionados con el abordaje de la violencia y la contribución a la cultura de paz para superar la violencia. Es visible la brecha de conocimiento en estos temas por parte de los médicos de familia y demás profesionales que actúan en la Atención Primaria. Por otro lado, es notable el potencial beneficio de tener esos profesionales actuando en este grave problema de salud por su elevada prevalencia y especialmente considerando su contacto frecuente y longitudinal con las personas, familias y comunidades quienes han sido víctimas de violencia.

**Palabras clave:** Formación; Medicina Familiar; Atención Primaria; Violencia; Cultura de Paz

## Resumo

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**Objetivo:** Identificar a percepção de médicos de família e comunidade, bem como outros profissionais, em 20 países que compõem a Confederação Ibero-americana de Medicina de Família (CIMF), sobre as formas mais prevalentes de violência em seu país e nas comunidades que atendem. Além disso, identificar a percepção sobre suas próprias motivação e capacitação, além daquelas dos médicos de família de seus países para abordar a violência e contribuir para a cultura da paz. **Métodos:** Estudo corte-transversal, exploratório, de abordagem descritiva e quantitativa, realizado nos 20 países membros da CIMF entre os meses de setembro 2017 a março de 2018. A pesquisa foi projetada com base em uma revisão da literatura sobre o fenômeno de estudo. Um questionário foi elaborado e validado com diferentes profissionais de medicina de família considerados especialistas no assunto e posteriormente disseminado com o apoio das diferentes sociedades científicas de Medicina de Família que compõem os 20 países do CIMF, alcançando 242 respostas. **Resultados:** Mais de 92% dos profissionais consideram que não possuem treinamento suficiente para lidar com a violência em seu cotidiano de trabalho e apenas 24% consideram que receberam treinamento suficiente na Cultura de Paz. Por outro lado, a percepção da prevalência, na região, dos diferentes tipos de violência, do ponto de vista pessoal, familiar e comunitário é alarmante. **Conclusões:** É necessário integrar na formação de médicos de família e os profissionais de cuidados primários, bem como nos currículos de graduação de Medicina, conteúdos relacionados com a abordagem à violência e a contribuição para a cultura da paz para a superação da mesma. A lacuna de conhecimento sobre essas questões é visível pelos médicos de família e outros profissionais que trabalham na Atenção Primária. Por outro lado, é notável, o benefício potencial de ter esses profissionais atuando nesse grave e prevalente problema de saúde, especialmente considerando seu contato frequente e longitudinal com pessoas, famílias e comunidades vítimas de violência.

**Palavras-chave:** Formação; Medicina de Família; Atenção Primária; Violência; Cultura da Paz

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## Introduction

*[..] We often talk about how a “culture of violence” can take root.*

*In many societies, violence is so widespread that it thwarts the hopes of economic and social development.*

*We cannot allow this situation to continue. .... It is possible to prevent it, as well as completely reorient the cultures in which it prevails. ... Governments, communities and individuals can change the situation.*

*We owe our children, the most vulnerable citizens of any society, a life without violence or fear. To guarantee it, we must be tireless in our efforts to achieve peace, justice and prosperity not only for countries, but also for communities and members of the same family. We must face the roots of violence. Only then will we transform the legacy of the last century of burdensome ballast into instructive experience.*

Nelson Mandela

(World Report on Violence and Health, 2002)

Primary Care [PC] is a fundamental strategy to improve health with criteria of Equity and Social Justice. Several authors, such as Barbara Starfield,<sup>1</sup> have pointed out the great impact that investment in PC has on equity. A health system based on PC requires a solid legal, institutional and organizational framework, adequate human capital, as well as sustainable economic and technological resources to guarantee an adequate response to the health needs of the population, orientation towards quality, responsibility, social justice, sustainability, participation and intersectoriality.

After 40 years of Alma Ata and its goal of “Health for All in the Year 2000”, we are still very far from reaching that goal. Health goods and services continue to be unattainable for many, especially those who need them most. This inequality, if we look for example the order of the countries according to the indicator Gini<sup>2</sup> as in many Ibero-American countries there are communities immersed in poverty and with restricted access to public services, with few social-labor opportunities and therefore, low levels of quality of lifetime.<sup>3</sup> Many of these people are in Latin America and the world, settled in the peripheries of large cities, living in a situation of exclusion, in precarious conditions, virtually unassisted, silent victims of oblivion and the greed of corrupt power groups, or hostages of criminal organizations. This environment constitutes a favorable environment for the appearance and maintenance of serious social and health problems, including violence.

This violence, with all its manifestations, must be understood as a tacit consequence of the enormous social inequality and as one of the most serious social and health problems in the world. Many studies indicate that violence is more common in societies with greater inequality and income inequality and with fewer possibilities of social development.

These societies will hardly have an atmosphere of peace, especially if the citizens and, specifically, the 1<sup>st</sup> level health professional, assume a passive role, maintaining ourselves as mute witnesses to injustice, if we keep silent about inequity, and we end up fostering that violence.<sup>4</sup>

## **Social inequality, violence and disease: an inseparable triade**

In 1996, the 49th World Health Assembly, declared violence as a growing public health problem that brings serious short and long-term health consequences for individuals, families, communities and, in addition, results in harmful to health services.

The Assembly itself urged Member States to urgently consider the problem of violence within their own borders and to establish public health activities to address it, setting goals, including: (a) Raise awareness about the problem of violence in the world, and make it clear that violence can be prevented and (b) that public health has the fundamental task of addressing its causes and consequences.<sup>5</sup>

Each year, more than 1.6 million people die and many more suffer non-fatal injuries as a result of self-inflicted, interpersonal or collective violence. Violence is one of the main causes of death in the population between 15 and 44 years of age. In 2012, almost half a million people died from intentional homicides and more than a third of these (36%) took place in the Americas.

Statistics reveal that **almost half** of all homicides occur in countries where 11% of the world population lives, which, not coincidentally, concentrates the poorest population from the socio-economic point of view.<sup>6</sup> The average homicide rate in the world is 6.2 per 100,000 inhabitants, however, in South Africa and Central

America, rates were up to four times higher (30 and 26 victims per 100,000 inhabitants, respectively). In contrast, rates up to five times lower than the world average, occur in East Asia, southern Europe and Western Europe in 2012.<sup>6</sup>

The greatest causes of violence are deeply related to the social, cultural and economic issues, constituting a public health problem, given the social value of the phenomenon and the forms of social mobilization that it triggers. Multiple family, community, cultural and other external factors interact to create an environment that favors the emergence of violence.<sup>5</sup>

It is a problem that lacks a systemic approach in most countries, because the interventions arise from the Cartesian care paradigm, of reductionist nature, which leads to linear thinking whose solutions go through a simple cause-effect relationship. This paradigm prevents thinking and proposing structural solutions that look at this phenomenon from its complexity.

In contrast, for some authors, interventions designed from education, job opportunities and support for families are long-term strategies that show more solid and broad results than punctual care reactions.

In the field of health, in addition to the accompaniment of health professionals in the processes of rehabilitation and socio-labor inclusion, we must consider that the consequences of violence are immediate and acute, but also long-lasting and chronic. Research has shown that the more severe the abuse, the greater the repercussions on physical and mental health. It is also known that the negative consequences for health derived from violence can persist long after the abuse has ceased.<sup>5</sup>

The “collective violence”, that is, the one derived from wars, terrorism, uprisings, ethnic, religious or similar conflicts, gang fights and mafia extortions, and in general all aggression and extortion carried out by an organized collective against other groups, civilians or military, is undoubtedly an important cause of mortality and serious alterations and sequelae in health. The high frequency of psychological consequences suffered by combatants and the civilian population in armed conflicts or similar has been widely documented.<sup>5</sup>

## **How to confront and overcome violence?**

As a complex problem, facing violence demands more than punctual actions.

It requires understanding its matrixes, its roots and, in addition, it requires proactive actions that help to have another attitude, another way of answering, that does not respond more violently to violent situations. That is, we need another social-scientific paradigm. *“This nascent paradigm forces us to make progressive journeys: we have to move from the part to the whole, from the simple to the complex, from the local to the global, from the national to the planetary, from the planetary to the cosmic ... Now, either we take care of Humanity and Planet Earth, or we will not have any future.”*<sup>7</sup>

In this context, it is worth bringing to consciousness the idea of the Culture of Peace and other central issues to overcome violence and that, synthetically, are listed here.

The relationship between violence and the culture of peace is established by understanding that repression and punishment of violent acts are not sufficient for a transformation of the individual (author of violence) and society. The one who practiced violence is not violence itself: he must be held accountable

for his actions, but he must also have access to the means to overcome that condition.<sup>8</sup> Many violent behaviors are learned socially and are not natural expressions of humanity, nor are they associated with a certain gender or social group.

The vision of the Culture of Peace through the promotion of a healthy and meaningful human life is the most effective way to prevent violence. The Culture of Peace presents a concrete alternative to replace the action that generates violence by an action that generates peace.

Another point that should be highlighted in the context of the paradigm shift and facing violence is the development of Spirituality. Spiritual health care has been considered an emerging field worldwide in the last three decades. Multiple disciplines have been conducting research and contributions to build a body of knowledge and practices consistent with science, this has been mainly contributed by palliative medicine, psychology, psychiatry, geriatrics, nursing and, more recently, family medicine.

Spirituality is related to the Culture of Peace, once peace is considered a source of spirituality and, in turn, it would also be linked with other associated sources such as hope, strength, love, connection, well-being and social support.<sup>9</sup> As Krishnamurti says: "World peace rests on inner peace". In this sense, a crucial aspect is the spiritual self-care of the person who cares, the health professional in all his subjectivity.

Another aspect that should guide actions to face violence has to do with the Ethics of Care.

The care with the other, although it is an archetypal attitude of the human being, was displaced to give place to egocentrism. Recovering care, in its historical concept, means promoting social relations of reciprocity, co-responsibility and mutual support. For this, an affective education of individuals or citizens is necessary. The education of the affectivity does not only lead to a better self-esteem but to a greater commitment with the others and with the society.<sup>10</sup>

## Study problem

The approach to violence is necessarily a cross-cutting issue and Family Physicians, as well as all Primary Care professionals, can and must contribute to its solution, through their own health actions, as well as being able to invest in participation of the community and citizen, and in the search and implementation of solutions to the problem together with governments, and health and education managers.

In the meantime, in training and in professional practice to address violence, we know that we have gaps to overcome here manifest in the following hypothesis that this study tried to explore:

## Hypothesis

- Although violence is one of the biggest public health problems in the world, from a theoretical and practical point of view, the approach to violence is not a relevant part of the training programs of the MFyC and other Health Professionals. of Primary Care.
- Health services in the field of Primary Care and Family Medicine are not adequately prepared to identify and adequately care for individuals, families and communities that suffer violence.

## General purpose

- Identify the perception of family and community doctors, as well as other primary care professionals from 20 countries of the Ibero-American Confederation of Family Medicine Network (CIMF), about the situation of violence in the countries and places where they work, and on training in the approach to violence and, also, its understanding of the culture of peace.

## Specific objectives

- To explore what has been the training of family doctors and health professionals in terms of the approach to violence in undergraduate and postgraduate studies.
- Identify the practices of family doctors and health professionals, who participate in the study, in the approach to violence in their daily clinical practice.
- To know the perception about the situation of violence in the countries and places where family doctors and health professionals of the first level of care that participate in the study work.
- To explore the feelings and perspectives of family doctors and health professionals of the first level of attention to address violence.
- Know the perception of family doctors and health professionals of the first level of care in relation to the Culture of Peace.

## Methodology

This is an exploratory, cross-sectional study of a descriptive nature and quantitative approach, carried out in the 20 Latin American and Ibero-American countries, members of CIMF, between the months of September 2017 to March 2018. The target audience of the study consisted of family doctors and residents of family medicine, as well as other primary care professionals.

## Methods

A previous bibliographical study was carried out to elaborate a questionnaire that identified the formation and the role of the Family Doctors and other Primary Care professionals in the promotion of the Culture of Peace and the perceptions about the situation of violence in their countries and place of work, and also on the approach to this phenomenon from their point of view. The Instrument was prepared, reviewed and validated in its content by representatives of the associations of Family Medicine constituting CIMF, considered experts in the subject. The questionnaire was self-administered, anonymous and in an online format. It was sent to each scientific society in each country for dissemination. It was also placed on the Facebook page of CIMF.



## Results

### 1) Profile of respondents

The population that participated in the survey added a total of 243 professionals. The profiles and occupations of the participants are varied, being almost all (93%) family doctors or residents of Family Medicine. The provenance of the 243 records informs that the survey participants are from 19 of the 20 countries that make up the CIMF. A respondent from the United States was included (Table 1). A total of professionals from 97 cities distributed in these 20 countries have participated in the Survey.

**Table 1.** CIMF Survey - Participants in the project: "Formation and Role of the Family Doctors and other Primary Care professionals in the approach to the phenomenon of violence and in the promotion of the Culture of Peace".

Country	Number of participants
Argentina	22
Bolivia	10
Brazil	25
Chile	20
Colombia	25
Costa Rica	20
Cuba	2
Ecuador	6
Salvador	2
Spain	25
United States	1
Mexico	20
Nicaragua	1
Panamá	10
Paraguay	12
Peru	8
Puerto Rico	7
Dominican Republic	5
Uruguay	8
Venezuela	14
Total	243

Source: Survey of the authors.

If the information is organized according to the conformation by Subregions, Table 2 is taken into account; it is observed that, in percentage terms, the origin (%) of the participants is proportional to the population (%) of each region.

**Table 2.** Respondents for CIMF Regions - Percentage Participation, Accumulated Population and Percentage.

Subregion	Respondents - Participation Percentage	Accumulated Population by Region	Population Percentage by region
Southern Cone	35.9%	280,243,774 Inhabitants	43.5%
Mesoamerican	27.7%	167,991,115 Inhabitants	26.1%
Andean	26.0%	139,563,236 Inhabitants	21.6%
Iberian	10.4%	57,030,280 Inhabitants	8.8%
Total	100%	644,828,405 Inhabitants	100%

Source: Survey of the authors.

The sex distribution among the respondents was 69% of women and 31% of men.

In terms of ages, the results of the variable were organized by age groups with the following categories, 20-40 years - 41.9%; 40-60 years - 34.6% and more than 60 years - 8.2%. Unfortunately, there was a problem in the survey so that 15.2% of the records could not be analyzed - which makes an adequate analysis of this topic impossible.

Turning to the question related to the professional profile of the participants in the survey, it can be observed, in Table 3, that the absolute majority was of family doctors (94%).

**Table 3.** Respondents and Professional Profile (n = 243).

Referred Profession	Percentage Contribution to the Survey
Family Doctor	94%
Primary Care Nurse	1.6%
Residents of Family Medicine	1.2%
Parent Educator	0.4%
Veterinarian	0.4%
Dentist	0.4%
Psychologist	0.4%
Psychiatrist	0.4%
Public health	0.4%
Social worker	0.4%
Total	100%

Source: Survey of the authors.

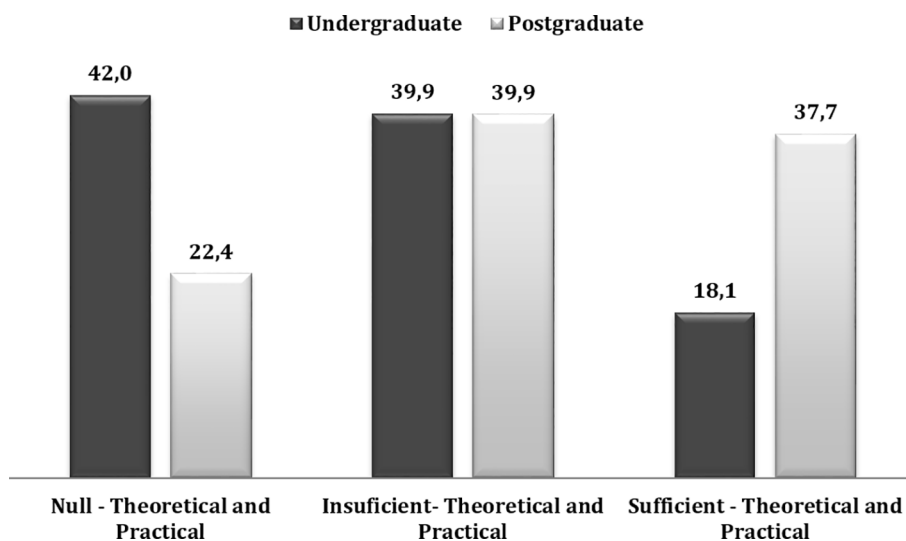
Regarding training as clinical or family medicine specialists: 93% of the specialties are related to Family Medicine and related to postgraduate training, about 50% of respondents had a master's degree (35%) or doctorate (9%) or post-doctorate (4%) at the time of the study.

The situation of the respondents related to their eventual scientific associations were grouped into 3 categories, namely: Scientific Societies related to Medicine and Family Health (60%); Other Scientific Societies with Different Interests (6%); Reports not belonging to Scientific Societies (34%).

## 2) Undergraduate training for the approach of violence

From the surveyed population, two central issues were reviewed that become part of the baseline for the discussion. It is about training in Violence and Peace. For this part of the survey, two components of

university education were reviewed, the theoretical and practical training spaces, both undergraduate and postgraduate. The results from these two components present in all the curricula are represented in Graph 1.



**Graph 1.** Self-perception (%) of the learning process to address violence in undergraduate (in = 243) and postgraduated (n = 223). Source: Survey of the authors.

At the undergraduate level, the respondents mainly located their response in two alternatives, the first and largest (42% of the respondents) is the one that shows that the training on Violence in theoretical and practical terms was null. This supposes a base of the important problematic, since it is not seen as a relevant topic in the processes of academic formation. The second alternative shows that about 40% of respondents acknowledge that there was some training, theoretical and/or practical, but they were insufficient. **It is relevant that 82% of the respondents have not had any training in undergraduate, or if they had, it was perceived as insufficient.** It should also be mentioned that 18% of the respondents perceive that there was Theoretical and Practical Training and this was sufficient.

In postgraduate studies, the situation is somewhat different, so that the number of positive answers increases in terms of having had enough information, theory and/or practice (38%), although in this topic there were 9% of answers as only theoretical training.

But the percentage of those who do not report any training or insufficient training, remains high (62%).

### 3) Data related to the prevalence of violence and to the types of violence

#### 3.1. Violence in the lives of people, families and communities

Related to the perception of the level of violence in the lives of people, in the country and in the workplace, the respondent had to dial in a number on a scale that varied from 0 (Not relevant) to 5 (The most elevated violence).

Although any level of violence is unacceptable, four categories were established for analysis purposes:

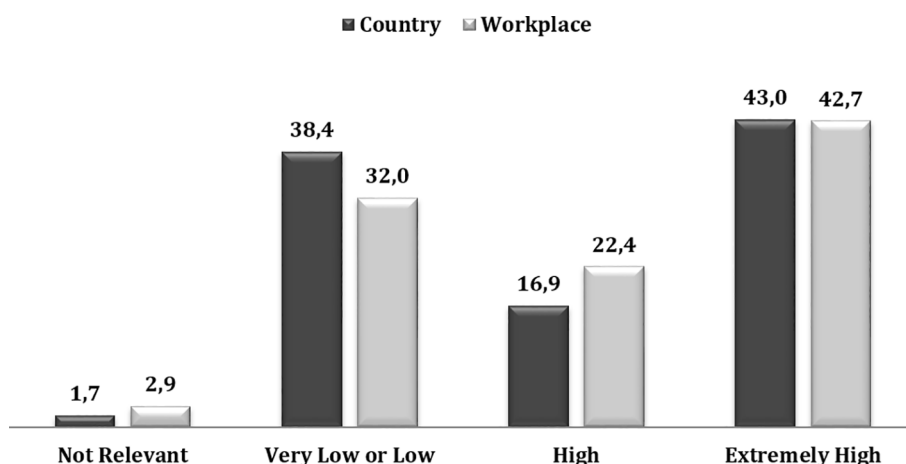
1<sup>st</sup> Level of Violence - Not relevant (for those who have marked 0);

2<sup>nd</sup> Level of violence – Very Low or Low (for those who have scored 1 or 2);

3<sup>rd</sup> Level of Violence - Elevated (for those who have marked 3);

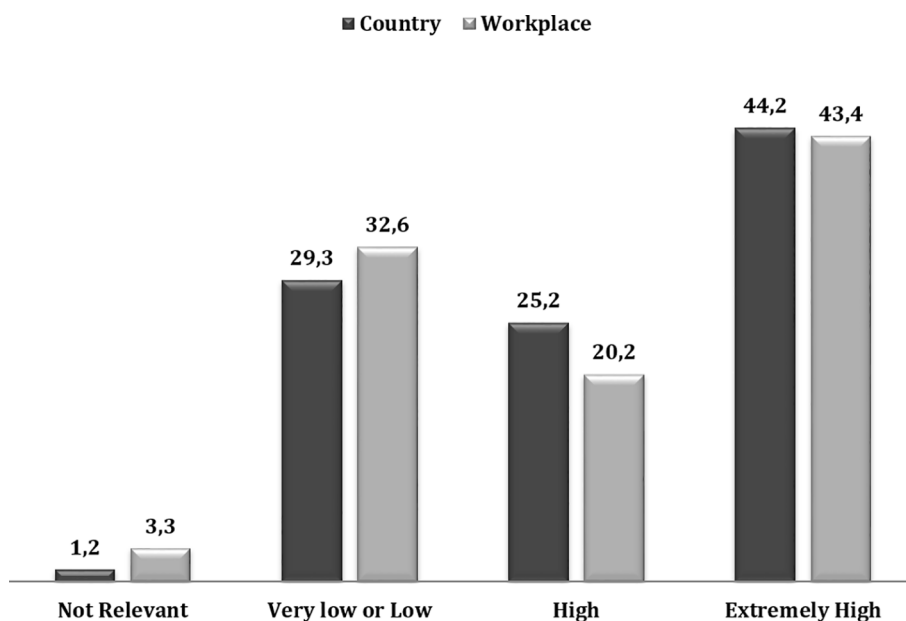
4<sup>th</sup> Level of Violence - Very high or extremely high (for those who have scored 4 or 5).

Considering this classification, the level of violence **in people's lives** has been classified as **Very High or Extremely High** for about 43% of the respondents, either in the case of violence in the workplace of the professionals who participated in the survey, be it in your country. If we add the percentage of who has classified as high, we have a percentage of 60% of the level of Violence considered high to extremely high in the country and 65% in the workplace of the respondents (Graph 2).



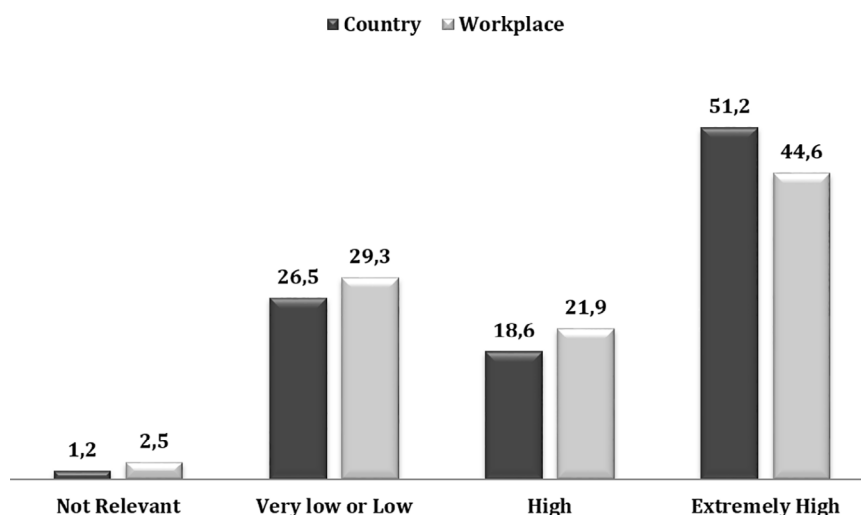
**Graph 2.** Classification (%) of the level of violence in the lives of PEOPLE, in the country and in the workplace, according to the perception of the respondents (n = 242). Source: Survey of the authors.

In the same sense, the same classification has been proposed, in this case, for the perception of the level of **violence in the lives of families** and the percentages were equally relevant, reaching close to 70% in the country and the same 64% at the family level (Graph 3):



**Graph 3.** Classification (%) of the level of violence in the life of the FAMILIES, in the country and in the workplace, according to the perception of the respondents (n = 242). Source: Survey of the authors.

The same question was asked to evaluate the perception of the respondents about the level of **violence in the life of the communities** and in this case the percentages are very high: 70% answered that they would classify the level of violence as elevated to extremely high, considering their country. Of these 70%, more than half (51%) marked values such as Very High to Extremely High. In the case of violence perceived by the respondents in the life of the communities in which they work, the values were lower, remaining around 67%, although the classification of Very High to Extremely High reaches about 45% (Graph 4). 2.5% and 2.1% respond that they didn't know, respectively to the country and workplace.

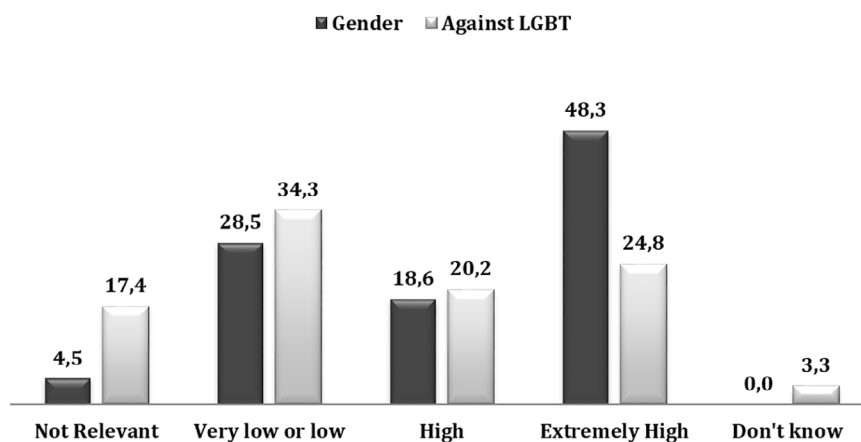


**Graph 4.** Classification of the level of violence in the life of the COMMUNITIES (%), in the country and in the workplace, according to the perception of the respondents (n = 242).

### 3.2. Gender violence and against the population of lesbian, gay, bisexual and transsexual (LGBT)

The perception of the respondents about the level of gender violence and also against the LGBT population was explored, using the same approach and classification.

Gender violence was recognized as quite high, adding 67% (48% considered Very Extremely High). Related to the violence against the LGBT population, the percentages are lower - adding up to 45% - suggesting a lower perception, once it is known that the levels of violence against this population are extreme (Graph 5).



**Graph 5.** Classification (%) of the level of gender violence and against the LGBT population that is attended by Family Doctors and/or their residents/students, according to the interviewees' perception. Source: Survey of the authors.

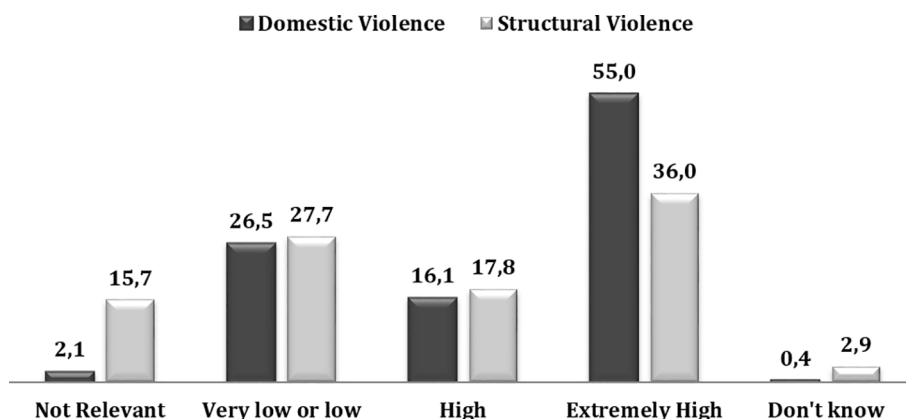
Next, he asked who were the people - among women, men, boys/girls and the elderly - who suffered the most from gender violence and against the LGBT population.

Related to gender violence, women were the most cited (54%), followed by adolescents (19%), boys/girls (16%), the elderly (6.6%) and finally men (4.4%).

Related to the perception of violence against the LGBT population, men appear first (40%), followed by adolescents (32%), then women (23%); children (4.1%) and the elderly (0.5%).

### 3.3. Structural violence and domestic violence

Structural violence is usually the most invisible of all forms of violence, although one of the most striking, because it is capable of keeping all others at high levels. Structural violence is that maintained, promoted or facilitated by the State. The State that should, precisely, care for and protect the population commits, through the application of its laws, its practice, or its absence in the defense of the most needy, a very violent form of violence. Related to the perception of Domestic Violence in the population assisted by the respondent professionals, the percentages are significantly high, since 71% classified it as Elevated to Extremely High. In terms of Structural Violence, the perception is lower, although it is in fact high (54%) (Graph 6).



**Graph 6.** Classification (%) of the level of Domestic and Structural Violence against the population that is attended by Family Physicians and/or their residents/students, according to the perception of the respondents. Source: Survey of the authors.

When asked about the people who suffered most from these two types of violence, the largest percentages remained with women (34%), boys and girls (30%), the elderly (19%) and adolescents (17%). It is striking that men were not related to domestic violence (Graph 7).



**Graph 7.** Who do you consider are the people most affected by Domestic Violence? Source: Survey of the authors.

The perception of which people suffered the most from structural violence in the communities for which they provided assistance, the answers prioritized by women (24,8%), then the elderly (22,3%), adolescents (19,2%), children (17,4%), and men (16,3%).

#### 4) Data related to the diagnostics of the different types of violence in professional practice

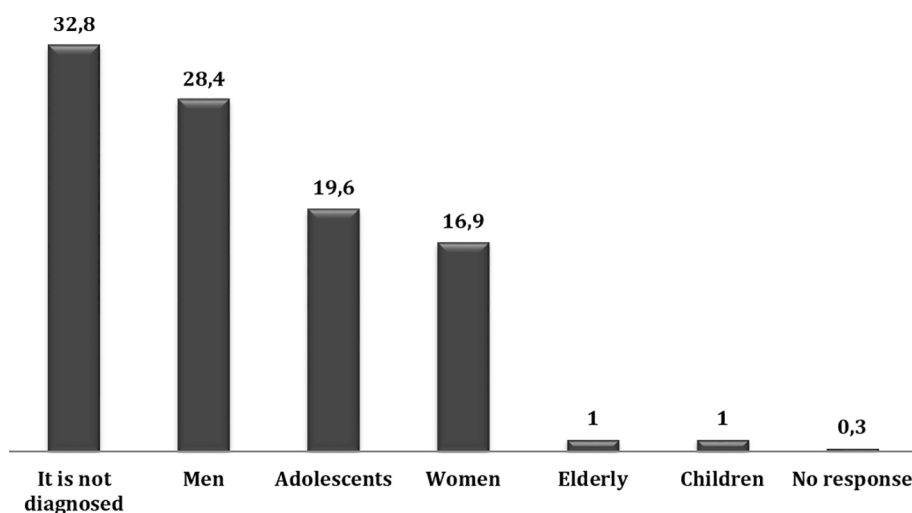
A good portion of respondents (64%) say they participate in violence diagnosis activities, although more than 30% of respondents report that they do not.

##### 4.1. Diagnosis of gender violence and against the LGBT population

Regarding Gender Violence, professionals diagnose it mostly in women (73%), but 14% say they do not make this type of diagnosis.

Violence against the LGBT population (Lesbian, Gay, Bisexual and Transgender) is the least diagnosed. About 33% of respondents report that they do not make this type of diagnosis.

When the diagnosis is made, violence against men is the most diagnosed (28%) followed by adolescents (20%) (Graph 8).



**Graph 8.** Diagnosis (%) of Violence against the LGBT population. Source: Survey of the authors.

#### 4.2. Diagnosis of domestic and structural violence

Regarding to the diagnosis of Domestic Violence, it is worth noting that more than one answer option could be marked. There were 413 bearings for 243 respondents.

The professionals reported that in the case of this type of violence the diagnoses were more prevalent when it came to women (39%), followed by children (25%); the elderly (19.4%); adolescents (11.6%). To follow there was the percentage of Not diagnosed (5.8%) larger than that of men (4.4%).

Structural violence is also relatively undiagnosed - the largest percentage (25%) is **“Not diagnosed”**. When diagnosed, a relatively equal distribution of opinions among respondents is observed about those who suffer most from this type of violence (Table 4). The percentage sum more than 100% because it was allowed to mark more than one option.

**Table 4.** Diagnosis of structural violence.

	Frecuencia	%
Not diagnosed	98	25.1
Elderly	72	18.4
Women	68	17.4
Teenagers	55	14.1
Men	54	13.8
Children	43	11.0
No answer	1	0.3
Total	391	100

Source: Survey of the authors.

#### 4.3. Participation of the professionals in activities that address violence and organization of health services

Related to participating, or not, in activities that address violence, the majority of professionals (64%) affirm that they do participate, although 36% do not.

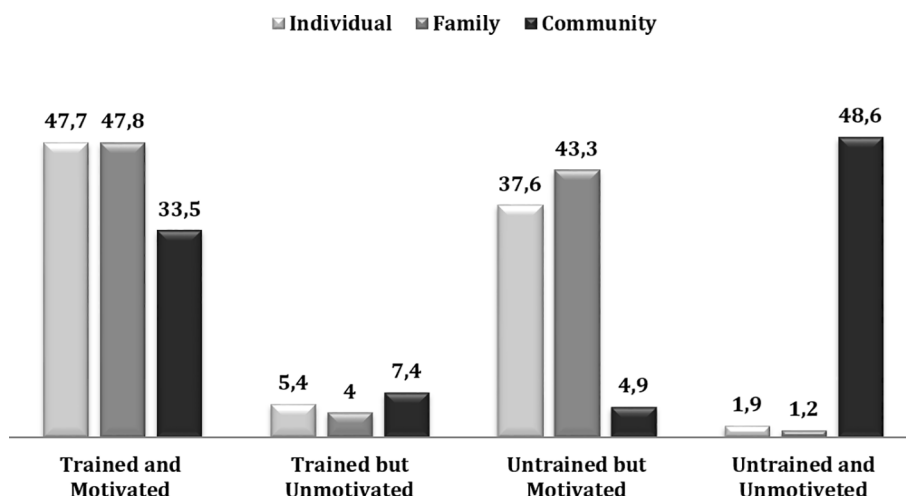
Related to the organization of services to address violence, more than half respond that it is organized for women (54%). In second place, the percentage is **of Not addressed or not organized** (15.3%). The percentages related to the Adolescents (13.4%); Children (12.4%); Men (3.3%) and the Elderly (1.6%) are alarming.

Related to the organization of the services for the approach of the LGBTI population, close to 99% of the professionals did not answer that question, assuming that there is no organization. It is also the situation of the approach to domestic violence and structural violence, where about 99% have not answered.

#### 5) Training and motivation for the approach of violence

Half of respondents feel trained and motivated (48%) to address violence at the individual and family level; and those who do not feel qualified (37.6% and 43.3% respectively), feel motivated, forming an absolute majority of interest in acting in these fields. But, related to violence in the community, 50% do not feel trained or motivated. (Graph 9).





**Graph 9.** Self-perception (%) on training and motivation to deal with the different types of violence that usually occur in PC (n = 243). Source: Survey of the authors.

The majority (89%) of respondents reported having their team (32%), other professionals (30%) or other institutions (26%) to address violence.

## 6) Legislation and Devices in the countries for people who go through situations of violence

The majority (78%) of the health workers who completed the form answered that there is legislation in their country that regulates what should be done for the health professional's actions in front of people or families who go through situations of violence.

Related to the knowledge on whether there is some kind of device in the respondent's country that guarantees access to some kind of attention, the absolute majority says that there is in the case of boys and girls and women (around 90%).

But the percentages decrease significantly, to just over 50% in the case of the LGBT population (57,4%) and men (55,8%).

In addition, half of the caregivers who participated in the study answered that they do not know the legislation that regulates the actions of health professionals, compared to the cases of people or families who go through situations of violence (49%).

Only one third of the caregivers who completed the form answer that there are mechanisms in their country that promote community participation in dealing with situations of violence (32%); half answer that they do not know what they are (55%). It is worth noting that of the mechanisms that have been referred, most are those promoted by the community or by Primary Care (14%).

## 7) Training in culture of peace

Regarding the training to face the discussions and approach of the Culture of Peace, 91% of the respondents said that she is Insufficient and/or Inadequate. The last question was open and asked: "In his opinion the CULTURE OF PEACE is:", so that people could answer what they wanted. The word cloud below highlights the 80 most-mentioned words:



## Discussion

Although it was not a random sample, the participants of the survey, it can be considered that it was a sample that manages to represent the doctors and family doctors of the Ibero-American region either in terms of percentage distribution between the countries as gender.

Related to the gender, as well as in this research, it is now observed that most of the professionals in activity or undergraduate in medicine are female, which has been considered a trend in the region, as has been expressed in different studies.<sup>11-13</sup>

Regarding training to address violence at the undergraduate level, it was relevant that 82% of the respondents had no training in this field. It is also striking that 40% of the respondents have stated that the theoretical and/or practical training they eventually had was insufficient. These data are in accordance with other studies and show the seriousness of the situation, taking into account that violence is considered today one of the biggest health problems in the world.<sup>14-16</sup> Likewise, these and other studies indicate the need to improve the training of undergraduate students of Primary Care professionals in this subject.<sup>17-19</sup>

The numbers in relation to postgraduate training are more encouraging, but worrisome, considering that most, about 63% had no theoretical or practical training, or if they had was insufficient.

According to the perception of the majority of the respondents, the level of violence in the lives of people, families and communities was Very High or Extremely high (more than 60% in the country and more than 65% in the local job).

In the case of the communities, 70% answered that they would classify the level of violence as elevated to extremely high, considering their country and around 67% in their workplace.

These impressions are in accordance with the statistics about the different types of violence that we live in most of the Latin American countries, and that, as already seen, have to do with the great social and economic inequality and the multiple family, community, cultures that interact to create an environment that favors violence.

Related to the perception of gender violence, the result has also been impressive (67%) and women were the most cited (54%), as is often the case.

Meanwhile, related to violence against the LGBTI population, the percentages were lower - adding up to 45% - suggesting a lower perception, which is serious, once it is known that the levels of violence against this population are extreme. Men are listed first, followed by adolescents, in terms of this type of violence. In relation to the perception of Domestic Violence the percentages were very high and women and

children were the most cited. But in terms of structural violence (that maintained, promoted or facilitated by the State), the perception is lower, even if it is still high (54%). More relevant, still, is the fact that although there is a perception of structural violence, it is not diagnosed in health services, like the others.

As violence is a problem that has to do with social inequality, and structural violence has to do, just with the maintenance of inequality by part and action or inaction of the state, it seems that we have a subject that needs to be studied more and explored. Structural violence is one of the most perverse and affects all others. To not recognize structural violence is to have a very limited view of the problem of violence.

Another data that shows an important problem was the information of the respondents about the organization of the services for dealing with Violence: only half responds that it is organized, but, especially for women.

In relation to the LGBT population, domestic violence and structural violence, practically 100% of the professionals said that the services are not organized to address or deal with these problems. It is worth highlighting the serious problem about violence against the LGBT population in the region: The UN published a report in which the rate of violence against trans persons in the Americas was considered "extremely high".<sup>20</sup>

Regarding the motivation and training of respondents to address violence, the data are also worrisome: less than half feel trained and motivated to address violence at the individual, family or community level. But, among those who do not feel qualified, there is a difference in motivation for addressing community violence: a large part do not feel motivated for this type of approach.

One positive aspect is that most respondents report having other professionals on their team or with other professionals and with other institutions to address violence. Another positive element is that most of them answered that there is legislation in their country that regulates what should be done in front of people or families who go through situations of violence, especially the case related to children and women. But the percentages decrease significantly, in the case of the LGBT population and of men. But, although there is legislation, half answered that they do not know what the legislation is.

Only one third answered that there are mechanisms in their country that promote community participation in dealing with situations of violence and of those, half answered that they do not know what they are. It is worth noting that of the mechanisms that have been mentioned, most are those promoted by the community or by Primary Care.

Related to the Culture of Peace, it is observed that the majority (75%) of the surveyed population does not consider having received training in Culture of Peace issues. That could also be seen in the answers about what is the Culture of Peace: The response **I DON'T KNOW** was the most mentioned.

This result can be contrasted with a problem detected in the majority of health professionals' Curricula, where the contents related to the management of diseases are privileged over the contents related to the generation and maintenance of health. In this case it is observed how it is given greater importance, that in reality it is of reduced quality by the previous answers, to the theme of Violence and little is addressed the Culture of Peace.

The field of study of the family doctor is focused on working with individuals, families and communities, from a comprehensive perspective. It is worth noting that the person-centered model, inherent in the work of family and community medicine, arises in full connection with the humanist movement and the ethics of

care and is an ally for Family Physicians to promote the Culture of Peace and the Ethics of Care. It seeks an unrestricted commitment to the person, their context and, in particular, their dignity and autonomy. This is also the Spirituality, an ally of the Culture of Peace and the confrontation of violence. Spirituality is a dimension that crosses all these variables, renewing the health focus, which attempts to capture those areas of knowledge that have not been explicitly included in the policies and practices of conventional health systems. The scientific literature supports the incorporation of the approach to spirituality and religiosity of the person in health care.<sup>21</sup>

The formation of skills in spiritual care is an emerging issue in many universities worldwide.<sup>22</sup>

The spiritual care is not exclusive of the doctor but is part of the desirable competences in the whole professional and technical health team.

## Conclusions

Despite the presence of postgraduate training programs in Family and Community Medicine (MFyC) in the countries of the region, the appropriate approach to violence in training and professional practices seem to constitute an important gap that needs to be covered. Violence is a serious public health problem. Health systems, although based on PC, have not managed to appease their causes, considering that this is a complex problem, of social, political and economic plots. But violence only exists if it is allowed and practiced by individuals, families and communities, just as it is for peace. It can be thought that if it is the people, families and communities that produce acts of violence, they will be the ones that can produce acts of peace.

Just as the absence of disease does not guarantee health, it is hardly possible to build a Culture of Peace solely by discounting violence. Social welfare does not depend exclusively on the effective approach of the conditions that generate social unrest. This principle of positivist approach is repeated in the model of risk factors and protection factors, as well as in the field of health promotion, which emphasizes the need to strengthen those resources that protect, maintain and enhance health.

Another important factor related to the culture of peace is rehabilitation centered on the human being, that is, the possibility of effectively thinking about mechanisms that allow social inclusion and reintegration into society.

At this point, the regulation partially favors the ideology, but not its operation.

The conditions for peace need two processes of democratization: one at the micro level from the municipalities and another at the macro level, supra-state and in both the ethic of care<sup>23</sup> can be applied. This perspective, which covers the journey from the box to the global social fabric, invites education for a global citizenship. This does not mean homogeneity, but a feeling of need and mutual union that precisely lies in the differences that enrich us. From the perspective of a world citizenship, we should not have alien laws, which exclude, but hospitality<sup>24</sup> laws.

Family and community medicine knows about this multiplicity of contexts and can contribute, from a person-centered model and a “trans-box” care ethic to a Culture of Peace and the confrontation of violence.

In terms of Primary Care and Family Medicine, we identified some general measures needed:

1. The insertion of tools for the Family and Community Approach at postgraduate level is strategic for the MFyC to value and integrate the community, supporting its mobilization against violence and for the Culture of Peace.
2. The MFyC must be introduced in a longitudinal way in the undergraduate because it is the specialty that is in a strategic position to contribute to address violence and promote the Culture of Peace.
3. It is necessary to work from an intersectoral perspective to identify inequalities and plan more comprehensive actions, although the MFyC, from the perspective of the PC, has a role and makes a fundamental contribution to the construction of the Culture of Peace and the fight against violence.

Therefore the implementation in the short and medium term of the following recommendations are imposed:

1. Include necessarily in the undergraduate and postgraduate programs in Family Medicine theoretical and practical contents necessary and appropriate to each level of training, for the development of competencies (knowledge, skills, abilities and attitudes), including communication and family approach and community, which allows facing the diversity of violence in the context of professional practice.
2. Urge the authorities, in the areas of training and professional practice, to promote self-care and inner peace for families and communities for the construction and implementation of public and educational policies transversal to human development, focused on the Culture of Peace, from a human rights perspective in an intersectoral and transdisciplinary work.
3. Establish financing policies that encourage research to identify the protective and deteriorating factors linked to violence, promoting the empowerment of the population in peace issues, through participatory methodologies and tools to address the community scenario from Primary Care.

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## Research applied to the territory from Family Medicine

Investigación aplicada al territorio desde la Medicina Familiar

*Pesquisa aplicada ao território desde a Medicina Familiar*

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### Abstract

In the context of the pre-summit and the VII Ibero-American Family Medicine Summit, held in Cali, Colombia on March 13 and 14, 2018, the research group and the Ibero-American Family Medicine Network (IBIMEFA) with the objective of identifying the perceptions of family doctors graduated and in process of formation of Ibero-America, on the conditions they have to develop applied research to the territory, carried out an exploratory, descriptive, cross-sectional study in the member countries of the Ibero-American Confederation of Family Medicine (CIMF). For the collection of information, a survey was designed with 51 items, whose content was validated by the working group. The instrument was stored in Google Drive and its dissemination through virtual media. A response was obtained from 277 people, representatives from 16 countries of Ibero-America in which it was found that there is interest and potential within the group of the IBIMEFA Network, to carry out studies with the research focus applied to the territory, although time difficulties must be overcome and funding to achieve it, as well as finding strategies that allow cooperative work to consolidate the Network.

**Keywords:** Family Practice; Health Determinants; Territory; Research

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## Resumen

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En el contexto la VII Cumbre Iberoamericana de Medicina Familiar, efectuada en Cali, Colombia el 13 y 14 de Marzo de 2018, el grupo de investigación y la Red Iberoamericana de Medicina Familiar (IBIMEFA) con el objetivo de Identificar las percepciones de médicos familiares graduados y en proceso de formación de Iberoamérica, sobre las condiciones que tienen para desarrollar investigación aplicada al territorio, realizaron un estudio exploratorio, descriptivo, de corte transversal en los países miembros de la Confederación Iberoamericana de Medicina Familiar (CIMF). Para la recolección de información, se diseñó una encuesta con 51 ítems, cuyo contenido fue validado por el grupo de trabajo. El instrumento se almacenó en Google Drive y su divulgación se efectuó a través de medios virtuales. Se obtuvo respuesta de 277 personas, representantes de 16 países de Iberoamérica en los que se encontró que existe interés y potencial dentro del grupo de la Red IBIMEFA, para realizar estudios con el enfoque de investigación aplicada al territorio, aunque se deben superar dificultades de tiempo y financiación para lograrlo, así como encontrar estrategias que permitan hacer un trabajo cooperativo que consolide la Red.

**Palabras clave:** Medicina familiar y Comunitaria; Determinantes sociales; Territorio; Investigación

## Resumo

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No contexto da pré-cúpula e da VII Cúpula Ibero-Americana de Medicina de Família, realizada em Cali, Colômbia, em 13 e 14 de março de 2018, o grupo de pesquisa e a Rede Ibero-Americana de Medicina Familiar (IBIMEFA) com o objetivo de identificar as percepções de médicos de família formados e em processo de formação da Ibero-América, sobre as condições que têm para desenvolver pesquisa aplicada ao território, realizaram um estudo corte-transversal, descritivo, e exploratório, nos países membros da Confederação Iberoamericana da Medicina Familiar (CIMF)). Para a coleta de informações, foi elaborada um questionário com 51 itens, cujo conteúdo foi validado pelo grupo de trabalho. O instrumento foi armazenado no Google Drive e sua divulgação foi feita através de mídia virtual. Foi obtida resposta de 277 pessoas, representantes de 16 países da Ibero-América e se verificou que há interesse e potencial dentro do grupo da Rede IBIMEFA, para realizar estudos com o foco de pesquisa aplicada ao território, ainda que se deva superar dificuldades relacionadas ao tempo e ao financiamento para conseguir realiza-la, bem como encontrar estratégias que permitam o trabalho cooperativo para consolidar a Rede.

**Palavras-chave:** Medicina de Família e Comunidade; Determinantes Sociais; Território; Pesquisa

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## Introduction

The strengthening of research in Family and Community Medicine has been one of the axes of work in all the summits convened by the Ibero-American Confederation of Family Medicine (CIMF).<sup>1,2</sup> On the occasion of the VII Ibero-American Summit - “Forty Years of Alma-Ata. Family Medicine and Family Health - A Path for Peace” in Cali-Colombia (2018), *the concept of Research applied to the territory was integrated* as one of the six topics under analysis. The topic is new and it is not clearly defined, although it can be characterized as giving relevance to the territorial context and the population in different social processes, including health. Initially, in order to have a conceptual background that allows readers a similar understanding of the term “Territory”, some definitions related to the subject are exposed.

Territory is understood as the geographic space that has limits and identity, politico-administrative dimensions.<sup>3</sup> Natural and social subsystems that modify one to another coexist in them.<sup>3</sup> On the other hand, the social determinants in health are “the circumstances in which people are born, grow up, live, work and get old, including the health system”.<sup>4</sup> Relating these two concepts, it is expected that beyond geographical dimensions, the subject-object interaction is recognized, the relation of the health-disease dimension, as well as the interactions of the social determinants of health with the territory.<sup>3-5</sup> In this way, applied research to the territory poses the challenge of defining problems, objectives, methodology, data collection and analysis that allow us to document this relation. Ideally research should seek to develop these processes with the community in order to allow the empowerment of their territory and recognize the transforming nature of the reality that all interventions entails and their commitment with life care.



Taking into account this broad concept of territory that includes the conditions of life and of course the sum of these as a fabric within which there are inequalities and inequities that affect the health of individuals, families and communities,<sup>6</sup> the family doctor must recognize these contexts for the development of models of attention, management and participation of the community. The valuation of studies oriented to the territory and the context can deepen the analysis from an integral (biosychosocial) approach and encourages us to overcome the barriers to research from this perspective.<sup>7</sup>

### **Relation between Family and Community Medicine and the population and territory contexts**

Primary Health Care (PHC), understood as a strategy “to organize health care systems and society”<sup>8</sup> includes not only health services, but also intersectoral work and community participation. Within the characteristics of the organization for the implementation of PHC,<sup>9,10</sup> one must have a resolute entrance door where the main stage of action of the specialist in family medicine is; on the other hand, as well as Anderson et al.<sup>11</sup> expressed in the framework of the V Ibero-American Family Medicine Summit:

*“Family doctors are specialists in the provision of personalized and continuous health care, focused on the person, regardless of age, sex or condition, integrating the physical, psychological, social, cultural and existential factors involved in the health-disease process. They provide care to individuals according to their family, community, and cultural context, and have a professional responsibility for their community. They play their role in promoting health, preventing illness and providing care, clinical accompaniment, palliative care, and do so according to health needs and resources available in the community. They must still be responsible for the development and maintenance of their personal skills, values and balance, as a basis for the provision of effective and safe care. Primary Health Care (PHC) is the fundamental field of action of the Family Physician, while Family Medicine is the key tool for the full development of PHC.”<sup>11</sup>*

Barbara Starfield has defined *some* characteristics that must be met by the entry door of the *health* system, to be coherent with a service organization based on APS<sup>10</sup> that includes four essential attributes: first contact, continuity, integrality (or extension) and coordination; and three secondary attributes are the family focus, community orientation and cultural competence.<sup>12</sup> These characteristics are coherent with the concept expressed by Anderson et al.<sup>11</sup> on the way of acting of family doctors, in which they relate the person-centered service with the family, community and cultural context and the professional responsibility for their community.

Thus, the concern about the possibilities that the specialist in family medicine can have to carry out research applied to the territory shows up and how it can be related to three areas in which these professionals operate, such as: clinical, management and human talent training.

### **General purpose**

Identify the perceptions of graduated family doctors and in process of formation of Ibero-America, on the conditions they have to develop applied research to the territory.

## Method

To achieve the proposed objective, an exploratory, descriptive, cross-sectional study was conducted in which family doctors (graduated and in-training) from the member countries of the Ibero-American Confederation of Family Medicine (CIMF).

The data collection was carried out between January 01 and 31, 2018, by a self-administered online survey tool, designed by researchers and with the contents validated by the working group, collecting 51 items grouped as follows:

- First group; eleven items aimed to establish demographic data of the respondents.
- Second group; seven items aimed to establish the capacity that the group can have to participate in research.
- Third group; seventeen items aimed to establish within the group the relation of their clinical practice with the determinants of health and clinical research that relates the information of the clinical practice of the family physician with the biopsychosocial approach that the specialty does.
- Fourth group; nine items aimed to establish the population ascription and responsibility of specialists in family medicine as an indirect way of looking at the possibility of conducting health management research.
- Fifth group; seven items aimed to relate practical training experiences from a biosychosocial approach, which allows inferring training in applied research in the territory.

The questionnaire was edited in Google Drive and its dissemination was done through email and social networks of family doctors representing the twenty countries that integrate the CIMF. The univariate statistical analysis was performed through SPSS version 25.0. The conclusions and recommendations were consolidated during the VII Summit.

## Results

### 1. Characteristics of the respondents

The response of 282 respondents was obtained, 5 surveys that reported level of undergraduate training or training in another field different from family medicine were excluded. The remaining 277 were family doctors (graduates and in-training), representing 16 countries of the Ibero-American region: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, Spain, Mexico, Panama, Paraguay, Peru, Dominican Republic, Uruguay and Venezuela (Table 1). According to their origin by subregions of the CIMF, they were distributed as follows: Andean Region 147 (53.06%), Southern Cone 72 (25.99%), Mesoamerica 57 (20.57%) and Iberian Peninsula 1 (0.4%). The number of collaborators per country was very dissimilar. On the one hand, Colombia registered 36.8% of respondents, followed by Mexico and Chile, around 10.5% each, while Spain, Panama and Cuba had less than 1% participation, followed by Paraguay, Peru and the Dominican Republic with less than 2%. In the remaining countries, the contribution ranged from 3.5% to 7.1%.

**Table 1.** Characteristics of the respondents: Country of residence, age and sex.

	Participants	
	No.	%
<b>Country of origin</b>		
Argentina	20	7.2
Bolivia	20	7.2
Brazil	9	3.2
Chile	29	10.5
Colombia	102	36.8
Costa Rica	15	5.4
Cuba	2	0.7
Ecuador	10	3.6
Spain	1	0.4
Mexico	29	10.5
Panama	1	0.4
Paraguay	5	1.8
Peru	5	1.8
Dominican Republic	5	1.8
Uruguay	14	5
Venezuela	10	3.6
Total	277	100
<b>Age</b>		
25-29	25	9.02
30-34	67	24.1
35-39	71	25.63
40-44	41	14.8
45-49	22	7.9
50-54	24	8.7
55-59	16	5.8
60-64	11	4.0
Total	277	100
<b>Gender</b>		
Male	92	33.2
Female	184	66.4
Other	1	0.4
Total	277	100

Source: Survey of the authors.

The ages of the participants were between 25 and 64 years old, with an average of 34.63 and 36 years of mode. 50% of the respondents were in the group of 30 to 39 years old. The participation of people of the female gender predominated (66.4%). There was considerable participation of residents (17%), which are included in the data analysis, considering that they are medical professionals working in the PHC, and that despite being in formation, they are in contact with the community, the systems of health and carry out research in the territory (Tables 1 and 2).

**Table 2.** Characteristics of the respondents: Professional role, level of training.

	Participants	
	No.	%
<b>Professional role</b>		
Assistance	86	31
Administrative	11	4
Teacher	19	6.9
In training	47	17
Teaching/researcher	4	1.4
Assistance, Administrative.	13	4.7
Assistance/teacher	63	22.7
Assistance/Teacher/Lawyer	32	11.5
Others	2	0.8
Total	277	100
<b>Level of education</b>		
Family Doctor	230	83.0
Resident	47	17.0
Total	277	100

Source: Survey of the authors.

In relation to the professional role played by the respondents (Table 2), 41.9% selected an exclusive role, being distributed as follows: 31% care, 4% administrative and 6.9% teaching. On the other hand, we found 40.3% of doctors with mixed roles, among which the care/teacher stands out with 22.7% and 11.5% who exercises the three roles of care/teaching/administrative. When the exclusive and mixed roles were added, the care role prevailed with 70%, followed by the teacher with 42.2% and the administrative with 19.9%. The investigative role was only reported by 1.4% of the participants and they came from Argentina, Colombia, Mexico and Uruguay.

Among those who answered the survey, 62% answered being linked to the scientific society of their country, of which 7% are also part of another national or international scientific society. 53% of the respondents only speak the Spanish language; 43% have some proficiency in English and 10 in Portuguese. Only 2.8% reported proficiency in the use of native languages.

Regarding training in the field of research methodology (Table 3), the one obtained through non-formal training (37.5%) prevails as courses, diplomas, seminars among others, followed by the training obtained during undergraduate and specialty (43.7%), master's degrees (10.5%) and PhD (3.6%). 72.9% of the respondents reported that they have less than five years of experience in research, of which 34.7% have less than one year of experience. It is important to note that 7.9% said they had more than 15 years of experience. Regarding its role in research, of the 277 respondents, 18.4% answered that they only have the experience generated in their undergraduate program or that they have not participated in research activities in the last twelve months (Table 3). From the total of respondents (36.1%), researchers and teachers in research are considered 18.8%. The perception of the researcher in training stands out at 26.7%.

**Table 3.** Characteristics of the respondents: Type of training, years of experience and role in research.

	No	%
<b>Type of training</b>		
Degree-courses-seminars	104	37.5
Undergraduate and postgraduate training of MF	121	43.7
Training in some additional specialty	13	4.7
Masters	29	10.5
PhD	10	3.6
Total	277	100
<b>Years of experience</b>		
Less than 1 year	96	34.7
1 to 5	117	42.2
6 to 10	29	10.5
11 to 15	13	4.7
More than 15	22	7.9
Total	277	100
<b>Role in the research</b>		
With experience in undergraduate	41	14.8
Does not participate in the last 12 months	10	3.6
Professor in research	52	18.8
Researcher in training	74	26.7
Researcher	92	33.2
Career researcher	8	2.9
Total	277	100

Source: Survey of the authors.

Regarding the type of research in which they have participated, 43% report having participated in descriptive research, 33% in qualitative research, 16% in analytical research and 3% in experimental research. 76% of respondents had participated in more than one of these types of research.

On the other hand, we also explored information about the hours dedicated to research, finding that 10% of respondents spent 10 hours or more per week on research and there were people who reported having more than 10 publications in the last 10 years.

## 2. Opinion or perception about the conditions that would allow participating in research in the territory in Ibero-American countries

In this section we gathered the perception of how to integrate the actions of the specialist in family medicine, in which it requires not only relating to the individual, but also understanding the conditions of life within a context of inequalities and inequities in the territories that they inhabit.

The question asked: *“In your practice as a specialist in family medicine; the place of work and the organization to provide the service facilitates that in your clinical approach it integrates:* “The options included categories of the social determinants of health, and that these are both integrated into medical

care (Table 4). When taking into account those who agree or totally agree with this item, 67.1% consider that there are facilities for the integration of socioeconomic, environmental and cultural conditions in the medical act; 69.3% reported that family and social contexts are integrated into the clinic; 61.7% said that social determinants such as unemployment, work, housing, agriculture and food are integrated into the clinic and for 51.8% the physical environment, leisure and culture, social services and health care can be integrated into the clinic.

**Table 4.** Integration of determinants of health in clinical care.

Is there an integration between the following determinants of health and clinical care?												
Social determinants	Strongly agree		Agree		Indifferent		In disagreement		Strongly disagree		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
Socio-economic environmental and cultural conditions	61	22.0	125	45.1	16	5.8	34	22.0	41	14.8	277	100
Family and social contexts	84	30.3	108	39.0	21	7.6	21	7.6	43	15.5	277	100
Unemployment, work, housing, agriculture and food	64	23.1	107	38.6	30	10.8	39	14.1	37	13.4	277	100
Physical environment, leisure and culture, social services, health care	58	20.9	103	37.2	32	11.6	40	14.4	44	15.9	277	100

Source: Survey of the authors.

In relation to “...if the organization of services facilitates the clinical integration with the habits of life and work”, analyzing those who responded in agreement or totally in agreement, 73.29% perceive that the clinical relation with the life habits (food, alcohol, tobacco, drugs, sleep) is facilitated; 59.57% consider that the organization of services facilitates the clinical integration with the support and community networks; 71.84% estimated that the organization of services facilitates clinical integration with the *personal characteristics of individuals* (age, sex, genetic inheritance) (Table 5).

**Table 5.** The organization of health services and the factors that facilitate clinical integration.

Is there a relation between the organization of services and the ease of integration of the following determinants of health in the clinic?												
Determinants of health	Strongly agree		Agree		Indifferent		In disagreement		Strongly disagree		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
Habits of life (food, alcohol, tobacco, drugs, sleep)	87	31.41	116	41.88	15	5.42	18	6.50	41	14.8	277	100
Support and community networks	55	19.86	110	39.71	38	13.72	38	13.72	36	13.0	277	100
Individual factors (age, sex, inheritance genetics)	84	30.32	115	41.52	19	6.86	18	6.50	41	14.8	277	100

Source: Survey of the authors.

It should be noted that 50% of respondents perceive that there is information on research related to health determinants, family, social and community contexts as part of the comprehensive approach. However, 52.63% consider that although there are policies in this area, they are not enough to support the execution of research aimed at social determinants or territories. It is noteworthy that only 30.3% of respondents have the perception that current policies in their countries support these investigative processes; In fact, the perception of the population surveyed of little to no support in this type of research is predominant in countries such as Bolivia (70%), Mexico (55%), Venezuela (90%), Paraguay (90%) and Colombia (55%).

Regarding the perception of factors that influence the strengthening of research that relates the determinants of health with the clinic, 51.27% strongly agree and agree that there are obstacles, only 36.46% agree or strongly agree that there is interest in carrying out this type of research (Table 6). Faced with the perception of factors that can influence the strengthening of research processes, it is found that 37.19% strongly agree and agree that there are groups aimed at this type of research in their respective countries.

**Table 6.** Perception of factors that influence the strengthening of research.

Influential factors	Strongly agree		Agree		Indifferent		In disagreement		Strongly disagree		Total	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
Obstacles to research	35	12.64	107	38.63	50	18.05	58	20.94	27	9.75	277	100
Interest in conducting research	18	6.50	83	29.96	62	22.38	87	31.41	27	9.75	277	100
Identifiable research groups	15	5.42	88	31.77	57	20.58	84	30.32	33	11.91	277	100

Source: Survey of the authors.

### 3. Family Medicine in the territory and health management

The perception of the existence of population ascription is mainly by political-administrative divisions, with an average of 40% for all countries, as well as the ascription by assurance of public-private entities that averages 35% (Table 7). However, there is an important perception that there is no population ascription, close to 20% on average. The perception of ascription by the political-administrative divisions is greater in Argentina, Brazil, Costa Rica, Cuba, Ecuador, Spain, Panama and Uruguay. The perception of ascription by assurance predominates in Bolivia, Colombia, Mexico and Peru. In Venezuela, the perception prevailed that there is no population ascription. This perception also had at least 20% or more in countries such as Bolivia, Colombia, Ecuador and Uruguay (Table 7).

### 4. Family Medicine in the territory and health management

Regarding the training, it was asked if the *training experiences for specialists in family medicine allow them to develop an integral, biopsychosocial, family and community approach*. In 85% of the respondents, the predominant perception was that it does allow for a comprehensive biopsychosocial approach, with slight variations between the different countries, only Mexico and the Dominican Republic were below 65% (Table 8). It was also questioned whether the *formative experiences (practice scenarios) facilitate this understanding*. In the region, the perception prevails that training does allow them to understand the context

**Table 7.** Perception of the type of population ascription.

Country	Total	Do not know/No answer		Assurance		Cultural distribution		Political-administrative divisions		There is no population ascription	
		N°	%	N°	%	N°	%	N°	%	N°	%
Argentina	20	2	10	1	5	2	10	13	65	2	10
Bolivia	20	0	0	10	50	0	0	6	30	4	20
Brazil	9	0	0	0	0	0	0	9	100	0	0
Chile	29	1	3	1	3	1	3	24	83	2	7
Colombia	102	3	3	56	55	1	1	11	11	31	30
Costa Rica	15	0	0	2	13	0	0	13	87	0	0
Cuba	2	0	0	0	0	0	0	2	100	0	0
Ecuador	10	0	0	1	10	1	10	6	60	2	20
Spain	1	0	0	0	0	0	0	1	100	0	0
Mexico	29	0	0	16	55	1	3	7	24	5	17
Panama	1	0	0	0	0	0	0	1	100	0	0
Paraguay	5	1	20	0	0	2	40	2	40	0	0
Peru	5	0	0	3	60	0	0	2	40	0	0
Dominican Republic	5	0	0	2	40	1	20	2	40	0	0
Uruguay	14	0	0	2	14	0	0	9	64	3	21
Venezuela	10	0	0	2	20	0	0	2	20	6	60
Total	277	7	3	96	35	9	3	110	40	55	20

Source: Survey of the authors.

of the population and the territory in 57% of the cases, an opinion that prevailed in Argentina, Bolivia, Brazil, Chile, Costa Rica, Cuba, Ecuador, Spain, Paraguay, Uruguay and Venezuela. The countries that did not have this perception were Panama, Peru and the Dominican Republic. In Colombia and Mexico opinions were divided (Table 8).

## Discussion and Conclusions

This is an exploratory research that continues a process that CIMF has followed through the different Summits, with their respective working groups (including IBIMEFA), with which they have sought to encourage the development of research networks and researchers of high level in the field of Family Medicine.<sup>13,14</sup>

Regarding the participation in the survey and the characteristics of the group, the following can be commented:

It was an open survey and it is important to mention that the participation of specialists in family medicine improved with respect to the 114 participants reviewed by Serrudo and others<sup>14</sup> in 2016. Most of the respondents have experience in research, as part of their functions as trainers in the specialty of family medicine and are linked in their work to universities; only 14.1% have master's and PhD degrees.

In the research of Fernández and others, they point out the difficulty of researching in Latin America, in 2011 the region had 3.8% of the full-time researchers of the world.<sup>12</sup> This proportion has not changed much, despite the increase in the global budget for research, in 2015 it oscillated at 3.9% and was financed mostly by universities. Investment in science and technology in Latin America is concentrated in three countries: Brazil, with 64%; Mexico, 17%, and Argentina, 7%.<sup>15</sup>



**Table 8.** Training experiences and development of competencies in integral approach.

Training experiences for specialists in family medicine allow them to develop an integral, biopsychosocial, family and community approach?									
Country	Total	The training allows comprehensive approach biopsychosocial				The training allows to understand the population in context with its territory			
		NO		Yes		NO		Yes	
		No	%	No	%	No	%	No	%
Argentina	20	0	0	20	100	7	35	13	65
Bolivia	20	1	5	19	95	7	35	13	65
Brazil	9	1	11	8	89	2	22	7	78
Chile	29	2	7	27	93	11	38	18	62
Colombia	102	19	19	83	81	49	48	53	52
Costa Rica	15	0	0	15	100	5	33	10	67
Cuba	2	0	0	2	100	0	0	2	100
Ecuador	10	0	0	10	100	4	40	6	60
Spain	1	0	0	1	100	0	0	1	100
Mexico	29	11	38	18	62	15	52	14	48
Panama	1	0	0	1	100	1	100	0	0
Paraguay	5	1	20	4	80	1	20	4	80
Peru	5	1	20	4	80	4	80	1	20
Dominican Republic	5	2	40	3	60	4	80	1	20
Uruguay	14	3	21	11	79	4	29	10	71
Venezuela	10	1	10	9	90	4	40	6	60
Total	277	42	15	235	85	118	43	159	57

Source: Survey of the authors.

In the survey, 76.9% reported having less than five years of experience in research and 26.7% were identified as researchers in training, which implies that the group has the potential to improve in this regard. There is a need to increase and improve training in research during residency and of formal researchers in the areas of Family Medicine and PHC, who can develop research in high-level territory and not only as training practices in research through the thesis of grade. Effective strategies must be promoted to improve the competences in this area for postgraduates, through continuous training and education programs, pre or trans congress research activities or even research internships referred by Serrudo and collaborators.<sup>14</sup> The fact that there are people in the group with more than 10 publications in the last decade is a strength, which may be related to the increase in publications observed in family medicine in recent years.<sup>13</sup>

Regarding the perception of the organization of health services in different countries, it allows the articulation of the determinants of the health of the population to the clinical, management and training roles of the family doctor. The perception was that around three quarters of the doctors (73.29%), considered that the clinical practice can be related to the determinants of health, mainly in relation to life habits (food, alcohol intake, tobacco, drugs, sleep) and 71.84%, with the personal characteristics of the individuals (age, sex, genetic inheritance). These findings are worrisome, since it would be expected that one hundred percent of family doctors have the perception (and skills) that social determinants cannot only be related to clinical practice, but should be integrated into the mentioned integral approach, biopsychosocial, holistic, etc., that

the family doctor performs, since it is part of the essential profile that cannot be lost. It will be interesting to deepen the characteristics of the training profile and the countries of origin of the professionals who did not consider it possible, in any case, to recommend some type of compensatory training activity for these deficiencies. On the other hand, these results also allow us to glimpse a potential to carry out research aimed at understanding better how family doctors can approach and impact the determinants of health and relate them to the territory.

It is possible that the perception of non-ascription of the population fixed by insurance, geographical area, affinity or by whatever mechanism, in addition to the lack of continuity of care for the same reason; they are limiting for the realization of investigation in territory. In addition to the limitations that a disorganized health model can entail and that is not generally based on Family Medicine or Family Health. The perception of the existence of these barriers to carry out research gives a clear idea of the effort involved in transforming this reality in many countries of the region.

In the work of Fernández and others, it is mentioned that there are three important limitations for conducting research in Latin America: lack of funding, the non-participation of family medicine as it is not considered as a subject in some countries and finally, the perception that research in family medicine has low impact, does not generate patents, innovations in pathologies of high economic impact, etc.<sup>13</sup> In this sense, the majority of respondents reported experiences in descriptive (43%) and qualitative (33%) research that are often considered low impact and very few in analytical (16%) and experimental (3%) research that have a better consideration.

The potential in the group and the identification of the limitations in the context, the importance of the contribution that our specialty can make to the research in the territory encourages us to continue exploring questions that arose in the working groups convened by CIMF during the VII Iberoamerican Summit of Family Medicine in Cali, Colombia and do not falter in efforts to achieve cooperative works that solve doubts such as the following: what clinical investigations can we perform that distinguish us and identify the integral conception of our specialty? How can we highlight the importance of population ascription for the management of resources in the territories in charge of the health teams? How can we improve the training experiences in this type of research for students? Are family doctors really empowered and can they contribute to research in the territory from family medicine?

During the analysis tables held during the VII Summit convened by CIMF, regarding the situational diagnosis presented in this document, the representatives of the participating countries determined by consensus to make the following general recommendations to promote research in the territory from the perspective of Medicine Family:

1. Contribute to the strengthening of the IBIMEFA Network for the integration of researchers from the Region, as well as in the identification and dissemination of training opportunities; financing; generation of information and periodic meetings for specific protocols.
2. Improve the communication channels of the theses/grade assignments/field work carried out by the students/residents for knowledge of the Region, in order to monitor the results and knowledge on the research applied to territory and establish thesis/research repositories and databases to define research lines.

3. Encourage and promote clinical and epidemiological research with a differential factor, with foundations and principles of family medicine (use of tools of Health and Family Medicine) and resume contact with the subgroups of previous summits, as well as with the coordinators of groups of the IBIMEFA Network, identifying concrete financing possibilities.

## Limitations

The sample is not significant, however it denotes an increase in the participation in this type of surveys carried out in the Ibero-American Summits of Family Medicine and allows an approach to the interest and possibilities that we have on the subject. The registered perceptions have an important qualitative value since it is the first time that this topic is explored relating the concept of research in the territory and family medicine. It also expands the information available on family medicine in its relation to research in the territory and constitutes a baseline for the work to be carried out by the ICPM. The majority participation of Colombia, host country of the Summit, and therefore, with greater participation (36.5%), can bias the information to concepts that predominate in that country. The data recorded have internal validity for the group of people who completed the survey. Within the possibilities of improvement, is to promote that this type of information is valuable, so we must achieve a more meaningful participation of all the countries of the region and be more precise in the variables we want to study. This type of descriptive work can only show its worth as long as it has continuity to be able to compare its evolution over time.

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## Economic Impact of Family Medicine on Health Systems in Ibero-America

Impacto Económico de la Medicina Familiar en los Sistemas de Salud de Iberoamérica

*Impacto Econômico da Medicina de Família nos Sistemas de Saúde na América Latina*

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### Abstract

There are few researches that address the economic and sanitary importance of the organizational model of a level of care or of the presence of certain professionals. The aim of this descriptive and transversal study is to explore and analyze the possible associations between the specialty of family medicine and economic and sanitary indicators in 16 countries of Ibero-America. The data processing was carried out through the program R, a programming language that shows "a set of functions that maintain some type of relation between them". It seems that there is a positive association between the number of specialists in family medicine with GDP, investment in health and life expectancy and in negative with the GINI index, anemia, mortality in children under 5 years, maternal mortality ratio and in traffic accidents. The GDP per capita is negatively related to anemia, mortality in children under 5 years of age, maternal and accident mortality ratio, and less intensely with cardiovascular mortality and suicide. There are no correlations between pocket expenses or investment in healthcare. Despite the different health and social realities of the countries studied, a favorable relation is found between the availability of specialists in Family Medicine and better health results, which suggests that it can be an efficient strategy for health services. More studies are necessary to analyze the statistical scope of this association.

**Keywords:** Family Medicine; Primary Health Care; Efficiency; Health Economics

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As it is a review without patient participation, no approval was requested from the Research Ethics Committee. The authors declare that the procedures followed were carried out in accordance with the ethical standards of the World Medical Association and the Declaration of Helsinki.

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## Resumen

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Son escasos los estudios que abordan la importancia, económica y sanitaria, que tiene el modelo organizativo de un nivel asistencial o la presencia de determinados profesionales. El objetivo del presente estudio, de carácter descriptivo y transversal, fue explorar y analizar las posibles asociaciones entre la especialidad de medicina familiar e indicadores económicos y sanitarios en 16 países de Iberoamérica. El procesamiento de datos fue realizado a través del programa R, un lenguaje de programación que muestra “un conjunto de funciones que mantiene algún tipo de relación entre ellas”. Se observa una asociación en positivo, del número de especialistas de medicina familiar con el PIB, la inversión en salud y la esperanza de vida y en negativo con el índice GINI, la anemia, la mortalidad en menores de 5 años, la razón de mortalidad materna y la mortalidad en accidentes en tránsito. El PIB per cápita se relaciona negativamente con la anemia, la mortalidad en menores de 5 años, razón de mortalidad materna y por accidentes y menos intensamente con la mortalidad cardiovascular y el suicidio. No se observan correlaciones con el gasto de bolsillo o la inversión en sanidad. A pesar de las diferentes realidades socio sanitarias de los países estudiados se objetiva una relación favorable entre la disponibilidad de especialistas en Medicina Familiar y mejores resultados en salud lo que sugiere que puede ser una estrategia eficiente para los servicios sanitarios. Son necesarios más estudios que analicen el alcance estadístico de esta asociación.

**Palabras clave:** Medicina Familiar; Atención Primaria; Eficiencia; Economía de la Salud

## Resumo

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São poucos os estudos que abordam a importância, econômica e a sanitária, que tem o modelo organizacional de um nível de atenção ou a presença de determinados profissionais. O objetivo do presente estudo, de caráter descriptivo e transversal, foi explorar e analisar as possíveis associações entre a especialidade de medicina de família e indicadores econômicos e de saúde em 16 países da Ibero-América. O processamento de dados foi realizado através do programa R, uma linguagem de programação que mostra “um conjunto de funções que mantém algum tipo de relação entre elas”. Existe uma associação positiva em relação ao número de especialistas em medicina de família com o PIB, investimento em saúde e expectativa de vida e em negativo com o índice GINI, anemia, mortalidade em crianças menores de 5 anos, a razão de mortalidade materna e mortalidade em acidentes em trânsito. O PIB per capita está negativamente relacionado à anemia, mortalidade em crianças menores de 5 anos, taxa de mortalidade materna e por acidentes e menos intensamente com mortalidade cardiovascular e o suicídio. Não se observaram correlações com despesas reembolsáveis ou investimentos em assistência médica. Apesar das diferentes realidades sociais e de saúde dos países estudados, uma relação favorável é encontrada entre a disponibilidade de especialistas em Medicina de Família e melhores resultados em saúde, o que sugere ser esta uma estratégia eficiente para os serviços sanitários. Mais estudos são necessários para analisar o escopo estatístico desta associação.

**Palavras-chave:** Medicina de Família; Atenção Primária; Eficiência; Economia da Saúde

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## Introduction

The World Health Organization (WHO) in its World Health Report 2003 states that a health system based in primary care should incorporate the principles of the Alma Ata Declaration of “Equity, Universal Access, Community Participation and Intersectoral Action”. It should take into consideration general sanitary issues of the population scope and will organize an integrated assistance that will connect prevention, care for the acutely ill and care for the chronically ill in all elements of the health system; it will continually assess the situation to try to improve performance”.<sup>1</sup> However, today, 40 years later, primary care has not reached any country or sufficient development or the proposed objectives.

The challenges faced by sanitary systems throughout the world and specifically in the Ibero-American scope are formidable. The most important challenge is to adequate health services to the needs of citizens, which requires reducing inequalities in health results and, while ensuring sustainability, also seeking to increase the financing of health systems.<sup>2</sup>

These challenges obligate us to deepen the rigorous economic analysis by incorporating into the sanitary world economic instruments and indicators that compare the product of health services with its

costs. This results in cost-effectiveness, cost-benefit and cost-utility analysis of the interventions, which facilitate a better allocation of resources and therefore serve as a basis for accounting and evaluating the cost of the provisions, planning decision-making and analyzing the financing of health systems. There are several mechanisms and several types of economic analysis useful for the measurement of economic impacts, such as direct costing, default, absorption, normalized real, integrated real and ABC, among others. Each of these, however, can present great differences for the same illness or benefit; even if common age groups are analyzed, the variations can be very broad.<sup>3</sup>

Most of the studies related to economic evaluations have been carried out in specific processes or specific activities, so analyzing the economic implication of a level of care in a given health system is a complex process with indirect variables. An exploratory study was carried out on the association that Family Medicine (FM) specialists have in the health systems of the countries part of the Ibero-American Confederation of Family Medicine.

In previous studies, other authors such as B. Starfield and J. Macinko<sup>4,5</sup> in the United States (USA) demonstrated that the provision of primary care physicians was associated with better health results, in all-cause mortality, cancer, heart disease, stroke and infant mortality. It was also showed that in Europe, the GDP and the number of family doctors was associated independently, with reductions in the potential years of life lost and with mortality from all causes.<sup>6</sup>

## Methods

This is a descriptive and cross-sectional study that explores the relation between health and economic indicators with the presence of family medicine specialists in the health systems of 16 countries in Ibero-America.

Based on the availability of indicators and reports from WHO<sup>1</sup> from the Ministries of Health of the different countries, evaluations of Scientific Societies, Eurostat<sup>7</sup> and the World Bank,<sup>8</sup> the following were elected:

### Macroeconomic Indicators

**Gross Domestic Product (GDP).** It is the most relevant indicator to measure the economic activity and the economic evolution of a country and also serves as a reference to compare the economic situation of the country with the region. The percentage of the GDP destined for Health in each country is also included.

**GINI index.** It is the most widely used indicator worldwide to measure inequality of income (and for any other type of inequality). It can oscillate between the 0 (zero) that expresses the perfect equality and the value of 100 (a hundred) for the maximum possible inequality.<sup>9</sup>

**Pocket expense.** It is considered as such the disbursement made by the families in the last year for medical attention, medicines, complementary tests, etc.

## Sanitary Indicators

- Number of Family Physicians per 100,000 inhabitants.
- Expectation of life or life expectancy.
- Tracer Diseases. For the Pan-American Health Organization (PAHO) there are tracer diseases that may be representative of the health level of a country. They are the following: prevalence of anemia in children under 5 years of age, maternal mortality ratio (number of maternal deaths per 100.00 live births); mortality rate in children under 5 years, mortality from cardiovascular diseases and mortality due to suicide and traffic accidents.

The relation between the economic indicators, the health indicators and the FM availability indicator for 16 countries members of the CIMF were explored: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Spain, Mexico, Nicaragua, Panama, Peru, Portugal, Paraguay and Uruguay.<sup>6</sup> The data correspond to the year 2015, being this the last year with complete data for all countries. The statistical processing was carried out with the programming language and R statistical analysis (R Core Team, 2017).<sup>10</sup> R is a programming language that is equipped with a set of tools for the calculation and generation of statistical graphs that show “a set of functions that maintain some type of relation between them”.

As it is a review without patient participation, no approval was requested from any Research Ethics Committee. In any case, the procedures followed were carried out in accordance with the ethical standards of the World Medical Association and the Declaration of Helsinki.

## Results

Table 1 includes 12 indicators that can allow us to compare the sanitary and economic situation among the different countries.

Before proceeding to the analysis of Figure 1, it is important to clarify that the size of the circle, the color and its intensity mark the relation between variables. And so the blue color indicates a direct relation and the red color indicates an inverse relation. The larger the circle, the greater the association, as well as the intensity of the color (the more intense the greater the relation). It is possible to see how the size of the circle, the intensity of the color and in this case the blue color are maximum when comparing the same variables (MF with MF, GDP with GDP, etc.). Considering the exploratory nature of this study and the methodological difficulties involved with this type of research, we evaluate that the main fact is not in the degree of association *per se*, but in the relation found that has content validity, considering previous studies.<sup>4-6</sup>

Figure 1 highlights the close relation between the number of positive number of family doctors with GDP per capita and life expectancy and negative with the GINI index, anemia, mortality in children under 5 years, maternal mortality ratio and traffic mortality. GDP per capita is also negatively related to anemia, mortality in children under 5 years old, maternal mortality ratio and traffic accidents, and less intensely with cardiovascular mortality and suicide. No correlations are observed or these are very, very slight in other indicators such as pocket expense or investment in health.



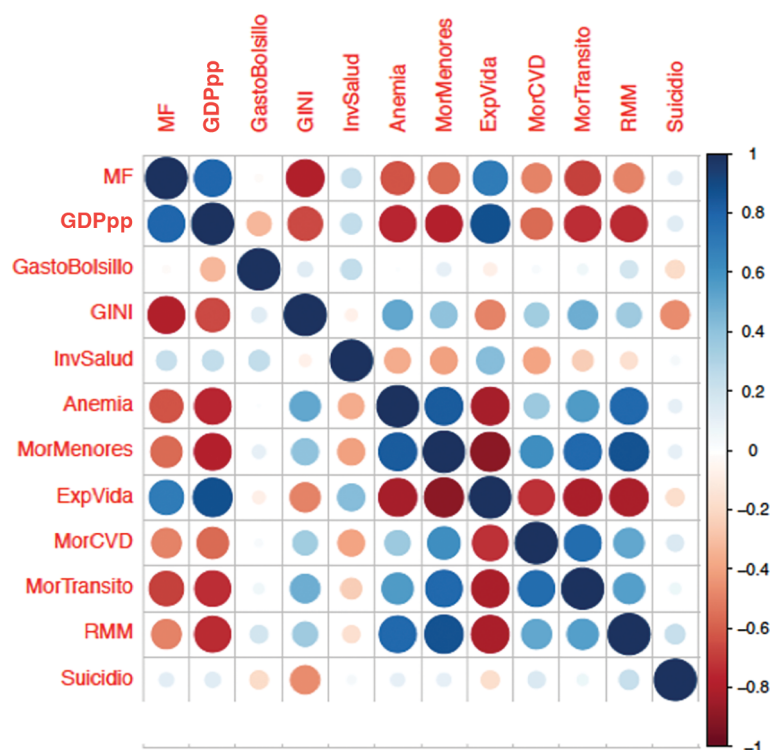
**Table 1.** Socio-sanitary indicators by country.

Country	MF	GDP(pp)	GBolsillo	GINI	InvSalud	ExpVida	Anemia	MorMen	MorCVD	MorTransito	RMM	Suicidio
ARG	14.3	13,467.1	30.7	42.7	4.8	78.3	21.4	11.6	17	14.1	52	14.2
BOL	5	3,077	23.1	45.8	6.3	68.7	47.5	38.2	16	23.3	206	18.7
BRA	2.7	8,757.2	25.5	51.3	8.3	75.2	24.3	15.7	17	22.6	44	6.3
CHL	5.6	13,653.2	31.5	47.7	7.8	79.2	19.5	8.4	11	11.6	22	9.9
COL	1.2	6,044.5	15.4	51.1	7.2	74.2	26.8	15.8	15	18.9	64	6.1
CRI	3.4	11,406.4	24.9	48.2	9.3	79.6	28.5	9.1	11	14.9	25	0.7
RDOM	0.1	6,468.5	21.1	44.9	4.4	73.7	27.7	31.5	19	27.8	92	6.8
ECU	6.2	6,150.2	48.4	46.5	9.2	76.1	27.9	21.5	13	20.7	64	7.5
ESP	74.8	25,787.9	24	36	9	83.4	12.4	3.4	10	3.6	5	8.5
MEX	34.2	9,152.9	44	48.2	6.3	76.9	27.7	15	15	11.8	38	5
NIC	1.7	2,096	37.5	46.6	9	75	28.4	20.3	16	14.9	150	9.5
PAN	2	13,134	22.3	51	8	77.8	28.6	6.9	14	10.7	94	5.5
PER	3.1	6,030.3	28.6	44.3	5.5	74.7	32.8	16	13	13.3	68	5.8
PRT	53.6	19,252.6	26.8	35.6	9.5	81.5	12.8	3.5	11	7.7	0	13.6
PRY	4.1	4,109.4	49.4	48	9.8	73	25	20.6	18	23.4	132	10.2
URY	14.6	15,524.8	15.6	41.7	8.6	77.1	22.4	9.3	17	17.4	15	17

Own elaboration from published data based on data obtained in WHO,<sup>1</sup> Eurostat<sup>7</sup> and the World Bank.<sup>8</sup>

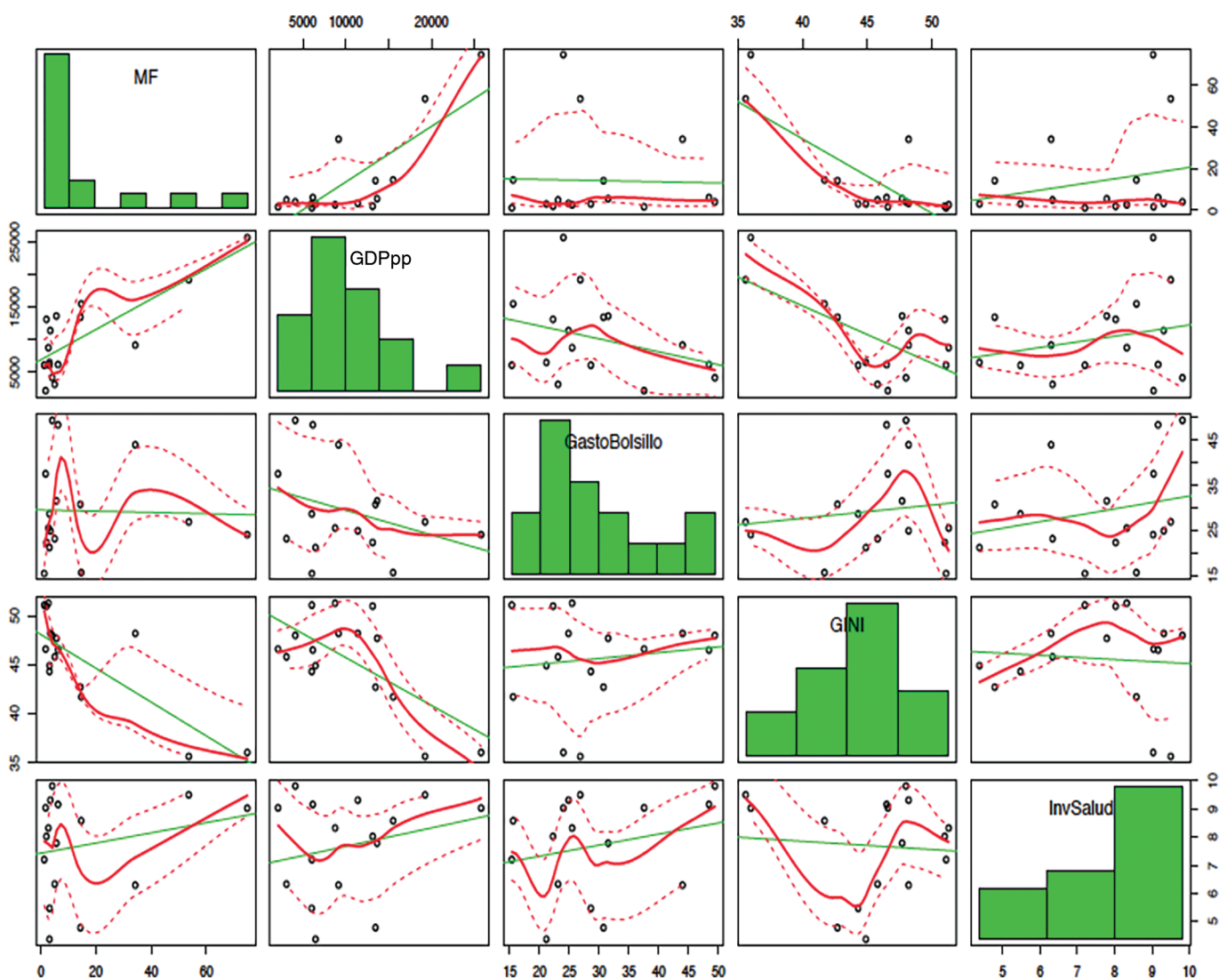
ARG: Argentina; BOL: Bolivia; BRA: Brazil; CHL: Chile; COL: Colombia; CRI: Costa Rica; RDOM: Dominican Republic; ECU: Ecuador; ESP: Spain; MEX: Mexico; NIC: Nicaragua; PAN: Panama; PER: Peru; PRT: Portugal; PRY: Paraguay and URY: Uruguay.

**MF:** number of specialists in family and community medicine/100,000 inhabitants; **GDP(pp):** gross domestic product per capita (in dollars); **GBolsillo:** Pocket Expense (in dollars); **GINI:** GINI index; **InvSalud:** percentage of GDP destined to health expenditure; **MorMen:** Mortality Under 5 years old; **ExpVida:** life expectancy; **MorCVD:** cardiovascular mortality; **MorTransito:** Mortality due to traffic accidents; **RMM:** Reason for Maternal Mortality.

**Figure 1.** Relation between macroeconomic and sanitary indicators.

**MF:** number of specialists in family medicine/100,000 inhabitants; **GDP(pp):** Gross Domestic Product per capita (in dollars); **GBolsillo:** Pocket Expense (in dollars); **GINI:** GINI index; **InvSalud:** percentage of GDP destined to health expenditure; **MorMen:** Mortality Under 5 years old; **ExpVida:** life expectancy; **MorCVD:** cardiovascular mortality; **MorTransito:** Mortality due to traffic accidents; **RMM:** Reason for Maternal Mortality.

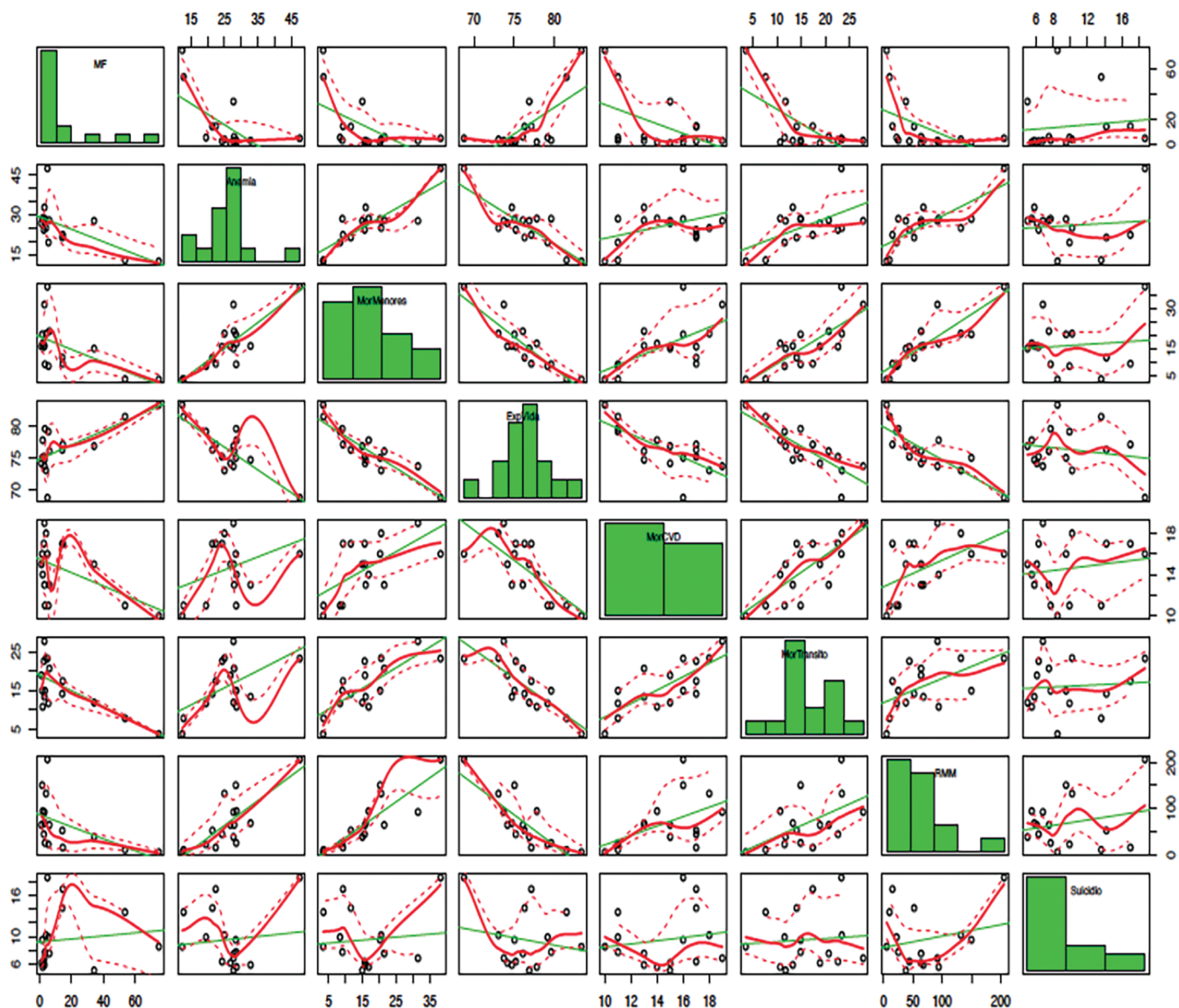
Figure 2 corresponds to the matrix of scatter plots of the availability of Family Physicians and economic indicators, allowing to explore the association between them, the scales of each of the indicators are indicated by the numbers located at the edges of the matrix. The tables in the first column show how the economic indicators vary according to the availability of Family Physicians. Reciprocally, the tables in the first row show how the availability of Family Physicians varies according to the economic indicators. The diagonal tables show distribution histograms of the data for each one of the indicators, the first diagonal table above shows that most countries have Family Physicians availability figures below 15 per 100,000 inhabitants; the second diagonal table shows for the GDP per capita around US\$ 7,000; the third diagonal table shows for the pocket expense a mode around 20%; the fourth diagonal table shows that the GINI index has a mode around 45; finally for the histogram of the percentage of GDP invested in health mode is between 8 and 10.



**Figure 2.** Matrix of FM scatter plots with economic indicators.

**MF:** number of specialists in family medicine/100,000 inhabitants; **GDP(pp):** Gross Domestic Product per capita (in dollars); **GBolsillo:** Pocket Expense (in dollars); **GINI:** GINI index; **InvSalud:** percentage of GDP destined to health expenditure.

Figure 3 allows exploring the association between the quantity or availability of medical specialists in Family Medicine and the main socio-health indicators. The tables in the first column show in their order how the socio-health indicators vary according to the Family Physicians, the diagonal tables show the distribution of the data of each of the indicators.



**Figure 3.** Matrix of scatter plots with economic indicators.

**MF:** number of specialists in family medicine/100,000 inhabitants; **GDP(pp):** Gross Domestic Product per capita (in dollars); **GBolsillo:** Pocket Expense (in dollars); **GINI:** GINI index; **InvSalud:** percentage of GDP destined to health expenditure; **MorIMen:** Mortality Under 5 years old; **ExpVida:** life expectancy; **MorCVD:** cardiovascular mortality; **MorTransito:** Mortality due to traffic accidents; **RMM:** Reason for Maternal Mortality.

## Discussion

The present work is the first analysis that explores the relation between the availability of specialists in Family Medicine, economic and health indicators among the countries that are part of the Ibero-American Confederation of Family Medicine (CIMF). A positive association between the availability of family doctors

and GDP per capita is suggested, which, in turn, translates into notable improvements in “hard” indicators (cardiovascular mortality, under-five mortality, life expectancy, among others) of public health.

If the analysis were limited only to the ratio between GDP per capita and number of family doctors, it could be mistakenly misinterpreted that the availability of Family Doctors is a “luxury good”, that is, only the countries with the highest GDP and therefore richer can afford to increase the number of family doctors. However, this relation is not linear since, given the GDP equality, it seems that a greater availability of specialists in Family Medicine is associated with an increase in life expectancy and a reduction in the rate of anemia and mortality in children below five years-old; cardiovascular mortality; mortality due to traffic accidents and maternal mortality.

As mentioned previously, the results found coincide with the results obtained by B. Starfield y J. Macinko.<sup>4-6</sup> in the United States (USA). They demonstrated that the provision of primary care physicians was associated with better health results, in all-cause mortality, cancer, heart disease, stroke and infant mortality. This relation was maintained regardless of the year (1980-1995) or the level of analysis (state, county, metropolitan statistical area). The combined results for all-cause mortality suggest that an increase of one primary care physician per 10,000 population was associated with an average mortality reduction of 5.3 percent. The same authors showed that also in Europe, the GDP and number of family doctors were associated independently, with reductions in the potential years of life lost and with all-cause mortality.

More recently, Chetty et al.,<sup>11</sup> also in the USA, describe that adding one more family doctor per 1,000 inhabitants (or 100 per 100,000) adjusted for sociodemographic factors, hospital characteristics, and mortality rates reduces income from pneumonia, acute stroke, of myocardium and heart failure by 7.5 and 8% respectively.

As for Europe, L. Vallejo<sup>12</sup> will publish this year an investigation based on the follow-up of a cohort of people over 50 years-old living in England, who were interviewed every two years. The data correspond to the periods 2004-2005; 2006-2007 and 2008-2009. The socio-demographic indicators added 35 quality indicators of processes that corresponded to 13 medical conditions. These indicators were chosen based on prevalence, possibility of prevention and/or treatment, importance in the elderly, the possibility of measuring it and the potential for improving its quality. They are very common clinical indicators in primary care (hypertension, diabetes, dyslipidemia) to which they added two indicators of resources: density of family doctors: number of family doctors per 1,000 inhabitants and distance to the health center. They concluded that a higher density of family doctors was associated with the quality of care and distance to the family doctor presents a negative association (at greater distance worse results). These effects were concentrated in cardiovascular diseases, osteoarthritis, diabetes, incontinence and hearing problems.<sup>12</sup>

Our work highlights a very intense negative relation between the GINI and the availability of family doctors. The relation between GDP and health, as well as the GINI index or other indexes of income inequalities, has been analyzed in many publications, but without relating them to the model of health organization in each country or the allocation of certain professionals. Jutz<sup>13</sup> compares the situation in 42

European countries and concludes that inequalities in income have more impact on health inequalities than social policies. Bergqvist et al.<sup>14</sup> found that social and health expenditures are associated with better health levels and lower inequalities, although they draw attention to the importance of health policies (like other authors).<sup>15,16</sup> A recent work done by Christopher, USA, assesses the effect of pocket expenses on income inequality. It describes that, in 2014, the GINI index was 47.84 and rose to 49.21 after deducting medical expenses. This pocket expense reduced the average income of the poorest decile by 47.6%, compared to 2.7% of the richest decile, pushing 7,013 million people into poverty.<sup>17</sup> In Brazil, Boing<sup>18</sup> analyzes pocket expenses according to the household expenditure survey for 2002-2003 and 2008-2009, using the World Bank poverty criterion (per capita income per day below US\$ 2.34 in 2002-2003) and of US\$ 3.54 in 2008-2009). The increase in poverty in the years 2002-2003 was 2.6 percentage points (6.8%) and 2.3 percentage points (11.6%) for the years 2008-2009. This increase occurred because of medicine expenses. In our case, no association was found between the number of family doctors and pocket expenses. This work does not analyze the health determinants and the relation between economic, social and health factors, especially when this relation is extraordinarily complex and does not depend on a single factor.<sup>19,20</sup>

This study presents some limitations to be taken into consideration:

1. The variability between the different countries, both in economic and health indicators, hinders comparability;
2. The indicators included were those available for the 16 countries and it was not possible to incorporate other social determinants that may explain better the differences in health results among the countries;
3. It is very difficult to measure the impact of family medicine on the health system when many countries of the Ibero-American region (CIMF) have less than 10 family doctors per 100,000 inhabitants;
4. The objective of this work is limited to exploring together the family, economic and health doctors indicators, for which graphic tools have been used, identifying some possible associations, however, considering that these are indicators at the national level, other statistical tools that allow to quantify the associations observed in future studies.

The VII CIMF Summit held recently in Cali concluded that although the availability of physicians was a rough indicator since it does not provide information on performance, functions or roles, the results showed that the best health results were obtained in countries with greater availability of specialists in Family Medicine and higher GDP per capita, so they recommended reaching the minimum figure in the short term (9-10 years) of all the countries of the Confederation of 15 FM per 100,000 inhabitants.

For future studies it is suggested to incorporate other indicators that help to analyze more accurately the role of family medicine in the health system: portfolio of services, resolution capacity, health expenditure in primary care versus other levels of care, organizational models of each country.

## Conclusions

The social and health realities of the countries of the region are diverse and with political imprints that directly and indirectly impact the health of the populations. While the relationships between economic indicators such as pocket spending and the percentage of GDP of investment in health with health indicators show unclear trends, highlight the favorable relation between the availability of specialists in Family Medicine and health results, suggesting that this it is a concrete, efficient strategy and available to all countries to convert economic investment into health outcomes.

Clinical efficiency depends on the maximization of the quality of care and user satisfaction with the lowest possible social costs. The path to social efficiency goes through clinical effectiveness and that seems to be intimately related to the number and professional characteristics of family medicine.

It should be a reason for reflection in the circles where the policies and resources of the health sector are debated, established and evaluated that the availability of specialists in Family Medicine is a consistent and sensitive marker of quality, equity and efficiency of health systems.

More studies are needed, with more precise and homogeneous indicators that allow deepening the analysis of the family medicine specialists' contributions to the efficiency of health services and to the improvement of the health of citizens.

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## Family and Community Medicine as source of Mental Health Care

La Medicina Familiar y Comunitaria como fuente de cuidados de Salud Mental

*Medicina Familiar e Comunitária como fonte de cuidados em Saúde Mental*

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### Abstract

During the Seventh Iberoamerican Summit of Family Medicine, Cali Colombia 2018, the Mental Health (MH) working group reflected on how Family Medicine (FM) can act to support people facing stressful situations in daily life as well as in conflicts (armed/unarmed), emergencies and natural disasters. Descriptive cross-sectional study, based on a survey of 42 questions to 99 Iberoamerican health professionals from 15 countries; 98 physicians and 1 psychologist. 8% residents of family medicine, 85% family physicians (FP), 4% general doctors, 2% psychiatrists and 1% internists. 47% of physicians perceive as good the ability of FP in the approach to MH. Concerning the MH problems observed, 30% where anxiety disorder, 27% depression, 17% insomnia, 10% alcoholism, 7% illicit drug abuse, 5% eating disorders and 4% post-traumatic stress disorder. With such results, recommendations for the Cali Declaration consider the necessary MH training for Family physicians, with cost-effective self-care strategies through strengthening community work. The teachers of FP must take actions tending to the self-care of their students, to facilitate the learning process and the preparation to practice the profession in such a complex environment as the Primary Care (PC) centers or in any place based on PC strategy.

**Keywords:** Family Practice; Mental Health; Emergencies; Disasters

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## Resumen

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En la Séptima Cumbre Iberoamericana de Medicina Familiar, Cali – Colombia 2018, el grupo de trabajo Salud Mental (SM) reflexionó sobre como la Medicina Familiar (MF) puede actuar para apoyar a las personas que enfrentan situaciones de estrés frente a la vida diaria, conflictos (armados/no armados), emergencias y desastres naturales. Estudio descriptivo de corte transversal basado en una encuesta de 42 preguntas a 99 profesionales sanitarios iberoamericanos provenientes de 15 países, 98 médicos y 1 psicólogo, 8% residentes de MF, 85% especialistas en MF, 4% médicos generales, 2% psiquiatras y 1% internista. El 47% de los médicos percibe como buena la capacidad de los médicos de familia en el abordaje de la SM. En cuanto a los problemas de SM observados, 30% indica Trastorno de Ansiedad, 27% depresión, 17% insomnio, 10% alcoholismo, 7% adicción a drogas ilícitas, 5% trastornos alimentarios y 4% trastorno de estrés postraumático. En este contexto se realizaron las recomendaciones para la Carta de Cali que consideran la formación en SM necesaria para los Médicos Familiares, con estrategias de autocuidado costo efectivas, mediante el fortalecimiento del trabajo comunitario. El cuerpo docente de las residencias de MF debe hacerse cargo de acciones tendientes al autocuidado de los alumnos, propendiendo a facilitar el proceso de aprendizaje y la preparación para ejercer la profesión en un medio tan complejo como son los centros del primer nivel de atención o en cualquier contexto en el que se trabaje con la estrategia de Atención Primaria de Salud.

**Palabras clave:** Medicina Familiar y Comunitaria; Salud Mental; Emergencias; Desastres

## Resumo

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Na Sétima Cúpula Ibero-Americana de Medicina Familiar, Cali – Colombia 2018, o grupo de trabalho Saúde Mental (SM) refletiu sobre como a Medicina de Família (MF) pode atuar em para apoiar a saúde integral das pessoas que enfrentam situações de estresse na vida diária, como conflitos armados/desarmados, emergências e desastres naturais. Estudo descritivo transversal com base em um levantamento de 42 perguntas a 99 profissionais de saúde ibero-americanos provenientes de 15 países; 98 médicos e 1 psicólogo. 8% de residentes de MF, 85% de especialistas em MF, 4% de clínicos gerais, 2% de psiquiatras e 1% de internistas. 47% dos médicos percebem como boa a capacidade dos médicos de família na abordagem da SM. Em relação aos problemas SM, 30% indicam Transtorno de Ansiedade, 27% de depressão, 17% de insônia, 10% de alcoolismo, 7% de dependência de drogas ilícitas, 5% de transtornos alimentares e 4% de transtorno de estresse pós-traumático. Neste contexto, foram feitas recomendações para a Carta de Cali que consideram o treinamento de SM necessário para médicos de família, com estratégias de autocuidado custo-efetivas através do fortalecimento do trabalho comunitário. O corpo docente das residências do MF deve se encarregar de ações que promovam o autocuidado dos alunos, visando facilitar o processo de aprendizagem e o preparo para a prática da profissão em um ambiente tão complexo como os centros de Atenção Primária à Saúde (APS) ou em qualquer contexto em que se trabalhe com a estratégia APS.

**Palavras-chave:** Medicina de Família e Comunidade; Saúde Mental; Emergências; Desastres

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## Introduction

The Seventh Iberoamerican Summit of Family Medicine, Cali Colombia 2018, through the group that had as its motto “Family and Community Medicine as a source of Mental Health care”, gave us the opportunity to reflect on how family medicine can and should act in relation to the problem of Mental Health (MH), seeking concrete contributions according to the central theme of the summit: “Family Medicine and Public Policies in territories of equity and peace”.

In the executive summary on Suicide Prevention of the World Health Organization (WHO) of 2014, it is stated that more than 800,000 people commit suicide per year and that for every person who commits suicide there would be at least 20 other people who have attempted suicide. It is also the second cause of death among people aged 15 to 29 years.<sup>1</sup> There would then be 16 million people each year at risk of death due to suicide attempts because of Mental Health conditions in the world. On the other hand, the main risk factor against suicide is a previous suicide attempt, so these 16 million people potentially have a higher risk of death than the common population.

The causes are multiple and related to crises that determine a decrease in the ability to cope with the stresses of life, both those of everyday life (financial problems, broken relationships, chronic pain and

illness, etc.), and those of more complex situations: emergencies and natural disasters<sup>1</sup> (floods, earthquakes, tsunamis, etc.), as well as anthropogenic disasters<sup>2</sup> (political and/or armed conflicts, fires, etc.).

The term *tsunami of mental health*<sup>3</sup> has even been coined, in the context of the development of children and adolescents who are victims of serious physical or sexual violence, who initiate criminal careers around the age of 13 depending on the countries and that progressively increase the consumption of drugs and alcohol. A latent threat to the future of our nations.

Because of the life style and situations created or not by the human being, a context in which a significant number of people are potentially unable to face the difficulties of daily life and determine a greater inability to face the inherent difficulties to emergencies and disasters is taking place, particularly anthropic disasters, in which the human being is the direct cause; and especially, those determined by political conflicts, armed or unarmed.

While all the above information may seem apocalyptic, the 2013 WHO report: “Rebuilding Better” [“Volver a construir mejor”]<sup>4</sup> raises the paradox that emergencies are an opportunity to rebuild better the system of attention in MH, no matter how weak the system was before the emergency or its seriousness. It is pointed out that emergencies and disasters, natural or anthropic, can give rise to situations where MH requires special consideration due to three common problems:

- increase in the rates of MH problems,
- the weakness of MH infrastructure and
- the difficulties that are generated in the coordination of the entities that provide services in the MH area.

In these situations, the prevalence of depression and post-traumatic stress disorders increases substantially. There is also an increase in the vulnerability and needs of people who already had serious mental disorders such as schizophrenia, bipolar disorder, anxiety and alcohol and drug dependence.

As a result of emergencies and disasters, the service infrastructure in MH can be weakened. There is a greater need for services and the health workers themselves can be victims of the emergency, in many cases they need to take care of their own families or friends before fulfilling their professional duties. This can lead to a shortage of qualified health workers.

In major emergencies with sudden starts, chaotic situations can be created by the appearance of multiple support agencies. Faced with this great initial impulse of organizations of all kinds, governmental and non-governmental, special emphasis must be placed on the coordination of the supply of services. The fundamental role of humanitarian aid is to strengthen public structures, thus managing to coordinate actions and the long-term sustainability of the functional structure of health services.<sup>5</sup> The importance of long-term sustainability lies not only in achieving a better state of general health, but also greater education, greater productivity and better interpersonal relationships, and therefore a better quality of life. This action not only benefits the MH of the people, but also the general functioning of the affected country and the resilience of the society that is capable of recovering from an emergency situation. Actions in the framework of early recovery provide the basis for a long-term mentality.

Attention in MH should focus on services that are accessible to the community. In the aforementioned WHO report, it is argued that the decentralization of MH systems towards community-based care systems is a fundamental strategy, especially to deal with situations of emergencies and disasters. It is necessary for early recovery that the guidelines of the agencies generate standards based on consensus between the health services and the community. The community must become a strategic actor. It is important to emphasize that the greatest investment must be made in people, community and health workers, rather than in infrastructure.

It is necessary to strengthen and expand attention in community-based services on Mental Health. The action of long-term psychiatric hospital centers should be redefined, even considering reducing their size. No level of service, from primary to secondary and tertiary, can meet all mental health needs, it is necessary to find the right combination among all of them. Self-care, informal care of the community and primary care in MH are the basis of the pyramidal care model. It is at this level where most of them should be coordinated. For those who require more intensive services at some point in their life, the secondary level should provide ambulatory care and short stay hospitalization. The secondary level is understood as community mental health centers and general hospitals. Only a very small portion of people with severe MH problems need long-term hospitalizations, considering a tertiary level, but without considering structuring psychiatric hospitals permanently. The goal is always to achieve ambulatory care and control. At all levels, the model emphasizes that people with MH problems must participate in self-management of their conditions.<sup>5</sup>

In this general context, a report of 2017 by the Organization for Economic Cooperation and Development (OECD) on MH<sup>5</sup> states that it is necessary to promote and invest in the introduction of programs that promote good mental health and the prevention of mental illness. Establishing actions that prevent depression and anxiety brings economic benefits to families, while certain interventions in the workplace can reduce the cost of low productivity by more than a third. There is, however, an unequal government commitment between the promotion of mental health and other pathologies in health systems, with a tendency to lean towards the latter, such as, for example, the strong focus on the promotion of cardiovascular pathologies.

The OECD document makes several recommendations for the governments of the countries, including:

- Implement integrated mental health programs, application tools and labor policy;
- Prioritize the mental wellbeing of citizens of all ages. For some countries this may demand activities throughout the life of the individual and for others it will involve promoting efforts focused on particular groups such as the elderly or unemployed. It can be done through a phased approach to the action, using new opportunities, such as, for example, on-line computer systems.
- Develop and support a permanently updated and comprehensive strategy to promote MH throughout life. Based on the best evidence of the effectiveness of interventions focused on the local context.

- Monitor and evaluate in a permanent way the effectiveness of the implemented actions, in such a way that it allows calculating estimates of the economic return of the investment in promotion and prevention activities. This can improve the understanding of the cost/effectiveness of the investments aimed at improving the MH of the people, favoring that other actors, external to the health care provision sector, visualize better the economic return of this investment, encouraging them to invest and participate in the realization of promotion and prevention activities.
- Establish networks of intersectoral collaboration, recognizing their importance beyond the health care systems and the MH, involving in the promotion and prevention in MH to other interested sectors including social assistance, education systems and workplaces.

The report of the Pan American Health Organization (PAHO 2013) on MH systems in Latin America and the Caribbean<sup>6</sup> reflects the importance of covering mental and neurological disorders from the field of Primary Health Care (PHC), since they represent almost a quarter of the total disease burden in Latin America and the Caribbean. “An efficient mental health system is vital both to be able to offer an appropriate response and reduce that burden that translates into morbidity, mortality and disability, and to close the high gap of sick people who are not receiving any type of treatment”.<sup>7</sup>

The evaluation of the attention systems in MH is developed from the relevance of its restructuring. The report recognizes that in South America, Central America, Mexico and the Latin Caribbean, undergraduate training in medicine and nursing, as well as training in the work environment in APS, related to the dedication and workload with respect to mental health, are generally low, with in-service training being slightly better in South America.

The formation and training in PHC services are at least unsatisfactory, they do not allow an adequate response to the MH problem. They are insufficient to improve the ability to solve the demand for attention due to psychosocial and MH problems. The integration of MH into PHC services is usually limited. This considerably restricts the capacity of the PHC to fulfill the functions in relation to the MH and the level of resolutivity entrusted to it in the context of a community model of mental health.

According to this report, the availability of evaluation and treatment protocols is very different, from almost nonexistent to not necessarily available or known according to the region. In addition, the limited interaction and limited integration, sometimes due to lack of information, of the PHC professionals with specialized MH professionals and with agents of the alternative care system (complementary integrative medicine).

Regarding the therapeutic plan to be established to people who consult in PHC for problems of MH, as the document states, it is evident that access to psychotropic drugs is a necessary condition for fulfilling the function of attending them appropriately. In this context, it is reported that medications are partially available, in many cases.

In terms of human resources, the data show their scarcity and the unequal distribution in the countries, with a marked variability among the sub regions.

It is important to mention the factors that limit access to mental health, among others:

- the distribution between the private and public system of professionals trained in MH, often at the expense of the public system, where the majority of the population is concentrated,
- the imbalance in the distribution of trained personnel in MH with a trend towards greater numbers in psychiatric hospitals, with the exception of South America, where a trend is beginning to exist for more trained personnel in intermediate ambulatory care centers, but without a comparable trend in PHC yet,
- an unequal distribution of available psychotropic drugs, and
- an unequal geographical distribution of trained personnel, in which the majority is concentrated in the cities and especially in the capitals of the countries of the region.

Another fundamental aspect in the development of strategies for the intervention in MH pathologies is the role of civil society - community, user and family associations. Although the WHO document on the region states that for the moment it is very limited and even non-existent (it does not participate in the discussion or decision-making regarding the provision of mental health services), other documents reviewed in this analysis highlight the importance of community participation, especially in emergency situations and disasters. Maybe then we need to develop devices that allow the participation of users in habitual contexts, since in situations of emergencies and disasters, the community acquires a spontaneous and vital role.

Faced with the spontaneous and vital role of civil society, there is a need to generate easy-to-implement strategies for the management of MH problems and diseases, both in daily life and in situations of emergencies and disasters. This is how strategies such as the “Program of Action to overcome the Gaps in MH: mhGAP” (for its acronym in English: mental health Gap Action Program) are developed. This program was launched in 2008 by the WHO as a way to face the great challenge of developing low-cost strategies, accessible to the population, especially from low to middle-income countries, and particularly in situations of humanitarian emergencies. This is how different guides and programs that are easy to implement and accessible to people without formal training or with very specific recommendations of the required training emerge.

There are therefore clinical guidelines for health professionals that allow rapid and effective support in humanitarian situations. One of them is the Humanitarian Intervention Guide mhGAP (GIH - mhGAP).<sup>8</sup> It is a basic clinical guide on mental, neurological and substance use disorders addressed to health workers: general practitioners, nurses, midwives and clinical assistants, as well as doctors with specialties outside psychiatry or neurology, who work in non-specialized services, particularly for low and middle-income countries. It contains advice for directors of clinical services regarding general principles of care applicable to humanitarian emergencies, highlighting the importance of multisectoral support.

It raises the following general principles of care for people with mental, neurological and substance use disorders in humanitarian emergencies:

- 1. Principle of communication:** Direct, concise, respectful confidential communication is pondered, with active listening, including for the patient, and, if necessary, with trained interpreters.

2. **Principle of evaluation:** Importance is given to the full identification of the mental, neurological or substance use disorder and to the interpretation that the patient gives to their health problem. There must be an interrogation that includes family background, person background, strategies used to solve the problem and the social support. It is advised to ask questions about suicide in a sensitive way.
3. **Principle for handling:** The training and understanding of the management that the patient will have on the part of the caregivers.
4. **Principle of stress reduction and strengthening of social support:** Fundamental is the reduction of stress that the patient or their caregivers may present. The use of the IASC Guide on Mental Health and Psychosocial Support in Humanitarian Emergencies and Catastrophes is recommended, as well as relaxation exercises with breathing techniques.
5. **Principle of protection of human rights:** Protect the rights of people with mental or neurological conditions and integrate them into the community.
6. **Principle of attention to the general welfare:** Help affected people to access, without danger, the services they need to survive, with a dignified life and ensure general physical health.

It addresses the symptoms and signs of acute and post-traumatic stress, grief, major depression, psychosis, epilepsy, alcohol addiction and other emotional disorders; mentioning the important points for the evaluation of the clinical picture; and specifies a basic management plan that includes pharmacological and psychosocial interventions.

There are also short counseling programs aimed at problems, easy to implement by health professionals not specialized in MH. This is the case of the Problem Management Program “Plus” - Help, for adults affected by anxiety in communities exposed to adversity, within the mhGAP program already described; program known by the acronym PM+.<sup>9</sup>

The PM+ strategy requires professionals to have basic help skills, with a focus on communication and building a relationship with the people they will serve. Family Physicians, especially those trained in the approach focused on the patient and on communication skills, are specially prepared for this. On the other hand, PM+ helps to improve the skills to treat patients who have had to face complex life situations.

The interventions or behavioral strategies considered are:

1. **STRESS MANAGEMENT:** Slow breathing strategy is used, the most appropriate in most situations that produce anxiety and stress. It can be combined with localized relaxation methods when the situation is perceived as more complex. This behavioral intervention is introduced from the beginning in the PM + and should be practiced at the end of each session.
2. **MANAGEMENT OF PROBLEMS:** in situations in which people face practical problems (unemployment, family conflicts, etc.). The professional and the user will work together to consider possible solutions to the problem that most concerns the person. They can jointly propose solutions to solve the problem and generate a strategy to carry out the solutions.

3. **GET STARTED, KEEP ACTIVE:** the goal is to recover and maintain the level of activity, which has an immediate impact on the mood, since people with depression often stop doing their usual activities.
4. **STRENGTHENING OF SOCIAL SUPPORT:** individuals with emotional problems can isolate themselves from their personal and organizational support networks. If people have a good social support network and use it regularly, it may be the case that all that is necessary is to encourage them to continue doing so. In the case of people who do not have them, it may take longer to analyze how they can improve their social support networks and they should be helped to develop a plan for them to receive more social support.
5. **KEEPING GOOD AND LOOKING TO THE FUTURE:** in the same way that people who recover from wounds or physical illnesses do, people with mental illness or problems suffer “ups” and “downs” of their emotions during recovery. It is important at the end of the sessions to clarify that practicing the strategies after the completion of counseling is essential to stay well. In the event that a problematic situation that causes distress reappears, it is likely that the person will be able to respond using these strategies.

### **General objective**

Analyze the role of the family doctor in mental health in Ibero-America in order to support the integral health of people suffering from disorders as a result of facing situations of conflict (armed or unarmed), emergencies and natural disasters, as well as those present in daily life.

### **Specific objectives**

1. Identify the role of the family doctor in the detection and treatment of the prevailing disorders of Mental Health, as well as the ability to support the detection of disorders in the population affected by armed and unarmed conflicts and emergency situations and natural disasters, in Ibero-America.
2. Know the role of the Family Doctor in the early detection of mental health disorders in all life situations and especially post-traumatic stress in post-conflict population and emergencies and disasters.
3. Analyze the availability of family doctors and human resources in general in the countries of Ibero-America for the approach of the mental health problem in the population in charge.
4. Recognize the participation capacity of Family Doctors in the development of strategies to address problems that arise in armed and non-armed conflicts, emergencies and natural disasters.
5. Identify the strengths of the integral care model, centered on the person, his family and the community, as a permanent form of early detection and management of mental health problems in the usual clinical practice of Family Doctors.
6. Identify the skills available to the Family Doctor for the prevention of mental health problems, according to the individual and family life cycle.

## Method

Descriptive cross-sectional study, which collects the opinion of different health professionals in Ibero-America about their own and others' abilities to address mental health problems.

For the collection of information, a survey was designed based on the objectives of the study, which consisted of 42 questions, 12 general identification (country, city of residence, age, gender, profession, etc.), 21 closed questions and 9 open questions, directed to know the opinion, attitudes or experiences, in relation to mental health.

For the validation of the instrument, a pilot test was carried out allowing the correction of the main authors of the work. The survey link was sent via email to members of the Ibero-American Confederation of Family Medicine, and they were asked to spread it among their contacts. It was established as an inclusion criterion that all the respondents were health professionals graduated or in postgraduate training, excluding students in undergraduate training.

There were 100 responses to the survey, of which 99 met the inclusion criteria and 1 did not comply because it was 1 undergraduate student of medicine. The remaining 99 were answered by Physicians with or without specialty and 1 Psychologist.

When analyzing the answers of the 99 surveys in 8 of them, 2 questions were suppressed when errors were detected in the selection of the proposed alternatives or in the **interpretation** of the open questions. In those questions the analysis was based on 91 surveys. The final analysis was based on 99 surveys, except for items 16 and 17, where 91 responses were obtained.

## Bibliographic review

A bibliographic review of the topic of Mental Health (MH) in situations of emergencies and disasters, natural and anthropic, and in contexts of daily life was carried out, with active search oriented to articles that provide global information of MH (Regions, Sub regions) and Orient towards the management of MH problems.

The selection criterion of the bibliography was fundamentally due to the search of the last 10 years of reports of health organizations and contributions of the same authors in relation to their countries of origin.

The bibliographic review was carried out through the distribution of different texts in interest groups. 18 documents were distributed among the 12 interested in participate, so they could prepare a summary of the documents that had been assigned to them. 9 abstracts of the distributed documents of 7 participants were obtained.

## Summit Plenary presentation

The topic of Mental Health in Ibero-America and the needs of approach were presented in plenary at the Summit, as a way of introducing the theme for group work.

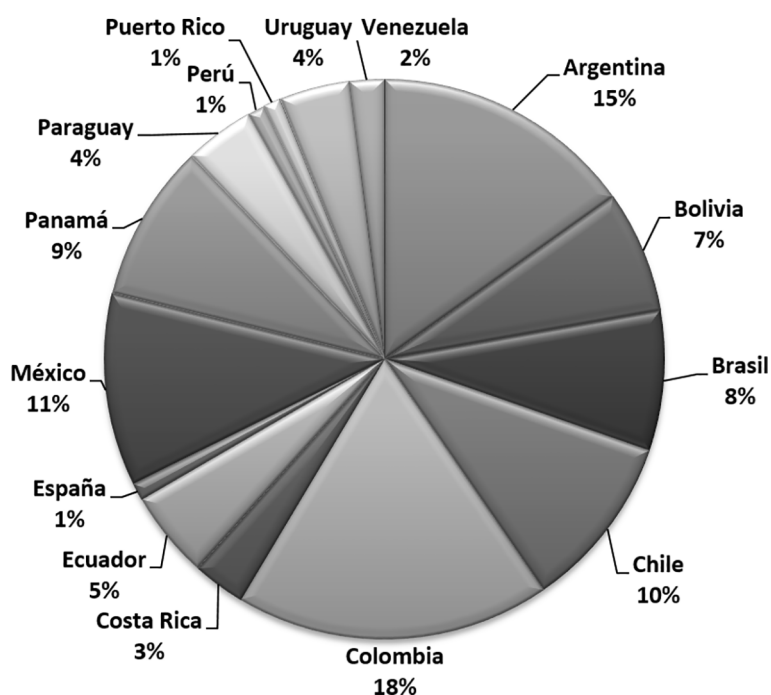


## Group work

During the Summit event, we carried out a working group to establish recommendations on the issue of Mental Health for the Cali Letter. Initially, it was made a presentation on the Mental Health theme. Then the participants were distributed in small groups (5 to 6 people maximum) with key questions regarding the objectives of this study. Specifically, they were asked to propose three recommendations for the Cali Letter. At the end, all the recommendations were registered, grouping them according to quality and action in the area of Mental Health, to finalize with three recommendations based on the recommendations.

## Results of the Survey

From the 99 surveys admitted in the study, it appears that the respondents came from 15 (75%) countries that make up the Ibero-American Confederation of Family Medicine (CIMF), registering an abstention in the filling of the instrument in 5 (25%) countries of the region (Cuba, El Salvador, Nicaragua, Portugal and the Dominican Republic). Participation by country was unequal (Graph 1), determining a bias that should be considered in future studies.

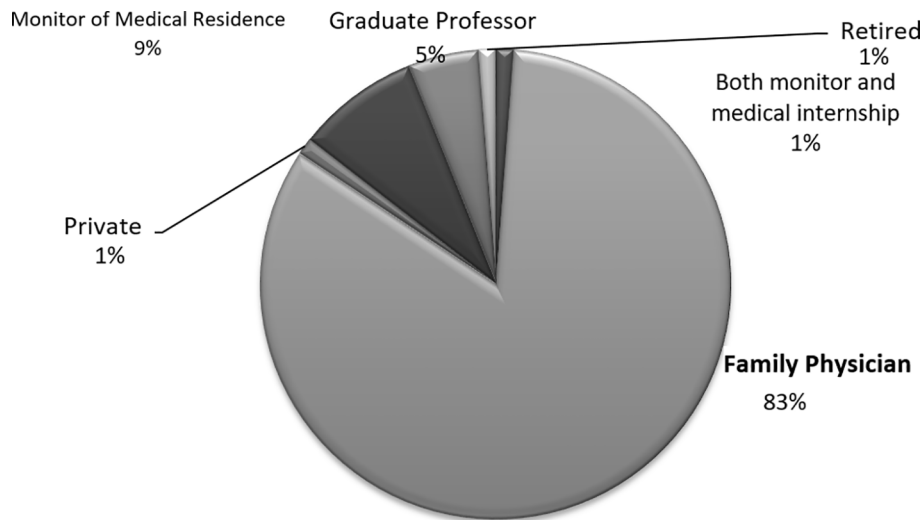


Graph 1. Representation (%) of the countries in the responses to the survey (n=83).

In the distribution by sex, 58.6% is women and 41.4% is men. According to the profession, 99% declared to be physicians and 1% psychologist.

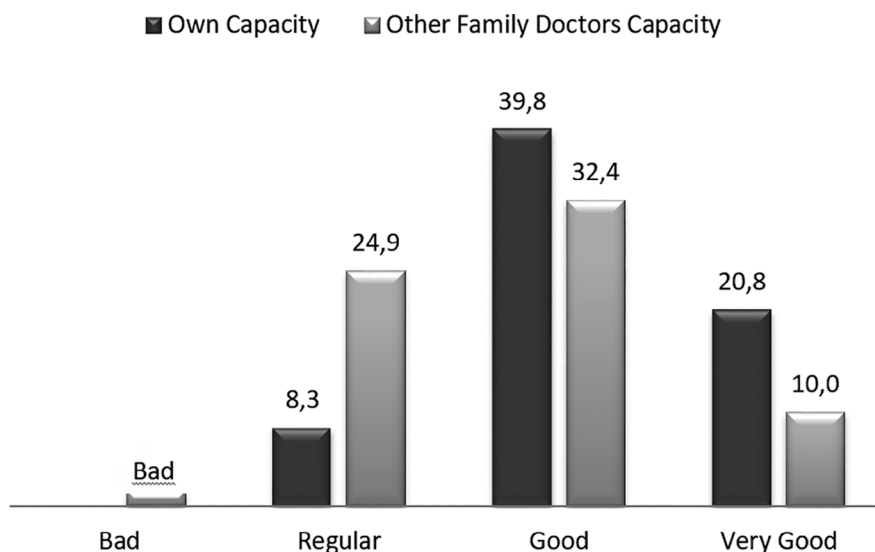
93% of the physicians indicated that they were linked to Family Medicine (family doctor), with 8% of residents, 85% of specialists in family doctor fulfilling full residency. 4% of general practitioners, 2% psychiatrist and 1% of internal medicine. From the family doctors, the majority (83%) work as a primary health care doctor (understood in the context of this research as the first level of care), while 8% answered

that they were monitors of family doctor residents. It is necessary to emphasize that the question was oriented to the main work carried out by family physicians, which is why it cannot be inferred, if those who practice in primary health care also perform resident tutoring tasks (Graph 2).



**Graph 2.** Distribution (%) of Family Physicians who answered the survey according to the work (n=83).

From the family doctors with university postgraduate training, discarding those countries in which only 1 person responded, it is worth noting that the majority of family doctors that responded from Argentina (64%), Bolivia (71%) and Brazil (83%), felt that the ability of the family doctors to address MH problems is Regular. On the other hand, family doctors in Mexico responded 45.5% Regular and 45.5% Good, with 9% Poor. The family doctors of countries such as Chile (100%), Colombia (86%), Costa Rica (100%), Ecuador (80%), Panama (88%), Paraguay (67%), Uruguay (75%) and Venezuela (100%) declare that the capacity of the family doctor in their country is Good and Very good (Graph 3).



**Graph 3.** Graph 3. Comparison (%) between the perception of Family Physicians regarding their own capacity in handling Mental Health problems and the capacity of the other family doctor (n = 83). Source: Survey of the Group.

When talking about one's ability to deal with Mental Health problems, a better perception of themselves is observed. Thus there are cases such as, for example, the family doctor of Argentina perceive that 27% of their colleagues in family doctor have a good and very good capacity, and that they themselves have 64% between good and very good capacity. Likewise, in Brazil, the self-perception of quality varies from 17% to 100%, while in Mexico it fluctuates from 45% to 82% and Uruguay varies from 75% to 100%. This change could suggest that they are more strict with respect to other family doctors than of themselves, or that there is a bias due to greater interest regarding the MH problem when responding to the survey and that they know themselves with greater capabilities than their colleagues. A percentage comparison between the perception of the family doctor about their capacity and that of their colleagues can be verified in Graph 3.

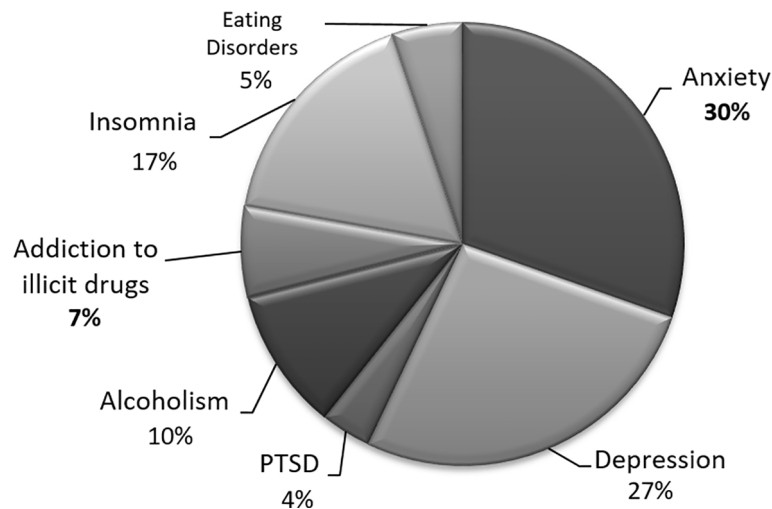
On the other hand, the only psychologist who answers the survey is from Argentina and states that the capacity and interest of the family doctor in the MH problem is regular, which coincides with the perception of the doctors in Argentina, who mostly (64.3%) consider it to be fair or bad. Only 35.7% consider it as good or very good. The interest follows a similar trend, respondents declare that the interest of the family doctor in their country is mostly regular (78.6%).

The number of general physicians (GP) without specialty that responded to the survey was very small (2 from Chile, 1 from Panama and 1 from Colombia). However, it is already analyzed that it could guide a tendency on the perception they have of the family doctor. The GP of Colombia, Panama and one in Chile, indicated that the capacity of the family doctor was good in MH's problems, the other in Chile considered it to be regular, and at the same time also indicated how to regulate its own capacity. The others rated their own capacity as very good without being family doctor, as opposed to their perception that the capacity of the family doctor is good. He emphasizes that they give as justification of this difference their own interest in the subject of MH and, therefore, their interest in training. On the other hand, one of them states that the capacity of the family doctors is due to the type of integral attention they provide.

Regarding the interest in the subject of MH, the GPs report it as good and very good in 100%, but they cannot always develop it due to the time limitations of the consultations.

The other specialists surveyed, 2 psychiatrists and 1 internist (IP), considered that the ability of family doctors to detect MH problems is good. Regarding the interest of the family doctor in the detection and approach of mental health problems they say that it is good and very good. The IP emphasizes that it is because of the knowledge that family doctors have of how MH disorders affect physical health. In relation to the question about the approach of people who have MH problems at the primary level of attention, the three choose the answer: "I think that family doctors are professionals of great relevance because the concepts and tools of this specialty can bring new perspectives and possibilities of intervention in mental disorders". However, when the review is extended to all physicians, the dispersion of the answers and the response to several possibilities at the same time, even opposed, makes it difficult to observe a pattern in the rest of the doctors.

Regarding the frequency of MH problems observed, from the valid answers of the doctors, 30% indicate the Anxiety Disorder as the most frequent, followed by depression with 27%, insomnia 17%, alcoholism 10%, addiction to illicit drugs 7%, eating disorders 5% and post-traumatic stress disorder (PTSD) 4%.



**Graph 4.** Frequency of mental health problems according to the perception of respondents in Latin America. March 2018 (n 99).

In relation to the question about what other pathologies could be included as frequent, in the respondents of several countries, Schizophrenia appears in 12%. This could reflect that family doctors are also playing a role in addressing chronic MH disorders, as they do for example in chronic cardiovascular diseases. Some even justify it in the context of chronicity, including also as a follow-up control to Bipolar Disorder, Attention Deficit Disorder and others.

One of the family doctors reminds us that smoking as any addiction is a MH problem. The fact that we did not include it in the list reflects the normalization of its use, even among us doctors.

In the same context 5.5% remind us that violence in relationships in general and family abuse are not uncommon.

Regarding the role of the family doctor in armed conflicts, 31% stated that they have specific skills and a special bond with the population, 21% say that they have adequate skills to be part of the team, 17% that there is a need for greater training and 2% state that they have no role.

Regarding the role of the family doctor in natural disasters there is a very similar distribution to that of armed conflicts: 41% say that the family doctor has specific competences and bonds with the population, 30% that have adequate skills to be part of the team, 24% that is necessary more training, 4% that is not their role and 1% do not know.

Regarding the Strengths that the family doctor has to act in these situations, they are expressed: *integrality, longitudinality and family focus, in the context of the continuity of the attention, the closeness with the community - physical and affective - and the adequate formation*, although it is suggested that more is always needed.

Regarding the Barriers, there is a clear ignorance of the participation in public policies. 60% do not know or believe that the family doctor do not participate in definitions of public policies regarding Mental Health of people. 65% do not know or do not believe that we participate in the development of training strategies and protocols to address mental health problems.

## Results of the Working Group

During the working group process several concerns were generated regarding the mental health of the health teams. Likewise, there was a marked concern for the MH of the residents of Family Medicine, emphasizing that during their training, family doctor tutors should provide the necessary tools for future Family Physicians to develop the self-care skills, and also, allow them to implement and strengthen the attention of MH in the centers in which they work.

On the other hand, the group said that the mental health of the service providers should be guaranteed, including the family doctor, guaranteeing a space of emotional discharge and decent wages.

It was also considered a priority for the family doctors to participate in the creation of team intervention protocols, specifying the scope and limit of each intervention. To this end, MH training should be strengthened, to work on prevention in MH and to make an early diagnosis when necessary. Structuring also training in community interventions in MH, to develop the strategy of community-based rehabilitation and strengthening of support networks.

The importance of developing specific competences according to the epidemiological profile of each country was also highlighted. The idea is to guiding the work of the family doctor to generate the highest impact on the health of the population.

## Conclusion

Considering the high prevalence and incidence of the problem of MH and the influence they have on the development of people, families and communities, the family doctor must incorporate into our daily work, in the comprehensive look, questions aimed at knowing situations in the emotional area. In each service, whatever the reason for it, we should ask about the mental health area, not just “How are you, how are you doing?”. We must ask specifically about the mood, emotional problems in the last time. We must always remember that people do not consult because of mental problems. Not only because of the stigma that still persists in the world regarding this type of problem, but because of the own condition of the mental health problem.

Then, this is the **challenge**, which is at the same time an **opportunity**: to make Family Medicine visible as a specialty that can and should address the problem of Mental Health due to its formation and its proximity to the population in its territories.

In this context, the following recommendations are made to be included in the Cali Letter:

1. Incorporate and/or strengthen, as the case may be, the training in mental and community health necessary for care spaces in which family doctors operate, without considering life situations as pathological, with the development of self-care strategies of the people, sustainable both in time and in the financial capacity of the countries of Ibero-America; in order to develop the ability to face stressful situations of daily life, which allow developing strengths for emergencies and disasters.
2. Strengthen and empower community work so that it is the empowered community itself that establishes support networks in mental health problems and is prepared together to face situations

of daily life and allows it to develop immediate actions in situations of emergencies and disasters, natural or not.

3. Prioritize cost-effective self-care strategies oriented to personal and family development tools, including health teams, and teachers, tutors of Family Medicine. In such a way that virtuous relations oriented to a cordial and constructive treatment are established. The faculty of the residences of family doctor must take charge of actions tending to the self-care of the students, tending to facilitate the learning process and the preparation to practice the profession in such a complex environment as the Primary Health Care centers or in any context with the PHC strategy.

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## 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

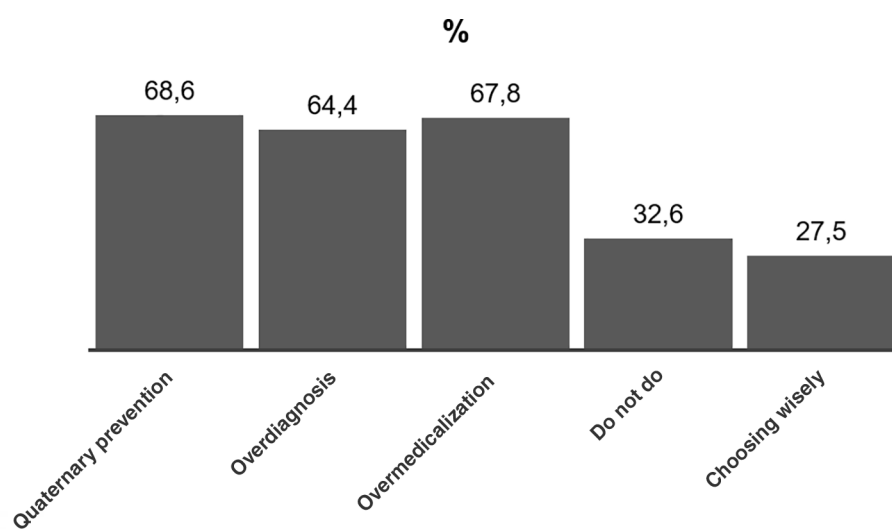
**Figure 1.** Concepts about which the respondents were aware (%).

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.

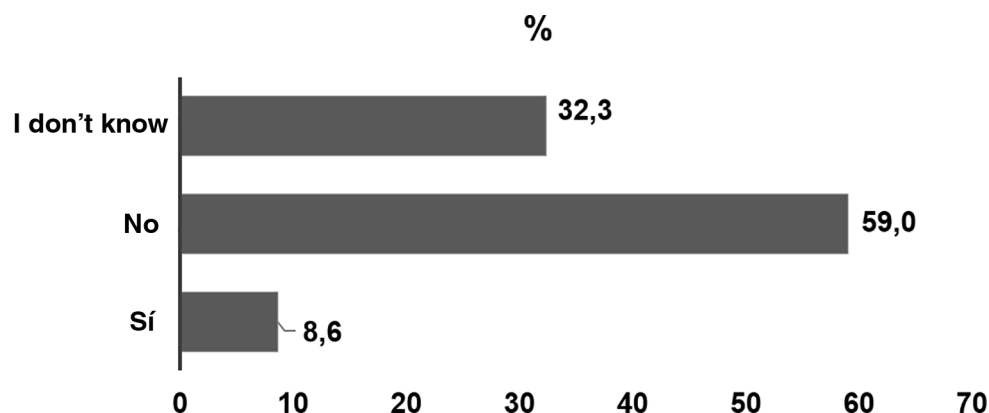


Figure 2. For two years, was P4 incorporated in public policies?

## 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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  - i. Initiative *Too much medicine*, approved by the *British Medical Journal*. Available from: <http://www.bmj.com/too-much-medicine>
  - j. Preventing overdiagnosis. Available from <http://www.preventingoverdiagnosis.net/>
  - k. Digital number in overdiagnosis. *British Medical Journal*. Available from: <http://www.bmj.com/specialties/digital-theme-issue-overdiagnosis>
  - 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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## The health of migrants and Family Medicine Health services in Iberoamerica

La salud de los migrantes y los servicios de salud en Medicina Familiar en Iberoamérica

*A saúde dos migrantes e os serviços de saúde de Medicina Familiar na Iberoamerica*

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### Abstract

This is an exploratory, transverse, Qualitative-Quantitative descriptive research, whose objective is to determine the Primary Access and Family Medicine Healthcare conditions for the migrant population in Ibero-America. With the support of University Professors from the Mexico, Colombia and Ecuador Universities, a validated 22 question questionnaire was prepared with items related to the migration phenomenon and healthcare services in Primary Care access and Family Medicine. Subsequently it was responded by the involved researchers of the 13 countries in the region. The conclusions and proposed recommendations from the Work Group on Migration and Healthcare of the VII Iberoamerican Family Medicine Summit were: a) It is necessary to recognize the migrants and their family rights to proper healthcare b) Include in the undergraduate, postgraduate and continuous educational programs the needed capabilities and skills towards an integral healthcare of the migrant populations and their families and c) create a Migrant Health Observatory entity.

**Keywords:** Health Services; Healthcare; Health; Migration; Family Medicine; Primary Care; Vulnerability

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## Resumen

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Estudio exploratorio, transversal, descriptivo y cuali-cuantitativo, con el objetivo de determinar las condiciones de acceso y cobertura de los servicios de salud de Medicina Familiar y Atención Primaria para la población migrante en Iberoamérica. Se preparó un cuestionario con 22 preguntas relacionadas con el fenómeno de la migración y la prestación de servicios de salud en medicina familiar y atención primaria, el cual fue validado en apariencia y contenido por profesores de las Universidades de México, Colombia y Ecuador. Posteriormente fue respondida y documentada cada pregunta por los docentes e investigadores de 13 países de la región. Las conclusiones y recomendaciones propuestas por el Grupo de Trabajo sobre Migración y Salud de la VII Cumbre Iberoamericana de Medicina Familiar, fueron: a) reconocer el derecho a la salud de las personas migrantes y sus familias; b) incorporar en los programas de pregrado, posgrado y formación continua, las competencias necesarias para la atención integral de la población migrante y de sus familias y c) la creación de un observatorio de salud de los migrantes.

**Palabras clave:** Servicios de Salud; Salud; Migración; Medicina Familiar; Atención Primaria; Vulnerabilidad

## Resumo

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Estudo exploratório, transversal, descritivo e quali-quantitativo, com o objetivo de determinar as condições de acesso e cobertura dos serviços de saúde de Medicina de Família e Atenção Primária para a população migrante na América Latina. Foi elaborado um questionário com 22 perguntas relacionadas ao fenômeno da migração e da prestação de serviços de saúde em medicina de família e cuidados de saúde primários, que foi validado na forma e conteúdo por professores de universidades no México, Colômbia e Equador. Posteriormente, foi respondida e documentada cada pergunta por professores e pesquisadores de 13 países da região. As conclusões e recomendações propostas pelo Grupo de Trabalho sobre Migração e Saúde da VII Cúpula Ibero-Americana de Medicina de Família, foram: a) reconhecer o direito à saúde dos migrantes e suas famílias; b) incorporar em cursos de graduação, pós-graduação e educação continuada, as competências necessárias para o atendimento integral dos migrantes e suas famílias e c) a criação de um observatório da saúde dos migrantes.

**Palavras-chave:** Serviços de Saúde; Saúde; Migração; Medicina da Família; Atenção Primária; Vulnerabilidade

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## Introduction

The phenomenon of migration has had different directions throughout the history of man. During the Colony, the flow of migrants was massively carried out from European countries to America, Africa and even Australia. Later, during the First and Second World War, as well with the Civil Spanish War and many other events happening in the so called “Old Continent”, they continued to enforce that much of its population look forward to settle in America.<sup>1</sup>

Much of the world migratory flow in the American Continent, has been directed mainly to the English-speaking countries: United States of America (USA) and Canada, although there is an increasing presence of Asian countries (China, India, Vietnam, etc.).

In the case of Mexico, it is the largest issuing country of emigrants to the USA (approximately 13 million); and is also transit step to the north of the continent through this pathway to migrants from Central and South America and the rest of the world. It is also one of the main receptors of Ibero-American immigrants along with Spain and the previously mentioned USA.<sup>1</sup> The economical remittances generated by this emigration, placed it in 2014 as the third country in the world in reception of remittances, only after India and China.<sup>2</sup>

Although global migration has considerably increased in the last decade, from 150 to 214 million,<sup>3</sup> intraregional migration has also grown at a 17% rate per year, not necessarily having to do with the migration of Central America and the Caribbean to the USA. It is related to the mobilization of people in other sub regions of Latin America, which according to data from the American States Organization (OAS) and the Economic Cooperation for Development Organization (OECD), represents up to a quarter of the total migration of the population in this region.<sup>4-6</sup>

According to the above, Argentina is constituted as the main recipient of migrants in the Southern Cone, with approximately 1.5 million legally established migrants.<sup>4</sup> Brazil is a very stable country, with the most important emigration being internal to large cities, not so in external immigration, which reports up to 17% from Portugal.<sup>5,6</sup>

In the Andean Region of South America, it can be observed as the main migrants expelling country is Colombia, mainly as the result from the armed conflict with the guerrilla and paramilitary groups. The other country with great mobility today is Venezuela, which due to the known political, economic and social conflict has gone from being a regional immigrant recipient country to a high emigrant territory.<sup>4,6</sup>

Historically, Ecuador has been a country that expel emigrants, their main destinations have been the USA, Spain and Italy. In recent years it has been observed that due to the global economic crisis, the recognition of the country as a middle income and the creation of a new migration policy, the attraction for many immigrants from neighboring countries have increased.<sup>7</sup>

In Central America and the Caribbean, the main migratory flows are to the USA and Canada. Intraregional emigration is concentrated in two countries: Costa Rica and the Dominican Republic. In the first case, mainly consisting of Nicaraguans, Colombians and retired Americans and in the second case, predominantly by Haitians.<sup>4,6</sup> In 2007, Spain had approximately 1.8 million foreigners, predominantly from Ecuador, Colombia and Argentina.<sup>1</sup>

For the purposes of this research, human migration is defined as the movement of people from one place to another with the intention of permanently settling in the new place. Movement is often over long distances and from one country to another, but internal migration is also possible. The migration can be of individuals, families or large groups.<sup>8,9</sup>

## Objective

Determine the current situation regarding the access and coverage of the migrant population to the healthcare services of Family Medicine and Primary Care in Ibero-America.

## Method and Materials

Exploratory, cross-sectional, descriptive study and mixed approach: Quantitative-Qualitative was carried out between the months of September 2017 to January 2018 with the purpose of situational diagnosis. One or two experts in the topic from the 20 member countries of WONCA-Iberoamericana-CIMF were invited to participate. The participants were known professors, researchers or practicing clinicians and were given the task of investigating and documenting the responses to a questionnaire with 22 questions related to the migration phenomenon and the provision of Healthcare services in Family Medicine and Primary Care in their respective countries.

The instrument explored six general dimensions: migratory and economic flows; family profile and migrant characterization, also the vulnerability of the irregular migrant; availability of protection programs and access to healthcare services; health risks in the health-disease process and the actual training of human resources to care for migrants.



This questionnaire was prepared, reviewed and validated in its content and appearance by professors from different educational institutions in Mexico, Colombia and Ecuador. In a second stage the validation was done by the members of the working group in the study. The questionnaire was then sent via email to each of the participating researchers. The information provided was concentrated into a regional report and then re-sent to the group's participants for their review and approval. After this process it was presented for open analysis and discussion in the working group during the 7th Ibero-American Family Medicine Summit in Cali, Colombia in March 2018.

## Results

Of the 20 countries in the Region, only 13 responded to the survey: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Spain, Mexico, Nicaragua, Panama, Paraguay, Uruguay and Venezuela. The following are the obtained and recorded results.

### Emigration in Ibero-America (IBA)

Regional emigration is very varied and has different characteristics in each of the sub regions of Ibero-America. Although CIMF is constituted by four sub regions (Mesoamerica, Andean, Southern Cone and Iberian Peninsula), the presentation of the results may or may not coincide with this sub regional segmentation.

In the Southern Cone, it is observed that in addition to the influx of migrants to Europe and the USA, there is also a significant intraregional flow. Argentina reported in 2012, that the main destinations of its emigrants were, Spain (30.2%), USA (23.3%), Chile (8.5%), Paraguay (6.1%), Israel (5.0%), Bolivia (4.7%), Brazil (2.9%) and Uruguay (2.3%)<sup>10</sup> Brazil has also had a greater emigration to Europe (51.5%), with a predominance towards Portugal (13.4%), Spain (9.4%), Italy (7.1%) and the United Kingdom (6.6%). Second place (23.9%) to the USA and third to the Asian continent (9%, of which, 7.4% goes to Japan).<sup>11</sup>

In the case of Paraguay, the emigration is to the contiguous countries, mainly Argentina, which from 2000 to 2010 had an increase of 70.5% of Paraguayan immigrants. It is followed by Spain and Brazil with almost 80 thousand and 39 thousand respectively in 2015.<sup>12</sup>

For Chileans, the country they emigrate to is Argentina, followed by the United States and then other destinations, such as Sweden, Australia, Brazil, Venezuela, Spain, France and Germany.

Uruguay reported in order of importance the same destinations as Argentina and Brazil, such as Spain, USA and later Argentina and Brazil.<sup>13</sup>

The Andean Region, integrated in this study by Bolivia, Colombia, Ecuador and Venezuela. Bolivia reported that according to the 2012 National Population Census, the main reception sites of Bolivians are: Argentina (38.2%), Spain (23.8%), Brazil (13.2%), Chile (5.9%), USA (4.2%), Italy (1.8%) and Peru (0.8%). Before the economic crisis of 2008 and the visa requirement for Bolivians to countries of the European Union (April 1, 2007), Spain was the main destination.<sup>14,15</sup> Bolivia has about 10 million citizens and approximately 1.6 million emigrants. In the 2012 census, 11.1% of the households declared having an emigrant relative.<sup>16,17</sup>

Colombia is the country with the largest number of emigrants from South America (4.7 million), which is equivalent to 10% of its current population, followed by Peru and Brazil. According to World Bank data for 2011, the main destinations of Colombian emigration were USA (28.8%), Venezuela (28.4%), Spain (17.6%), Ecuador (8%), Canada (2), 1%) and subsequently Mexico, Panama and Australia.<sup>18,19</sup>

Ecuador is in the 102nd position of the 194 ranking of emigrants. The top 10 countries where they migrated in 2015 were: United States, Spain, Italy, Venezuela, Chile, Canada, Colombia, United Kingdom, Germany and Switzerland.<sup>7</sup>

In the case of Venezuela (2015), 606,344 Venezuelans lived abroad. However, there is a lot of irregular migration, which is difficult to measure. In February 2018, the report of National Migratory Trends in South America, it is observed that between 2015 and 2017 the global migration of Venezuelans increased by 132%, being the countries chosen: Colombia, USA, Spain, Chile, Argentina, Italy, Ecuador, Panama, Brazil, Mexico, Peru and Portugal. According to consolidated data of the International Migration Organization for (IOM), in 2015, the percentage of Venezuelans outside the country was 2.3% of its population and in 2017 it is estimated at approximately 4.7%, which indicates that almost 80% of the recent emigration from Venezuela has occurred mainly during the years 2016 and 2017. When comparing the figures of 2015 with those of 2017, an explosion in the movements of Venezuelans towards other countries is confirmed.<sup>20</sup> (Table 1)

**Table 1.** Emigración in IBA: main destinations according to country, 2010-2017.

Country of origin	Main countries of destination
Argentina	Spain, USA, Chile
Bolivia	Argentina, Spain, Brazil
Brazil	USA, Portugal, Japan
Colombia	USA, Venezuela, Spain
Chile	Argentina, USA, Spain
Ecuador	USA, Spain, Italy
Spain	France, Germany, USA
Mexico	USA, Canada, Spain
Nicaragua	Costa Rica, USA, Guatemala
Panama	USA, Costa Rica, Spain
Paraguay	Argentina, Spain, Brazil
Uruguay	Spain, USA, Argentina
Venezuela	Colombia, USA, Spain

Source: Data obtained from research according to references.<sup>10-25</sup>

Mesoamerica region is integrated into this study by Mexico, Nicaragua and Panama. Amazing was that to confirm that Mexico is the country with the greatest migratory flow to the USA, in 2015 it reached around 13 millions of emigrants, 97.81% of this total emigration to USA and; Canada in second place 0.61%; Spain 0.41%; Germany in fourth place, 0.15% and Guatemala 0.15%.<sup>22</sup>

Nicaragua reports that 14.0% of its population lives abroad, mainly in Costa Rica and the USA, although it is followed by Guatemala, El Salvador and to a lesser degree Spain and Honduras, representing approximately three quarters of intraregional migration in Central America.<sup>23</sup>

In Panama, 52% of emigrants go to the USA; 6.4% Costa Rica; Spain 6.2%; Colombia 3.8% and Mainland China receives 2.8% of Panamanians.<sup>24</sup>

Spain is one of the main receiving countries of Latin American migrants. After the economic crisis that began in 2008, many Spaniards were left without work or their life expectancies were frustrated, so they decided to migrate to other countries. In 2009 there were 1,000,047 thousand Spanish residents abroad, according to the National Institute of Statistics of that country, the number of Spanish migrants increased during the following eight years, reaching in 2017 to 2.40 million people, of which, 794,209 (33%), are born in Spain, the remaining 67%, are nationalized foreigners, surpassing the figure of 1.6 million people. His favorite destination to emigrate was the European Union (425,919, in 2017). In 2009, 819,731 nationalized Spaniards returned to their country of origin, calculating that of them, 578,763 (71%), did so to Latin America. Eight years later, the number of nationalized who have returned to their country has doubled (from 755,923 to 1,000,042 people). The main receiving countries of Spanish migrants are France, Germany, United Kingdom, Argentina and Venezuela. The last two were referred to the nationalized Spaniards who returned to their country of origin.<sup>25</sup>

### **Immigration in the Iberoamerican countries**

According to the last 2010 Census, 1,805,957 people of foreign nationality lived in Argentina, representing 4.5% of the total population. Of these, 3.67% come from the American Continent. It is the main recipient country of intraregional migration, with Paraguay (36.4%), Bolivia (23.5%), Chile (13%), Peru (10.6%), Uruguay (7.9%) having greater relevance, and Brazil (2.8%).<sup>10</sup> This migration has been favored by the regional integration agreements (the Common Market of the South [MERCOSUR] and the Andean Community of Nations) that facilitate intraregional mobility. On the other hand, there is also growth in the number of non-South American migrants who are more vulnerable than regional migrants due to the difficult access to migratory regularity.<sup>20</sup> In recent years there has been an increase in Dominican and Venezuelan immigrants, with the latter reaching a percentage increase of 903% (1,936 in 2017). Other flows of significant immigrants are those affected by the conflict in the Syrian Arab Republic, which from October 2014 to October 2017, has received 828 applications for admission. Likewise, 4,747 residences were granted to citizens of Senegal between 2010 and 2015 (97.7% Men and 2.3% Women).<sup>26</sup>

In Chile, according to United Nations (UN) data, there were 369,436 immigrants in 2010, a figure which increased to 469,436 in 2015, a 27% increase, which corresponds to 2.7% of the total population. Between 2005 and 2016, 323,325 Definitive Permanencies were granted in Chile, with the Peruvian community benefiting the most, with 123,401 (38%); subsequently the Bolivian (13.5%), and the Colombian (13%).<sup>27-29</sup>

Immigration in Uruguay seems to be less intense and diverse, the data reported correspond to people from Argentina and Brazil mainly. The main issuer of the European immigrants is Spain.<sup>13</sup>

According to the 2010 Census, Brazil has 0.3% of the population composed by foreigners, which totals just under 600,000 inhabitants, from Portugal (21%), Haiti (8%), Bolivia (8%), Japan (7%), Italy (6%), Spain (5%), Argentina (5%), China (5%) and USA (3%).<sup>30</sup>

Under a special Refugees condition, in 2015 they received 10,308 applications, the majority being from Venezuela (33%), Cuba (13%) and Angola (13%). In 2016, 9,552 refugees from 82 nationalities were registered,<sup>31</sup> as reported by the UN, the countries of origin were: Syria (27%), Colombia (13%), Democratic Republic of the Congo (13%), Angola (12%), and Palestine (5%). In the same year, 35,351 asylum applications were received from people from Haiti (20%), Senegal (15%), Venezuela (12%), Angola (7%), Nigeria (7%), Cuba (6%), Syria (3%) among others (Table 2).

**Table 2.** Immigration in Ibero America: main countries of origin, 2010-2017.

Accepting country	Main countries of origin
Argentina	Paraguay, Bolivia, Chile
Bolivia	Argentina, Brazil, Spain
Brazil	Portugal, Haiti, Bolivia
Colombia	Venezuela, Ecuador, USA
Chile	Peru, Bolivia, Colombia
Ecuador	Colombia, Peru, USA
Spain	Marruecos, Rumania, Ecuador
Mexico	USA, Gautemala, Spain
Nicaragua	Honduras, El Salvador, Mexico
Panama	Colombia, Venezuela, Nicaragua
Paraguay	Brazil, Argentina, Spain
Uruguay	Argentina, Brazil, Spain
Venezuela	Colombia, Spain, Portugal

Source: Data obtained from research according to references.<sup>7,10,13,14,20,26-38</sup>

As for the Andean Sub region, for the year 2015 1,404,448 immigrants lived in Venezuela, representing 4.5% of the country's total population,<sup>20</sup> having as main countries of origin Colombia, Cuba, Bolivia and Haiti. As mentioned before, for many years, Venezuela was a country that received immigrants, as reflected by the high percentage of this population; however, in recent years it has become a country that emits migrants.

Bolivia in 2012, reported 119,033 people born abroad, representing 1.2% of the total population, of which 52.3% are men and 47.7% women. Their countries of origin were Argentina (30.4%), Brazil (18.5%), Spain (8.6%), Peru (7.8%) and Mexico (7.1%). Of this international immigration, 44.0% reside in Santa Cruz; Cochabamba has 17.6% and La Paz houses 14.4%. Of these, eight out of 10 live in the urban area; 23.4% said they had arrived in the country between 2010 and 2012. When comparing the data of 2012 with those of 2001, there was an increase in the number of immigrants under the age of 14 with 4% and a decrease of 3.9 % in the group of 15-64 years.<sup>14,32</sup>

Regarding the situation of immigrants in Colombia, the data indicate a total of 109,971 people from other countries, the most important are Venezuela, Ecuador, USA and Spain, which corresponds to 0.27% of the total country population (DANE, 2005). The percentage participation by continents of origin is: South America (43.3%), North America (31.2%), Central America and the Caribbean (13.8%), Europe (11.0%), Asia, Oceania and Africa are the continents with less origin of foreigners.<sup>33</sup>

In Ecuador, about 200,000 people entered from 2001 to 2010, estimating that the immigration rate in 2010 was 1.2%, increasing 0.3% in relation to 2001. The countries of origin for that year were Colombia, Peru, USA, Spain, Cuba and Venezuela in order of importance and frequency.<sup>34</sup>

In Mexico it is reported as the main group of immigrants are people from the USA (69.7%), Guatemala (4.9%), Spain (4.3%), Colombia (1.3%), Argentina (1.3%), other immigrant groups are much smaller. Together they all represented 1% of the total population, according to the last 2010 Census, which detected 961,000 foreigners.<sup>35</sup>

Nicaragua in 2010 estimated that 40,000 foreigners lived in its territory, according to World Bank data, highlighting the intraregional immigration of Central Americans, especially from Honduras and El Salvador, which are favored by the free mobility agreements (CA-4).<sup>36</sup> The Central American Free Trade Agreement or CA-4 is an agreement signed in June 2006 by four of the countries of Central America (Guatemala, El Salvador, Honduras and Nicaragua), establishing free mobility among citizens of the signatory countries without restrictions beyond their national identity documents. However, minors are required to present a valid passport to avoid illegal trafficking of children.<sup>37</sup> Of the immigrant population residing in the country, Hondurans make up the largest group, grouped 36.3%, following Mexicans, Cubans, Spaniards, Russians, Germans and Colombians. Those of African origin represented 4.16% of the foreign population and Asians 1.2%. According to data from the National Police, it is estimated that only 5 to 10% of people who arrive or transit through the country are registered, which they estimate could translate into at least 60,550 to 121,100 irregular immigrants in the period from 1990 to 2005, which come mainly from Peru, Ecuador, Colombia, India, Dominican Republic, Costa Rica and Mainland China. The proportion of extra-regional migrants went from 18.0% of immigrants in 2006 to 60.0% in 2009, with the main countries of origin being Eritrea, Somalia and Ethiopia.<sup>38</sup>

In the immigration that is registered in Panama (2010), it was found that the main group corresponds to Colombians (28.2%), followed by Venezuelans (17.1%), Nicaraguans (9.1%), Chinese (5.9%) and Dominicans (5.4%).<sup>24</sup>

In Spain, the main countries of origin are Morocco (11.96%), Romania (11.25%) and Ecuador (7.21%). In recent years, the number of immigrants living in Spain has decreased by 427,112 people (6.8%).<sup>7</sup>

### **The importance of remittances in the countries of the Region**

The valued monetary remittances generated by the emigrants are very important for the economy of the countries of Ibero America (not only of Latin America). In this sense, we see that of the top twenty countries receiving remittances from the world ranking in 2016, there are two in the region: Mexico in fourth place with 28,143 million dollars (4.8% of the world total), which equals 2.3% of the Gross Domestic Product (GDP)<sup>22</sup> and Spain in thirteenth position with 10,080 million dollars (1.7%). Remittances have been increasing progressively in recent years and are expected to continue that way. The main countries of origin of the economic flow are France, Germany and USA.<sup>7,22,39</sup>

Nicaragua is another country whose importance of remittances is fundamental. This is shown when we observe that in the first quarter of 2017, income from remittances corresponded to 9.6% of GDP, with

income from the US economy (56.0% ), Costa Rica (20.2%), Spain (9.6%), Panama (5.9%), El Salvador (1.0%), Canada and Mexico (0.9% and 0.3% respectively).<sup>40</sup> Although the economic dependence on remittances for Nicaragua is evident, in countries like Panama it does not have the same importance, in 2016 a total of 505.7 million dollars was received; mainly from the USA, Costa Rica and Spain, which represented 0.92% of GDP.<sup>7</sup>

In the Southern Cone, the economic flow through remittances does not seem to be so important, so we see that in the case of Paraguay (2016), remittances worth 656.9 million dollars, 103.3 million dollars more than in 2015, came in. Money comes mainly from three countries: Argentina, Spain and Brazil.<sup>7</sup> Likewise, in Uruguay, 2.4% of households received remittances in the surveyed year with an average monthly amount of 150 dollars, 60% destined for Montevideo.<sup>13</sup> In the case of Brazil, monthly remittances were received with an average of US \$ 200 million dollars (2,400 million a year).

In both Argentina and Chile, income from remittances has a low economic impact. In the case of the first, in 2016, 349 million dollars were received, equivalent to 0.4% of GDP.<sup>41</sup> Apparently the Argentine emigrants do not send money on a regular basis to their families. In the same sense, income from remittances in Chile is not considered important and comes from countries like Argentina, USA and Spain mainly.<sup>7</sup>

In Colombia, remittances sent according to reports from the Bank of the Republic, represent between 1.7 to 1.8% of GDP, with Valle del Cauca being the department that receives the most remittances (33%), reaching up to 3% of GDP for the Vallecaucanos.<sup>7,33</sup> Bolivia in 2016 received remittances worth 1,217.2 million dollars from Argentina, Spain and the United States (18.4 million dollars more than in 2015), which is equivalent to 3.60% of GDP.<sup>7</sup> Although, refers to a significant decrease in recent years due to causes attributable to the international crisis.<sup>42</sup>

Ecuador has two sources of financing: oil and remittances.<sup>43</sup> The second ones constitute the second source of income of the country, representing in 2008 7.4% of the GDP, later a decline has been observed, which as of 2011 has oscillated around 3.5% of this Product.<sup>34</sup> In 2016, remittances came mainly from the USA, Spain and Italy. The rest came from the United Kingdom, Mexico, Chile, Peru, Canada, Germany, Switzerland, Belgium, France and Colombia.<sup>44</sup>

Venezuela is a difficult country to analyze, since its figures are not reliable. According to official data, remittances sent to Venezuela by emigrants, for the year 2016, represented 0.0% of GDP, even with negative growth (-6.3%).<sup>41</sup> However, these data are not credible, since today more than ever the emigration of Venezuelans to many other countries implies that the flow of remittances is greater. The difficulties posed by the Venezuelan government in the exchange control, forces the citizens to use informal mechanisms for the entry of foreign currency, as observed among the population. In this sense, a private polling company registered that 88% of emigrant families claim to receive money from abroad.

### **Main reasons for emigration in Ibero-America (IBA)**

Based on the recorded information there are six main reasons why people emigrate in Ibero-America: a) economic and labor issues, b) family reunion, c) political issues d) war conflicts, e) studies and f) environmental factors.

In relation to economic and labor issues we see that they are also directly related to family reunions. Virtually all countries have these causes of migration, stimulated by poverty and lack of employment or better remuneration, as occurs in the 13 countries surveyed. At this point it is important to distinguish between regular or legal migration and irregular or also known as illegal migration. In IBA there is a high frequency of irregular migration, which is markedly intraregional, as occurs between the USA, Mexico, and the countries of Central America. For many of these migrants, visa procedures are very cumbersome, expensive and difficult to obtain. The same occurs between the countries of the Andean sub region and the Southern Cone, with a high percentage of intraregional immigrants between Colombia, Venezuela, Ecuador, Bolivia, Peru, Brazil, Chile, Argentina, Uruguay and Paraguay. However, this condition of frequent irregular migration entails greater risks to their health, given that they try to evade migration filters, crime and even expose their lives.<sup>10,13,19,20,22,33-35,45-50</sup>

In Ecuador as well as in Bolivia and Paraguay, the phenomenon of feminization of migration has been presented since it has been considered that the main causes of emigration are the economic crisis, decrease in the employment rate, and family reunion, besides that women enter the labor market more easily.<sup>34</sup>

On the other hand, we also have regular or legal migration, which under the same economic motivators travel with greater security and planning, often seeking to establish themselves in the receiving place. These people usually have better levels of education, which allows them to get a better job with better income. This also occurs in the 13 countries surveyed, with the situation in Spain being the tenth largest recipient of immigrants worldwide, but also an important issuer of young immigrants (25 to 35 years old), with university degrees and languages, who Due in part to the economic crisis that persists, they seek better employment opportunities, mainly in other European countries.<sup>51,52</sup>

Political issues and armed conflicts have been triggers of large-scale migration, as happened in Nicaragua, between 1970 and 1980 by the Sandinista Revolution and the Counterrevolution in times of the Cold War, or the armed conflict in Colombia produced by the Revolutionary Armed Forces (FARC-EP), The Dictatorship of Pinochet in Chile and more recently the political conflicts in Argentina, Bolivia, Paraguay and the "Migration Escape" of Venezuela, which in the latter case is due to economic and political collapse.<sup>19,38,49,53,54</sup>

Another cause of Migration reported was that of studies abroad, mainly in Chile and Colombia, since in the latter country postgraduate education is very expensive.<sup>33,45,49</sup>

The environmental factors were reported by Bolivia and Nicaragua. The first one referring to droughts, floods and landslides due to the softening of the earth. The second refers to meteorological phenomena such as Hurricane Mitch (1998), which increased emigration to Costa Rica by 40%.<sup>36,47</sup>

### **Main work areas of immigrants in receiving countries**

In general, all countries report that the activities in which immigrant workers work are related to the three sectors of production, predominating agriculture, livestock, construction, domestic workers, services, trade, killing and processing of meats, the textile industry, etc.

Brazil, like Chile, Colombia, Bolivia, Argentina, Ecuador, Spain and Mexico, report that a high percentage of its migrant population has advanced or university studies, dedicated to scientific and/or academic activities, as well as business. In some cases, as in Spain, it is common to find a large contingent of workers who occupy positions in the labor structure well below the real level of their qualifications, occurring more frequently with informal workers.<sup>10,19,22,42,55-62</sup>

### **Do migrants travel alone or with family in the Region?**

There are no reliable data on this, however, several of the countries provided information that allows us to make some inferences, for example: Nicaragua reports that the majority of migrants to Costa Rica travel alone, with the intention of later regrouping with the family. The information reveals that a significant percentage of Costa Rican households are of binational composition, finding that 36.8% of Costa Rican-born households live in households with a Nicaraguan head of household and, to a lesser extent, spouses and other relatives. Of these binational households, 36.9% of the total heads of families were born in Costa Rica, and 62.6% in Nicaragua.<sup>63,64</sup> Another important fact is that provided by Paraguay, referring to the fact that the people who mostly emigrate travel in principle alone and with the passing of the years take their relatives; they are young people of productive age, and especially women. The Permanent Household Survey (EPH), in 2012, shows that about 60% of registered emigrants are women: 52% in Argentina and 80% in Spain. Regarding the ages, the majority is in the range of 20 to 34 years (34%, between 20 and 24 years, 18% between 25 and 29 years).<sup>65</sup>

In Bolivia, patterns of emigration are more or less common among the population, such as the fact that when you want to improve income “only one family member goes out”, while when looking for a job “it is almost normal to see that the whole family leaves the country in search of new destinations”.<sup>66,67</sup> Between 2004 and 2007, a predominantly female flow (64%) was observed, which apparently was motivated by the greater ease to get a job. Of the women-mothers who migrated from Cochabamba, 91% did so under the independent pattern and only 9% under the associative pattern of family reunification. According to the relatives of these women, the reasons that motivated the migration were: unemployment (55%), others (31%), family reunification (9%) and 4% intrafamily abuse.<sup>66</sup> Bolivian emigrants in Spain had higher irregularity rates than others in the region, which obviously makes them more vulnerable in labor and legal terms and with greater difficulty in regrouping their family, being also more likely to have to return.<sup>68</sup>

In Colombia, as it is referred to, migrants seeking better employment opportunities tend to travel alone at the beginning and reunite the rest of the family in the receiving country.<sup>45</sup> The same situation occurs with Venezuelans, most of them young, single, alone traveling emigrants. In fact, according to some unofficial research, Venezuela is the second country with the highest percentage of children living abroad.<sup>69</sup>

The case of Argentina, in the emigration to Spain, reports a somewhat different situation, according to official reports, 53.2% of men arrived in that country alone, without a partner or children, while 46.3% did so with a partner and/or children. Women traveled 44.1% without a partner and children and 18.9% with a partner and/or children.<sup>70</sup>



In Ecuador, migrants travel alone with the hope of reuniting their families in the immediate future, this reflection is corroborated by the statements of the Vice Minister of Human Mobility who in 2014 indicated: "This year we have a terrible and unfortunate number that exceeds 600 children who have traveled unaccompanied in search of their families ", triple the number of cases registered in 2013.<sup>71</sup>

Finally, in Spain it is referred that the emigrant is usually male, young of 30-34 years, mainly of Catalonia, Community of Madrid and Valencian Community and in some occasions we can speak of young couples with children.<sup>72</sup>

### **Assaults and/or abuses against immigrants**

The migrant is very vulnerable from the moment he decides to leave home and start looking for a better future. It requires the courage and the decision to part with the family, customs, security, food. To face the challenges of the migratory transit to the dreamed destination, and finally, to try to insert itself in the target society, to assimilate and reach the goal of a better quality of life.

The migratory process is not simple, the immigrant is exposed to different risks to his health, both due to common illnesses, as well as accidents, aggressions and/or abuses. In this sense, we see that the attitudes of rejection towards immigrants are varied from country to country, for example, in Uruguay, Bolivia and Argentina, people present aggressive-passive attitudes, such as indifference, marginalization, social exclusion, and intolerance, hindering intercultural links and producing changes and reactive behavior among newcomers.<sup>73-76</sup> In the case of Chile, racist attitudes can be observed in daily life with clear examples such as the leasing of rooms at abusive prices, in addition to unworthy conditions of overcrowding and lack of hygiene; various physical aggressions, in particular to black people.<sup>77</sup>

Other countries have a more important component of sexual violence, as in Colombia, Nicaragua and even Paraguay, which in the case of the former, has stood out as a country of origin, transit and destination for trafficking in persons, with crimes such as sexual exploitation, forced labor and drug trafficking. In the case of the second, the United Nations Children's Fund (UNICEF) estimates that there are around 4,800 children and adolescents who are sexually exploited commercially in Managua. This is an indicator of the high number of trafficking in persons.<sup>78,79</sup>

Venezuela apparently does not have problems of abuse towards migrants, the only seemingly violation of their human rights occurred in 2015, through the unjustified deportation of Colombian citizens ordered by the State. In this context, mention was made of the apparent breach of the administrative procedure of deportation and the possible violation of the rights of some of the deported persons.<sup>80</sup>

It is considered that Ecuador has a remarkable increase in immigration, especially of undocumented immigrants since 4 years ago, this phenomenon has caused changes in society and newspaper reports have been observed in cases of xenophobia and labor exploitation.

According to the reports provided, Mexico and Spain are the most violent countries for immigrants, although, under different circumstances. In the case of Spain, reference is made to a greater variety of xenophobic and racist attacks. According to the RAXEN 2016 report, there are 500 verified or documented

incidents, compared to the 452 that were recorded in the 2015 report, when there were evidence of 284 assaults and 136 incitements to hatred. From January to December 2016 this organization collected disturbing data when registering in the Community of Valencia (93 incidents), Madrid (72), Catalonia (58), Andalusia (57), Castilla-León (31), Aragón (27), and the Balearic Islands, Murcia, Euskadi, Navarra (with more than 20), detecting incidents in all the Autonomous Communities.<sup>81,82</sup> Regarding sexual assaults, one third of the female victims are immigrants, 75% were Spanish aggressors and 25% were not born in Spain.<sup>83</sup> Reports from Médicos del Mundo (Voluntary healthcare organization) show that 85% of the patients who attended have experienced violence before, during or after their migration, and a third of asylum-seekers have been tortured.<sup>84</sup> In addition, immigrant and refugee women, as well as minors in transit due to suffering a high percentage of economic violence, are in a particularly delicate situation, psychological, physical and sexual (Table 3).

For its part, Mexico seems the most violent country in relation to organized crime, not because of xenophobia towards migrants. It happens mainly with those who are in transit and even more, in the proximity of the borders with the United States and Guatemala. Mexican immigrants of all nationalities who try to cross the border illegally receive mistreatment at the US border 65-85% of the time, the main aggressions are: physical violence with theft, especially money and identification and the physical, verbal and psychological violence, extortion, kidnapping and sexual violations, which although they are also present, the percentage of incidence is lower compared to the others.<sup>85-87</sup>

### **Formal assistance programs to migrants in the countries of IBA**

Regarding the presence of legislation and formal health care programs for the migrant population, we see that only three countries have them, Argentina, Ecuador and Mexico. In the case of Argentina, there is the Support Program for Social Integration of Migrants (Migrant COUNTRY). The establishment of a "Migrant and Refugee Orientation Center" is proposed, which allows for the provision of valid information, such as the completion of immigration procedures, legal advice and accompaniment, prevention of gender violence, institutional violence, and the taking of complaints in case of acts of discrimination, and above all, empowerment workshops, language classes, introduction to employment and craft workshops, in addition to providing a place for those people who do not have headquarters to meet.<sup>88</sup>

In Ecuador, in March 2007, the National Secretariat for Migrants was created - SENAMI being responsible for defining and executing migration policies, aimed at the human development of all its stakeholders, serving as a link in all actions of attention, protection and development of the migrant, according to the policy of the Ecuadorian State;<sup>89</sup> programs such as "Healthy Ecuador I come back for you" and "Return of People with Catastrophic Diseases" granted by the Ministry of Public Health, as well as "Return of People with Disabilities" granted by the Vice Presidency of the Republic of Ecuador are contemplated. Currently, all assistance programs for migrants are carried out by the Ministry of Foreign Affairs and Human Mobility.<sup>90</sup>

In the case of Mexico, there are government institutions whose objective is to work for the benefit of this vulnerable population, such as the Institute of Mexicans Abroad (IME), the Migration National Institute (INM), among others, with various programs In this regard, the most important are:

**Table 3.** Vulnerability and Access to Healthcare Services.

Country	Assault and abuse of migrants	Child Migration	Shelters for migrants	Formal programs of attention to migrants	Access to Healthcare Services	Free medications for migrants
Argentina	Passive-Aggressive-attitudes	Diverse immigration	No	Yes	Gratuitous	Yes
Bolivia	Passive-Aggressive-attitudes	Immigration from Brazil, Colombia, Ecuador and Peru	Yes, religious and civil	No	In some specific programs	No, only for regular migrants
Brazil	No	No data available	No	No	Gratuitous	Yes
Colombia	Sexual violence and trafficking	No data available	Yes, religious and civil	No	In medical or surgical emergency	No
Chile	Racist and xenophobic attitudes	Diverse immigration	Yes, of the State, religious and civil	No	In medical or surgical emergency	Yes, in specific institutions
Ecuador	Xenophobia and labor exploitation	Immigration from Colombia and Peru	Yes, of the State, religious and civil	Yes	Gratuitous	Yes
Spain	Very intense xenophobic and racist attacks	Diverse immigration	Yes, of the State, religious and civil	No	In medical or surgical emergency. Varies in some Autonomous Communities	Yes, only in some Autonomous Community
Mexico	Physical, economic, and sexual aggressions by the organized crime	Emigration to the United States	Yes, of the State, religious and civil	Yes	Free for 90 days (Popular Insurance)	Yes, in specific institutions
Nicaragua	Sexual violence, accentuated in childhood	Emigration to the United States	Yes, of the State, religious and civil	No	Gratuitous	Yes
Panama	No	No data available	Yes, of the State, religious and civil	No	Free in migrant shelters	Yes, in specific institutions
Paraguay	Sexual violence and trafficking	No data available	No	No	In medical or surgical emergency	Yes
Uruguay	Passive-Aggressive-attitudes	No data available	No	No	In medical or surgical emergency	Yes, in specific institutions
Venezuela	No	No data available	No	No	In medical or surgical emergency	No

Source: Data obtained from research according to references.<sup>3,10,22,28,36,60,73-106,119-131</sup>

**Mujer Migrante:** Offers reliable and timely communication and information services for migrant women and their families -in Mexico and abroad, mainly in the USA, as well as foreigners established or in transit through Mexico, particularly in Central America-, in order to reduce the risks of their condition of double vulnerability: women and migrants.<sup>91</sup>

**Temporary Immigration Regularization Program:** The purpose is to regularize the situation of temporary immigrants in Mexico.<sup>92</sup>

**Seguro Popular:** The National Commission of Social Protection in Health facilitates the temporary incorporation of the Social Protection System in Health of the Popular Insurance for 90 days, during its transit through the national territory, covering the three levels of medical care, no matter your status as a regular or irregular migrant.<sup>93</sup>

Go healthy, come back healthy: It is a program that contributes to the health of migrants and their families with intersectoral actions of promotion and prevention of health, in the place of origin, transit and destination of these groups, mainly in the USA and other cities.<sup>3</sup>

Other countries such as Paraguay, Uruguay, Nicaragua and Venezuela have legislations that guarantee the right to health for the entire population, including migrants, however, they do not have specific programs. Bolivia legally has the possibility of supporting regular migrants in some priority programs such as childbirth care, child or elderly care, as will be seen later on.

In Spain, Royal Decree Law (RDL) 16/2012 excluded from health care thousands of people including migrants in transit, except in some situations such as emergency care or assistance to pregnant women, minors, asylum seekers, victims of It deals, however, with the violations of the law, even those populations that did have recognized rights have been denounced by organizations such as REDER and other Non-Governmental Organizations (NGOs).<sup>94</sup>

### **Access to medical healthcare for undocumented immigrants**

In most of the countries such as Colombia, Chile, Uruguay, Paraguay and Venezuela, medical attention is provided to immigrants in case of medical or surgical emergency, even in the case of an irregular situation, with the expenses borne by the State being covered.<sup>28,95-97</sup> Spain, through Royal Decree (RD) 1192/2012 and Royal Decree Law 16/2012: Article 8 states that non-EU foreigners who are in Spain registered in the Register of Foreign Residents or are residents in a regular administrative situation, have the right to healthcare under the same conditions as Spanish citizens. Likewise, foreigners not registered or authorized as residents in Spain (immigrants in irregular administrative situation), will receive healthcare only in the following situations: a) Due to urgency due to serious illness or accident, whatever its cause, up to the situation of medical discharge, b) By pregnancy, childbirth and postpartum and c) Children under eighteen years of age will receive health care under the same conditions as Spanish citizens.<sup>98,99</sup> Despite the existence of the DR, not all communities apply it as is, in Catalonia, Euskadi and Asturias, they are guaranteed the right to receive healthcare if they are registered in their territory. In Castilla-La Mancha, they are billed for the care provided. Only in Andalusia is healthcare provided to immigrants in an irregular situation under the same conditions as the rest of the Spanish.<sup>100,101</sup>

In the case of Brazil, Ecuador and Nicaragua, the medical service is provided indistinctly to any person who requests it, regardless of citizenship or immigration status. This fact has motivated that in the case of Nicaragua, many people, including Honduran citizens, cross the border only to receive health care and return to their country.<sup>36,90</sup> In the cases of Mexico and Panama, they reported that besides providing protection to the healthcare of irregular migrants, they also have shelters that provide temporary assistance in basic issues such as food, housing, clothing and legal advice.<sup>93,102</sup>

### **The attention of the irregular migrant who can not pay for the medical service**

In some countries such as Argentina, Brazil, Ecuador, Nicaragua and Paraguay, medical care for irregular migrants is free.<sup>90,103</sup> In Panama it can be provided in this way only in hostels, while Chile and

Uruguay do so only in cases of being affiliated with the National Health Fund (FONASA), in the first case or a mutualist in the second.<sup>104-106</sup> Colombia and Spain only in the case of medical or obstetric-gynecological emergencies that have already been mentioned before.<sup>99,107</sup> Mexico for 90 days from your registration in the free Seguro Popular<sup>93</sup> y Bolivia does this in informal social security, with the authorization of the director of the medical unit, since formally only regular migrants who do not have health insurance can be cared for in the following areas: pregnant women, children under 5 years old, adults over 60 years old, sexual and reproductive health services for women of childbearing age and people with disabilities.<sup>108</sup> In Venezuela, this possibility has recently been limited by conditioning medical attention to the presentation of the “Carnet de la Patria”.

### **In case the migrant can not buy the medication**

In terms of providing medicines free of charge to migrants, it is striking that ten of the thirteen countries can provide it under different characteristics. Argentina, Brazil, Ecuador, Nicaragua and Paraguay do so indiscriminately with their citizens in public health institutions and within a basic table of medicines.<sup>90,109</sup> While Bolivia provides it only to regular migrants and in the programs referred to in the previous paragraph. Spain, only in some autonomous community.<sup>99</sup> Chile, Mexico, Uruguay and Panama only in certain health institutions.<sup>91,104-106</sup> The countries that do not provide medicines to irregular migrants are Colombia and recently Venezuela, which can be explained by the current economic, political and social crisis.

### **Main health problems of the immigrant population requiring consultations**

The main reasons for consulting healthcare services in the 13 countries surveyed are repeated with relative frequency. Therefore we will enclose them in two dimensions, according to the information received: the biological sphere and the mental health.

In the biological diseases area, the most frequent were respiratory and gastrointestinal and other infectious diseases such as tuberculosis, hepatitis, those transmitted by vectors, hosts and reservoirs such as malaria, dengue, filariasis, schistosomiasis. In addition to accidents and injuries. These conditions were a common denominator for Bolivia, Spain, Mexico and Argentina, although the latter also refers as frequent headaches, allergies, vascular problems (from vascular insufficiency, to cerebral vascular accidents).<sup>76,102,109-113</sup> Bolivia also reports high frequency of “altitude sickness”.<sup>110</sup> For Chile, the main demands of medical attention are the diseases that require surgical intervention (37%), delivery (20%), illness with medical treatment (18%) and pregnancy (5.8%).<sup>28</sup>

The most frequently reported mental health problems are the following:

Nicaragua highlighted that people consulted and with migrant relatives suffer stress (67%), depression (58%), headache (39%) and intrafamily violence (5%).<sup>114,115</sup> Brazil mentions that the immigrants with the most mental and behavioral disorders are the Koreans of São Paulo: anxiety disorders (13%), post-traumatic stress disorder (9.6%), mood disorders (8.6%), somatoform disorders (7.4%), dissociative disorders (4.9%), psychotic disorders (4.3%), eating disorders (0.6%), disorders derived from psychoactive substances (alcohol, tobacco or drugs, 23.1%). These Korean patients present more psychiatric disorders than the

population in Korea, especially post-traumatic stress disorder, and a rate similar to that found in the Brazilian population.<sup>116</sup> Argentina, in addition to the organic problems already mentioned, also mentions that 33% of the migrant patients surveyed, who are treated in a hospital in the City of Buenos Aires, presented acculturative stress, also called Ulysses Syndrome, with somatization data. Finally, Uruguay reported that there are no differences between the pathology of immigrants and national morbidity. Colombia, Panama and Venezuela do not have information available in this regard.

### **Most used Medical services in the Health Systems by irregular immigrants**

When asked about the use of medical services by immigrants, twelve of the 13 countries reported not having official information about it, however, based on the research carried out by the members of the working group among their inter-institutional colleagues, and by the personal experience of each of them, they reported that the first level of care and emergency services are the most demanded, probably followed by services of gynecology-obstetrics and pediatrics, as well as public health, for the control and treatment of the main causes of demand for medical attention referred to in the previous section. It is also known that there are assistance centers for migrants provided by different religious institutions, foundations, NGOs, among others. Spain responded that irregular immigrants do not have access to the health system since 2012. Regularized immigrants have the same rights as Spanish citizens. That said, the services most used by immigrants are related to the needs of maternal and child health.<sup>99,117,118</sup>

### **Hostels for irregular migrants in transit**

The shelters for irregular migrants are constituted as shelters and “sanitary and legal checkpoints” (although it is not their main function), which allow people to survive, reflect, even insert themselves into the labor and socially of the host country. Most of them provide accommodation, food, clothing, security, legal advice, general orientation, spiritual support and in many cases medical and psychological care. In cases where the shelter is of the State, assistance is also frequently provided to return to their places of origin. In the study presented, only six of the 13 countries have shelters for migrants financed by the respective governments, such as Chile, Ecuador, Spain, Mexico, Nicaragua and Panama. These five countries also have other facilities that have the same objective, but are of a religious or civil nature, with non-governmental financing.<sup>119-124</sup> Bolivia and Colombia, have shelters of this last type, mainly of a religious nature where the State does not participate.<sup>125-128</sup> In Ecuador, there are shelters for people waiting to be deported, one of them is located in a hotel in the capital that has all the basic services.<sup>129</sup> Finally, five of the countries surveyed, most of the Southern Cone, Argentina, Brazil, Paraguay, Uruguay, and Venezuela, do not have shelters that support migratory mobility.

### **About child migration in IBA**

Of the 13 countries, only eight provided information on child migration in their respective countries. In the Southern Cone, Argentina, according to the last population census of 2010, there were 140,312 minors of 14 years of foreign nationality at that time. In addition, in the composition of asylum and refuge

applications, 89% were of legal age and 11% were infants, predominantly men (65%), unaccompanied or separated from their families.<sup>10</sup> For Chile, the immigrant population under 18 years corresponds to 1.4% of the total, with the group with the greatest presence being between 20 and 35 years old.<sup>28</sup>

In the Andean Subregion, Bolivia mentions that the most recent reports on child immigration correspond to the Population and Housing Census 2001. In this, reference is made to the fact that in the Bolivian Amazon, Brazilian immigrants under the age of 15 represent 40%, Colombians, 4%, Ecuadorians 19.2% and Peruvians 14.3%.<sup>60</sup> According to the Observatory of the Rights of Children and Adolescents (ODNA), in 2010, 1% of the population of Ecuador under the age of 18 is from another country; this percentage corresponds to 27% of the total number of foreigners. The majority comes from Colombia and, in smaller number from Peru.<sup>130</sup> For its part, Venezuela does not have official information on this subject, however, according to some unofficial sources and press reports, as well as daily observation, it can be inferred that the majority of immigrants, both in the past and in the Currently, they are adults who arrive alone in the country, with few children entering or entering this form.

For Mesoamerica, Mexico and Nicaragua, they report that in the case of the former, 1.5% and 1.6% of children 0-9 years of age (men and women respectively) and 5.6% and 5.7% % of the group of 10-19 years (men and women), were repatriated from the US to Mexico, descending from 20,438 in 2010 to 11,743 in 2015.<sup>22</sup> For Nicaragua, between October 2013 and June 2017, the US Border Patrol captured 16,546 unaccompanied minors from Honduras, 14,086 from Guatemala and 13,301 from El Salvador, but only 178 from Nicaragua. The number of children deported from the US to Nicaragua is lower than in other neighboring countries, despite the socioeconomic difficulties facing the country.<sup>131</sup>

Infantile immigration in Spain broke the record in 2017, since in the first nine months there were 5,380 unaccompanied foreign minors in the reception centers of the autonomous communities and cities, 34.6% more than in 2016, when there were 3,997. Central Government statistics reveal that a total of 16,379 immigrant minors arrived in Spain since 2014.

### **Do immigrants in the host country live alone or with their families?**

Regarding the question of whether immigrants live alone or as a family in the host country, we see that it was only answered by five of the twelve countries (Argentina, Bolivia, Spain, Mexico and Uruguay). Argentina reports that at present, the family structure of immigrant families is as follows: couple and children 43.78%, couple alone 24.42%, children alone 12.90%, alone 11.06%, parents and siblings 0, 92%, parents 1.38% and other 5.53%. On the other hand, immigrants from bordering countries have arrived mostly when they were young, consequently, a high proportion of them and they had not yet formed their families of procreation before leaving. Mostly they resided with their parents and only a minority had a spouse and children. Although there are many immigrant women who are already mothers, the proportion of those who have their children in the country of origin (long-distance mothers) is quite low. This practice is very uncommon among women of Bolivian origin and more widespread among those of Paraguayan origin.<sup>103</sup>

Regarding family composition, according to data provided by Bolivia, in the 2001 National Population and Housing Census (no more recent data were found), 43.3% of foreigners born in Amazonian countries (Brazil, Peru, Colombia, Venezuela, Ecuador) were single, 51% married/cohabitant and 5.8% separated/widowed/divorced.<sup>60</sup>

In Spain, the immigrant population lives as follows: 33% only (35% of men, 31% of women); 28% with another person; 27% in units of 3-4 people; and the remaining 12% in units of more than 4 people. The average size of households is 2.5 members, below the average of Spanish households (2.8 according to the 2001 Census).<sup>132</sup>

In the case of Mexico, it is mentioned that according to the 2010 Population Census (the last), 54.4% of the immigrants were married and 45.6% were single.<sup>35</sup>

The information provided by Uruguay is not of a national nature, corresponds to the report of a Health Center of Montevideo, according to which, 75% of the records of migrant patients attended from January to July 2016, arrived alone, being a large majority of women (close to 100%).

### **Migrant population who live alone, without returning to join another couple**

This question was answered only by six of the thirteen countries, Bolivia, Ecuador, Spain, Mexico, Nicaragua and Uruguay. The first mentioned that the presence of singles is comparable to that of married (35%), with a notable presence of couples in cohabitation (24%).<sup>42</sup> In Ecuador, according to the Employment and Unemployment Survey of 2006, it records that, regarding the marital status of people who left the country, 48.1% have a commitment (married 42.3% and free union 5.8%), highlighting in this group men with percentages of 49.6%. While in that population that did not have a spouse (separated 2.9%, divorced 2.0%, widowed 1.3%, single 45.7%) women stand out with 53.8%.<sup>133</sup>

Spain reports that of married people, 38% of men and 26% of women are physically separated from their spouses, in most cases because they have not achieved reunification in Spain. On the other hand, 62% of immigrant parents and 47% of mothers have children in the country of origin (of them, more than two thirds are minors). The reunification of the spouses is somewhat greater among Eastern Europeans and Latin Americans (73% in both cases) than among Africans (66%). However, because African immigration is older in Spain and have more children on average (2.5, 1.6 for Eastern Europeans and 1.9 Latin Americans), the average size of both their households ( 2.8 members) as of their homes (4.8 members) is higher than that of the other groups (2.3 and 4.2 Europeans and 2.4 and 4.1 Latinos). Finally, the highest birth rate among Latin Americans, in relation to Eastern Europeans, explains that the average size of their homes is higher, despite the fact that the degree of family reunification is similar in both groups.<sup>132</sup>

In Mexico, it is reported that the family structure of female immigrants who did not remarry or unite as a couple was 9.4% and men 10.8% in 2010.<sup>22</sup>

In Nicaragua, the phenomenon of emigration has resulted in families having gone from being nuclear to single-parent families and in many cases to being extended families; Most of the time, it is the single mothers who emigrate, leaving their children to other relatives. It is estimated that almost half of the 900 thousand Nicaraguans residing abroad left sons and daughters in their country of origin.<sup>134</sup>



Finally, in the case of Uruguay, the report corresponds to information from the Ciudad Vieja Health Center, mentioning that 72% of the immigrants who attended live alone or in groups without their families who were left in their country of origin.

### **Type of medical services offered by the family doctor to migrants**

In general, the performance of family doctors in thirteen countries is very similar, focused on patient care from the perspective of family medicine and primary care, with activities based on the risk approach, comprehensive care and continues, in many cases with rehabilitation activities and epidemiological surveillance. However, none of the countries mentioned have their own health care programs for properly structured migrants.

### **The role of the Family Medicine or General doctor in the health of migrants**

Regarding the role of the Family or General practitioner in the health systems of IBA, only Spain has defined the role of the professional in the health care of migrants. Twelve of the 13 countries give the same treatment in the care of these patients than any other citizen of their country. However, the social determinants of health in migrants are not considered nor are the factors of mobility and risks of their migratory status. In this sense, Spain points out that it is necessary to individualize and personalize the attention to the immigrant patient. A clinical history that includes the aspects related to the migratory process and a careful physical examination to reach the diagnosis in these patients. The attention to the immigrants presents some differences with respect to the native patients, especially in the first stages of their arrival and always taking into account the country of origin and the time of stay in the receiving country.<sup>111,135</sup>

The Family Medicine doctor should also advise and carry out activities of prevention and health promotion when the immigrant is going to return to the country of origin (counseling, vaccinations, antimalarial prophylaxis, etc.). In addition, in the holistic approach of patients, it is important to pay attention to the psychological, sociocultural and religious aspects that can influence the health of the patient and their family, remembering that the migratory process is a vital and stressful event, being attentive to the presentation of serious psychiatric symptoms.<sup>111,135</sup>

In summary, the Family Medicine doctor when dealing with immigrants, should be culturally sensitive with medical care, competent, respectful, flexible and sensitive clinical efficiency.<sup>111,135</sup>

### **The issue of migrant health is within the curriculum of the Medicine Career or the graduate program of Family Medicine**

Of the 13 countries surveyed, only Spain has a formal Migrant Health program in the specialty curriculum of Family Medicine,<sup>136</sup> whose competences are directed to the effective communication management with this population and to the attention of the risks of infectious and imported diseases, as well as to situations of family and social risk, such as people in social exclusion, disabled patients, family violence, etc.

In some programs of specialization in Family Medicine of Ecuador and Mexico, there are modules or topics intended for the assistance of migrants and their families, emphasizing the adoption of linguistic competences, communication and interculturality, from the holistic approach of the specialty.

For its part, Argentina, which like the other twelve countries does not have a formal program in Medicine or in the specialty of Family Medicine, has developed since 2007 the working group: Health and Migrations, dependent on the Directorate of Teaching, Research and Professional Development of the Ministry of Health of the Government of the Autonomous City of Buenos Aires, which carry out training called "Training of Trainers: Migrations, Health and Interculturality Course. Conceptions and practices". As of 2010, it was formalized as a postgraduate continuing education activity, reaching at this time its seventh edition.<sup>137</sup>

### **Regarding the departure of healthy migrants and their return to the sick country of origin**

No country has information about it, although it is not possible to document this fact, it is easy to understand that in many of the countries that receive immigrants, they do it as human capital of exceptional quality, young, strong, motivated, determined, etc. However, after being for years in the informal sector and exposed to exploitation, working days longer than those approved by law, with social determinants against their health and without formal access to health services and social protection systems, It is evident that many people who emigrated return to their sick and aging countries, to be served by the health systems that guarantee their country of citizenship, becoming a social burden.

### **Regarding the departure of emigrants without addictions and who have acquired them in the host country**

Regarding the complicated issue of imported addictions through migration, no country has timely information that can provide a clear idea of the situation. Spain is the country that indirectly can provide some data generated through the epidemiology of AIDS. In this sense, it has been observed that although the transmission mechanisms involved in the transmission of the disease correspond to those of their countries of origin, unprotected sexual contacts being the main route of infection in the immigrant community. It is noteworthy that 41% of cases in people from North Africa had been infected through the use of drugs by parenteral route, a mechanism that is rare in the countries of origin, but is frequent in Spain. This data suggests that many of the risk behaviors for infection are acquired in that country and support the hypothesis that at least 25% of immigrants with AIDS have become infected due to this situation of socioeconomic, cultural and emotional vulnerability.<sup>135</sup>

In another area such as that of prostitution exercised by immigrant women in Spain, which is the product of the need to earn an income; the absence of family, personal and social protection; sexual exploitation and trafficking, among others. It is easy to understand that the health risks are not only sexually transmitted infections, it has also been reported that there is an important relationship with other diseases and psychological and psychiatric disorders such as anxiety, depression, somatization, behavioral disorders, psychotic disorders and post-traumatic stress; In addition to self-medication and addictions (alcohol, cocaine and marijuana), which are not usually recognized, so it is difficult to quantify.<sup>135</sup>

Likewise, immigrant women are more vulnerable to intimate partner violence, given their defenseless situation, and may have more devastating effects due to chronicity, silence, deterioration and absence of palliative social resources. This situation can lead to the deterioration of mental health with depression, anxiety, sleep disorders, which also carries risk of addictions such as abuse of alcohol and barbiturates, or other medications.<sup>135</sup>

## Conclusions

The research carried out reveals that there are great deficiencies in the mechanisms of data collection at the level of health institutions and others linked to the phenomenon of migration, in most of the participating countries.

When analyzing the information collected in the questionnaire and the origin of it, it is obvious that the bibliographic sources consulted by the participating researchers are multiple and very different, not comparable to each other (censuses, internal surveys, particular investigations, records of organizations, interviews, personal experience, others), in some cases could be considered somewhat subjective. However, these limitations and scope, the information presented was very well documented and allows us to make the comments that are presented below.

The issue of migration and healthcare services in Ibero-America should be a priority issue on the political agenda of governments, health institutions, universities and each and every family medicine professional and health Primary Care service provider.

It is important to highlight the lack of preparation of human resources in Family Medicine and Primary Care in the area of migrant health, which constitutes an urgent challenge to be solved, given the great responsibility that governments have in terms of control and epidemiological surveillance, in addition to health being a fundamental right of every human being. Not to mention the economic importance of migration in most countries, as well as the cultural and human wealth they bring to societies.

It is also concluded that the Access and coverage of the migrant population (especially the irregular population) is very deficient in most of the countries, even in those that could have a more solid sanitary structure, generating greater risks to health, not only for migrants, but also, for the general population.

Due to the lack of previously commented information, some of the questions could not be answered, which limits the interpretation of the data, however, the research carried out by the members of the working group in the health institutions of their countries (qualitative), can support the results that are presented, although it will be important to deepen with more specific investigations, in each of the countries of the Region.

Finally, the results presented in this document were analyzed and discussed in working groups during the VII Ibero-American Family Medicine Summit, reaching the consensus of the representatives of the 17 countries participating in the working groups to the following recommendations:

- I. Recognize the right to health of migrants and their families, ensuring equal access to protection, protection, and rights enjoyed by the citizens of each country.

- II. Incorporate in the curriculum of the undergraduate, postgraduate and continuing education programs, the necessary competencies for the integral attention of the migrant population and their families.
- III. Creation of a migration health observatory, with a registry of reliable and validated information, that allows analysis and follow-up to make effective decisions focused on people and their families.

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