

Application of The Integral Health Risk Management Model of The Colombian Coffee Area From The Experience of Various Actors.

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Summary

Objective: Describe the experiences of the advances in integrated health risk management of actors in the Colombian coffee-growing region. **Methods:** Phenomenological study, with 21 semi-structured interviews to leaders of the health secretariat, Health Promoting Entities (EPS) and Health Service Providing Institutions (IPS), gathering information on the implementation and execution of the integral health risk management model, through the narrative analysis of content of the experiences of the actors interviewed. Field observation notes and triangulation of information with governmental documents. **Results:** The model implementation process recognizes the importance of the Primary Health Care strategy with direct actions to reduce risk factors and contribute to strengthening family health, promoting community participation and strengthening comprehensive and intersectoral care. In addition, progress is made in cardiovascular risk management in the prioritized population. **Conclusions** The integral risk management model of the coffee-growing region is in the implementation stage and some actions are being carried out in the three departments, with regulations recognized by the main authors due to the pandemic have presented delays, there are difficulties in follow-up, control and viability.

Keywords: Health risk factors, risk management, health strategies, primary health care, (Source: DeCS BIREME)

INTRODUCTION

The World Health Organization (WHO) establishes the importance of reducing the risk factors that produce the leading causes of morbidity and mortality in the continent among the population between 30 and 70 years of age. This in order to reduce the gaps of inequalities and contribute to the health of vulnerable people. Measures for the prevention and control of health risks are required in an intersectoral manner, through the Primary Health Care (PHC) strategy. [1], it is important to highlight some advances in coverage and impacts on the health of the European Union community in countries such as Germany, the Netherlands and Spain, among others. They have a publicly funded health system. PHC is the gateway to health care, medical professionals act as a filter for referral to specialties, and morbidity and mortality have been reduced. These systems have been in continuous work for several decades to control risk factors and with preventive measures to improve the health of the population [2].

With regard to the region, the Americas present important challenges in addressing the determinants of health, each population has particular characteristics, which is why

comprehensive health risk management (IWRM) becomes a fundamental tool, since it is aimed at preventing and mitigating risks to individual and collective populations. He defines it as "a mechanism that allows anticipating events or materializing health risks" allows timely treatments and the reduction of complications in the health-disease process. [3,4].

According to the Pan American Health Organization (PAHO), it states that some Latin American countries have carried out transformative processes in their health system with changes in health policies and reforms since the 90s, seeking to expand the conditions of access whose main objective is to organize health care management and interdisciplinarity based on PHC [5].

In relation to the health system in Colombia, it is the state that guarantees the right to health and regulates protection mechanisms throughout the territory, for the year 2016 the PAÍS policy was approved that establishes a comprehensive health care model (MIAS) creating the Comprehensive Health Care Routes (RIAS) articulated to the GIRS model established as one of the main axes of the ten-year health plan for compliance with the implementation and execution in the territory based on PHC actions from collective and individual activities for populations by life course [6].

The above regulations have been in force in the Colombian coffee axis, for 7 years, the territory is made up of three departments; Quindío, Risaralda and Caldas, who share in addition to their geography, similar economic, cultural, social and political activities in their health situation. They also make up the unit of the Administrative and Planning Region (RAP) of the Coffee Axis, to respond to the territorial needs and projects in a common society [7].

Based on this panorama, it is important to describe the implementation and execution of the model from a regional perspective with the experience of the different actors who have participated in the process, in order to investigate the phenomenon in depth and interpret its concepts, experiences, strengths and weaknesses, in this way an empirical reflective knowledge is built that promotes the mitigation of health risk factors in the region. Taking into account the above, this study aimed to describe the application of the comprehensive health risk management model from the experience of different actors in the departments of the Colombian coffee region.

Methods

For the writing of this article and to comply with the rigorous methodological guidelines, the COREQ guide for qualitative studies COREQ [8] was taken into account, a qualitative, interpretative and emergent study was chosen, through a phenomenological perspective, which takes into account the description of the experiences lived by the participants, the selection of the participants, Intentional sampling strategies were established, which was established by saturation of the information or until it was determined that there were no new data that would contribute to the objective of the study [9]. It was attended by 24 people from different health professions and other fields, leading officials and actors in the process, identified through the theoretical analysis of the implementation and execution of the model in the territory (coffee axis), during the implementation and execution of the model, both from the public and private sectors.

The following criteria were established as participation criteria: work in government entities in the programs that lead the execution and dissemination of the model, with at least two years of experience, and including the following positions: governors, mayors, secretaries of health,

managers, coordinators, leaders and other minor positions of the institutions, who agreed to participate voluntarily in the research. Those people who did not agree to sign the informed consent or allow the recording of the interview did not participate in the study. It is important to mention that during the fieldwork, although some actors such as mayors or governors accepted and authorized the study, in the end they delegated the interview to the secretaries of health, referring that "*they knew more about the subject.*" In the case of managers of Health Provider Institutions (IPS) and Health Promoting Companies (EPS), they agreed to assign the coordinators or leaders of the promotion and prevention programs, alluding to a better experience in these actors. The sociodemographic information of the participating actors is complemented, which is shown in Table 1. The instrument used was a semi-structured interview that consisted of a form of open questions, which serve to clarify gaps in an objective way by introducing the established categories. According to the research question, four axes of experiential analysis were included, which took into account the theoretical aspects of the risk management model: concept, experience, strengths and weaknesses during the process of implementation and execution of the model. A deductive categorization was performed [10]. The interview script was endorsed by three experts in the field, the interviews obtained were transcribed with a coding of the data and systematized safeguarding the identity of the participants.

For the fieldwork, the participants were approached by telephone call and/or email where the generalities of the research and the importance they had as actors in the execution of the study were explained. It was decided that the interviews would be carried out in the workplace, individually or in other cases, remotely through the Google Meet platform. All were arranged by appointment and the informed consent was sent in advance electronically and the recording was accepted. Verbatim transcription of the interviews was made in Word for Microsoft. This research was carried out in a period of fieldwork that began in March 2022 until September of the same year, the research team was made up of two women Nurses: one with a master's degree in Public Health and the other with work and teaching experience in this area and a man with extensive experience; dentist Doctor of Public Health from his professional and academic profile. It was declared to have no link with the study population to reduce the presence of bias or any type of interest in the results. Interview transcripts were sent to participants in order to establish feedback from them to their personal email.

Content analysis of the interviews, phenomenological reduction strategies and the results were triangulated through categorical analysis, feedback from participants and researchers; and finally, through the complementary analysis of 38 government documents; agreements, bulletins, resolutions, which are world leaders in the comprehensive management of PHC health risk with important advances for several decades. and that confirm what was expressed by the actors in the territory. The quality criteria of qualitative research such as reliability, transferability, credibility, audibility and consistency were met.

The ethical requirements for health research were met in accordance with international and national regulations. Participation in this research was voluntary, confidentiality and anonymity, and the social information obtained was returned, as established for this type of study. The study was approved by the ethics committee of the Alexander Von Humboldt University Business Corporation (Minutes, 057,2021)

RESULTS

Table 1. Characterization of the Study Population (n=24).

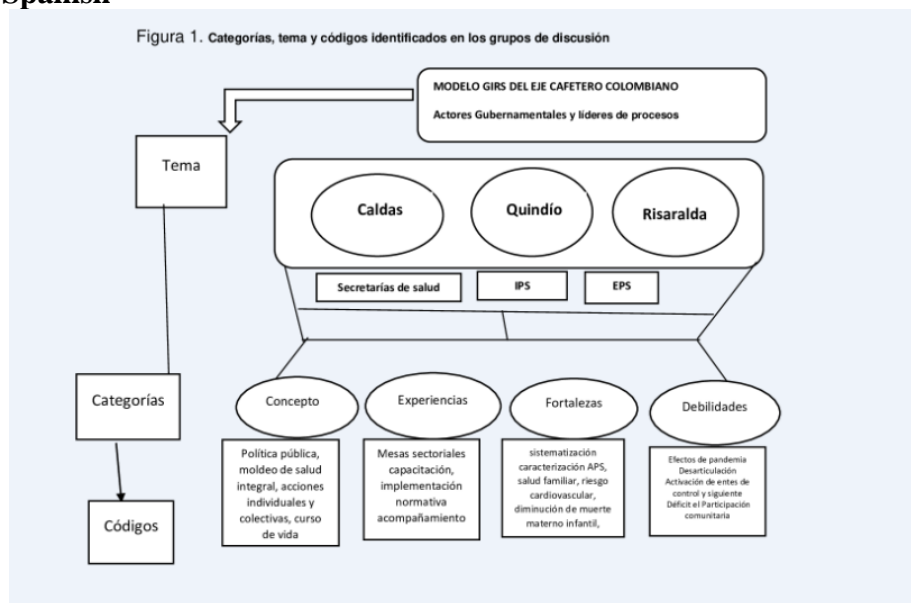
Feature	n
Actors	
Secretary of Health	3
Leaders of the program of governors and secretaries of health	8
E.P.S and IPS Program Coordinators	6
IPS Program Coordinators	3
EPS managers of the coffee region	1
Health educators	3
Professions	
Nurse practitioner	8
Psychologists	4
Medical	3
Lawyers	4
Business Administrator	2
Dentist	2
Educational level	
Mastery	2
Specialists	11
Professional	10
Technical	1

Note. This table shows that the study participants have different roles in the implementation of the policy of their territories, such as different professions and educational level, allowing an overview of the experiences described in the results of this research.

The results show some characteristics of the profile of the population under study (Table 1). Taking into account that the actors are in charge of directing, coordinating the implementation and execution of the GIRS in the region, the vast majority are specialists, workers of the Ministry of Health, most of them have the profession of nurses and psychologists.

The participating actors were distributed among the leaders of the departmental and municipal secretariats, I.P.S and E.P.S coordinators (Figure 1), directly involved in the implementation of the model, four structural categories were established to carry out the analysis of the result; concept, experiences, strengths and weaknesses, the most important codes are established according to the categories of the study.

Figure 1. Categories, topic and codes identified in the discussion groups. In original language Spanish



The first category is the concept of the model (Table 2), most of the participants define important elements about this "Public policy", "integral health modeling", "individual and collective actions", "life course" recognize its importance in the current health system as a comprehensive and integrating policy, which seeks to reduce health disparities.

Table 2. Verbal excerpts from government actors and IPS and EPS process leaders

Category 1. Knowledge*	
Q2	"A comprehensive health care model, where promotion and prevention have their greatest relevance and importance, taking up the concept of primary health care"
Q3	"Comprehensive care model became MAITE or territorial models, there is already a fundamental change beginning to take place"
Q5	"At the general level of comprehensive risk care, as I know that they have several pillars, it is composed of a part that has to do with the provision of health services and another part that is related to social determinants"
Q6	"As an EPS health administrator, we manage two major risks: financial and health, the management of population risk of individual risk."
P8	"As for the issue of risk management, it helps us to focus much more, then as particular risk factors of each patient"

Note. In terms of knowledge of the policy, most government actors and leaders of public and private institutions define the model and recognize its importance in the current health system as a comprehensive and integrating policy, which seeks to reduce health disparities.

Table 3. Verbal excerpts from government actors and IPS and EPS process leaders

Category 2. Experiences	
P11	"Difficult processes Two EPS left more than 100,000 million pesos in debts to the hospitals of the department of Risaralda and not only to the hospitals but to the IPS. Because of this, health resources have been weakened So, the models of comprehensive care that they make, are the municipalities' own resources, and there are not many resources"

- Q6 "Here are our two pillars of the health services unit; they are health risk management and knowledge management"
"The most important thing is to be able to incorporate and characterize the population in the issue of systematization is essential for risk management, we have established a system that allows it"
- Q4 "There is some progress, but not all routes are prioritized, the pandemic affected a lot"
- P12 "The model has been in place for almost six years and is still not fully developed"
"Let's say, the process is stalled above all because of the pandemic"
"Identify the risks that I have individually and also for the family group and for the community group, but that individual has risks and must be worked on in a comprehensive way. Among the EPS, which is the one that affiliates the user, the one that has the responsibility of customer service as IPS, "

Note. The experiences of a group of professionals who are part of the actors of the model, who live in the daily processes of implementation and execution of the policy, are described.

Likewise, in the second category of experiences (Table 3), the actors report having participated in the work of the Sectoral Roundtables and receiving continuous training for regulatory implementation in the different departments, plus the accompaniment of government entities for the implementation and execution of the GIRS model

On the other hand, in the third category of strengths (Table 4), the participants point out the importance of the GRIS from PHC, focused on family health, prioritizing cardiovascular risk actions and the recognition of the decrease in the maternal and infant death indicator in the region, on the other hand, a minority recognizes that they have the functional digital systematization of the population, this allows the classification of risk and intervention of the same.

Finally, weaknesses of the implementation of the model (table 5), it is defined that due to the effects of the pandemic that delayed its application, also the institutional disarticulation in addition to the deficit of control and monitoring by regulatory entities plus the lack of community participation and continuous training of health teams.

Note. The experiences of a group of professionals who are part of the actors of the model, who live in the daily processes of implementation and execution of the policy, are described.

Table 4. Verbal excerpts from government actors and IPS and EPS process leaders

Category 2. Strengths	
P13	"There are some routes built, in the dimensions of integrality, accompaniment and follow-up"
P14	"We have 17 fixed COVECVOM community leaders and five who are, to say, floating, they are articulated to the strategy and have the risk factors in the communities."
P 1	"We have seen a reduction, let's say, in maternal mortality, an opportunity in reporting in epidemiological surveillance"

- P 6 "We have also been able to make early detection through the application of cardiovascular and metabolic risk screenings of patients who were, let's say, already with hypercholesterolemia with high triglycerides"
- P8 "The strengths, that is it, is to have an educator who goes to the patient's home"
- Q6 "This strategy is directly linked to primary health care Attention. Why? Because they identify themselves and from there we start the route."

Note. Family health care, one of the most important actions of comprehensive risk management, to improve the health and well-being of communities.

Table 5. Verbal excerpts from government actors and IPS and EPS process leaders

Category 2. Weaknesses*	
P1	"Model interpretation, when they already say health, you already begin to make the first mistake because the other actors who are supremely important."
Q2	"They do not have interdisciplinary teams with the capacity to resolve that the true model of comprehensive care requires. Overbilling in specialist professionals".
Q3	"There are many users who refuse services because they say no, that they they come to the doctor only when they feel sick and do not attend program activities in demand-induced actions."
Q5	"It breaks my integrity because I do prenatal control here. But I have the attention of the report in another institution with another operator who does not know what the conditions of the users were "Since it is an intersectoral coordination strategy that allows comprehensive and integrated care from public health, health promotion, disease prevention, diagnosis, treatment and rehabilitation at all levels of complexity."
P1	"There are very good programs, but people rotate it a lot from their position" The doctor has those 20 minutes of the morbidity consultation and also has the time for at least 10 additional minutes."
P9	"It breaks my integrity because I control it here. But I have to provide care elsewhere and with another operator who does not know what the conditions of that patient were, her levels of risk, who knows absolutely nothing and who only has a delivery at the last minute."

DISCUSSION

According to the results obtained from the qualitative nature that characterizes this study, the experiences of a group of the actors of the model are described, who live in the daily process of implementation and execution of a health policy. That is why it is necessary to analyze the findings obtained against some international models that carry out comprehensive health risk management from structural aspects, achieving important advances in their health systems.

In terms of knowledge of the policy, most government actors and leaders of public and private institutions define the model and recognize its importance in the current health system as a comprehensive and inclusive policy, which seeks to reduce inequalities and inequities in health. One of the strategies that the departments of the coffee region have made for the operational implementation of the model and the dissemination of the basic concepts to the different actors, is the training of different sectors [1,12].

On the other hand, some actors identify family health care as one of the most important actions to improve the health and well-being of communities. In the department of Caldas, GIRS has been evident since the formulation of the development plan for the period 2016-2019, which has specific actions according to the life course and which are established in the promotion and detection programs [14,15]. Similarly, in the department of Risaralda, the model began with the Collective Interventions Plan (PIC) in 2015 with the strategy called "Healthy Homes", which is established in 8 municipalities of the department that have been prioritized for their vulnerable populations and its objective is family health education [16,17]

Some studies have shown that health systems with a focus on family health and community participation have made important advances in reducing health risks. As an example, at the conceptual level, Cuba has one of the most outstanding health models in PHC with indicators that show the greatest progress in terms of reducing factors that constitute health risks in Latin America [18,19].

It is worth mentioning that Spain has also been strengthened in recent decades, with a health system focused on PHC, where GIRS is carried out from a family approach, assigning a doctor of this specialization to each user for their care. It can be said that this is the gateway to the Spanish health system with an 85% coverage of the state and its healthy lifestyle programs, achieving continuity to public health policy and including the active participation of the community, from the experience of Cuba and Spain, experiences that could be applicable to the Colombian context can be articulated [20,21].

With respect to the experiences, the actors refer to the fact that the pandemic left the health system of the coffee region in a notable delay in complying with its public policies and the decrease in financial resources. This situation is ratified by the WHO, stating that this event affected all regions in the world, generating crises in the economic, political and social sectors. For this reason, all countries were forced to invest large amounts of unplanned material, financial and human resources in the fight against COVID-19. Despite this, PHC is still considered by GIRS to be the main gateway to the system and the basis for strengthening essential public health functions for the world's poorest countries [22].

Other advances described by the population object of this study is the implementation of digital information systems with which they have been able to characterize their users a very valuable step for individual GIRS, it is important to clarify that only two EPS in the region have functional information systems, making notable comparisons with countries similar to the Colombian context, important achievements in the Peruvian health system are recognized with the use of systematization in the PHC strategy [23]

Key advances have been made in terms of digital health policy and the implementation of robust, efficient, and timely information systems, as fundamental components of a process that allows identifying and reducing risks in populations. Another model that highlights the relevance of this issue is in relation to the Canadian system that implemented a web-based digital tool called "Frailty Portal", which allows processing and identifying the different health risks in fragile and vulnerable communities [24].

From the findings of the study in the coffee axis, it is significant to consider as a propositional experience the construction of some routes of comprehensive health care for individuals, families and communities, promoting accompaniment and follow-up in the implementation, according to the needs of the territories. In the 2020 development plan of the department of

Caldas, this strategic quality management system is clearly determined, allowing the fundamental elements that are used as part of the application of the GIRS from the PHC in community work to be determined. Similarly, in the department of Risaralda, the insertion of the model has been working for several years [25].

The integration of the community is a fundamental action for the development of the model, the municipalities of Quindío have 17 community leaders who make up the Community Epidemiological Surveillance Committee (COVECVOM); located in rural and urban areas articulated with the PHC strategy. Its function is to detect risk factors in the communities, to report to the operational leaders of the basic components of the care route. Brazil has been carrying out a similar process for several decades that is considered successful in Latin America, it is the Unified Health System (SUS) that also has the guiding principles of universal access, comprehensiveness, management and social participation, where direct GIRS interventions are implemented in PHC communities and teams [26].

Another important element recognized by the actors is the decrease in some health indicators such as maternal and infant mortality. In addition, they identify the strengthening in the increase of the opportunity for notification in epidemiological surveillance as a response to the mitigation of some risk factors by life course. This decrease has occurred gradually in the last two years in the departments of Risaralda and Quindío [27,28].

Early detection interventions, through cardiovascular and metabolic risk screenings, are central components of the care route and are considered a significant health experience for the adult population of the departments of the Coffee Region. These interventions make it possible to prioritize and organize a care and prevention plan, based on education and self-care, using pedagogical tools that help disseminate the route of health promotion and maintenance from each of the territories. [29,30].

In the department of Caldas, efforts have been concentrated on those municipalities that are lagging behind, establishing plans and goals aimed at reducing social gaps and improving living conditions through a genuine operational and participatory model. In this sense, the PHC strategy has made it possible to carry out diagnoses and characterizations of families, as well as to promote educational processes, associated with the comprehensive care route, which articulate promotion, prevention, individual and collective GIRS, all of which is focused on the social actors and their particular life circumstances [31].

Some elements similar to those raised by the speeches of the participants of the coffee axis are those raised by the Canadian health system Medicare, which is financed with public funds and is divided into provinces. There are currently 13 provincial and territorial health insurance plans. The roles and responsibilities of health services are shared between provincial, territorial and federal governments. Over the past 20 years, the Public Health Agency of Canada has formed innovative, multi-sectoral partnerships to promote healthy living and address chronic disease prevention for older patients, which will be a key element in combating the rise in chronic diseases during aging [32, 33].

Regarding the weaknesses of the model, the study population reports that one of the concerns is the disarticulation between the sectors and the lack of comprehensiveness of the model, since at the time of execution the intersectoral coordination is not clear and each sector develops the actions that most favor it, forgetting about the comprehensive care of the user. This is related to an analysis carried out in five Latin American countries; Argentina, Peru, Chile, Colombia and Mexico. These countries coincide with the same difficulty in the articulation of health

systems promoted by a neoliberal model, where the segmentation and fragmentation of health services generate collapse in care and increase in hospital expenses, prioritizing health care from a curative approach, focused on specialized medicine, thus being important to join efforts and revitalize PHC from a family and community approach. promoting intersectoral attention from human talent in training, seeking commitment and articulation from training practice [34].

In the same way, the speeches make visible the deficiency in the surveillance and control processes of this model, in different stages of construction, directly affecting the operational functioning and financial viability. From the point of view of the Pan American Health Organization PAHO, it affirms that Latin American governments must take direct action in surveillance, public health control and thus be able to strengthen institutional capacity and self-sustainability under the responsibility of local government, and reiterated the commitment to all countries in terms of resource management and accountability [35].

Finally, there is limited community participation of the healthy population, which continues with concepts of a care model and lack of knowledge of the preventive area, which aims to modify lifestyles, focusing on the improvement of physical, mental and social health, adopting healthy lifestyles and modifying the risk factors present in the communities [36]. For WHO and PAHO, it is of utmost importance to strengthen primary health care with the participation of communities and territorial governments, including young people in health decision-making, identifying the needs and vulnerabilities of those of marginalized communities through health risk management [37].

STRENGTHS AND LIMITATIONS OF THIS STUDY

Among the strengths can be identified the availability of the actors to participate in the study, extensive interviews with very clear concepts were carried out.

On the other hand, the limitations were not obtained from the actors who make direct decisions in the distribution of resources such as governors or mayors if they requested participation, but they always delegated to the secretaries of health.

Conclusions and recommendations

The GIRS model of the coffee region is in the implementation stage and some execution actions in the three departments, with a regulation recognized by the main authors due to the pandemic, have presented delays, there are difficulties in monitoring, control, financial viability. However, positive experiences are demonstrated compared to the GIRS model, digital information systems and family health.

In Colombia and Latin American countries, clear policies must be established delimiting the actions of the different sectors within the model to invest financial and human resources, with long-term goals and evaluate their results in the reduction of risk factors that affect health.

It is necessary to continue promoting citizen participation, this being the fundamental engine of the model, both for the dissemination of public policies, as well as in decision-making and in the execution of interventions that strengthen the detection of risk factors and changes in lifestyles.

References

1. World Health Organization. Communicable Diseases [Internet]. WHO; 2022 [cited 2022 Dec 22]. Available in: <https://www.who.int/es/news-room/fact-sheets/detail/noncommunicable-diseases#>.
2. Pan American Health Organization. Primary Health Care [Internet]. PAHO [cited 2022 Dec 22]. Available in: <https://www.paho.org/es/temas/atencion-primaria-salud>.
3. Báscolo E, Houghton N, Del Riego A. Logics of transformation of health systems in Latin America and results in access and health coverage. *Rev Panama Public Health*. 2018; 42: e126. <https://doi.org/10.26633/RPSP.2018.126>.
4. The Essential Functions of Public Health in the Americas. A renewal for the 21st century. Conceptual framework and description. Washington, D.C.: Pan American Health Organization; 2020. License: CC BY-NC-SA 3.0 IGO. Available in: https://iris.paho.org/bitstream/handle/10665.2/53125/9789275322659_spa.pdf.
5. Ministry of Health and Social Protection. Presentation of the sectoral training of the Comprehensive Health Care Model. MINE; 2017. [Cited 10 January 2023]. Available in: <https://www.minsalud.gov.co/Paginas/presentaciones-modelo-integral-atencion-salud-mias.aspx>.
6. Gaviria-Ríos, M. A., & Aristizábal Toro, A. F. (2020). Functional characterization of the Eje Cafetero RAP, Colombia. *City. Revista Brasileira de Gestão Urbana*, 12, e20200052. <https://doi.org/10.1590/2175-3369.012.e20200052>.
7. Government of Quindío. Administrative Planning Region [Internet]. Coffee; 2018. [Cited 20 February 2023]. Available in: <https://ejecafeterorap.gov.co/wp-content/uploads/2021/02/RAP.pdf>.
8. Fuster-Guillen D, Qualitative Research: Hermeneutic Phenomenological Method. *Monograph: Advances in qualitative research in education*. 2019; 7 (1): 201-229. doi: 10.20511/pyr2019.v7n1.267.
9. Ortega-Bastidas J. How do we saturate data? An analytical proposal "from" and "for" qualitative research. [Internet]. 2020. [cited 20 February 2022] *Interciencia*, 45(6), 293-299. Available in: <https://www.redalyc.org/journal/339/33963459007/html/>.
10. Diaz-Bravo L, Torruco-García U. Department of Research in Medical Education, Faculty of Medicine. National Autonomous University of Mexico City, Mexico. *Inv Ed Med* 2013; 2(7):162-167.
11. Resolution 0161 of 2017 [Internet]. By means of which the Technical Team in charge of operationalizing the Comprehensive Health Care Model in the Department of Quindío is formed. 2017. [cited 2023 Jan 15]. Available at: https://www.quindio.gov.co/home/docs/items/item_196/salud_publica/Resolucion_0161_de_2017_MIAS_Y_RIAS_Secretaria_Salud_Departamental.pdf.
12. National Planning Department. Development of the Plan of Collective Interventions Manizales, Caldas, Occidente [Internet]. 2013 [cited 16 Jan 2023]. Available at: <https://www.manizales.gov.co/RecursosAlcaldia/201505072212049151.pdf>.
13. Resolution of the Technical Team of the Departmental Health Secretariat in charge of operationalizing the Comprehensive Health Care Model in the Department of Quindío, and designating functions, Resolution 0161 [Internet]. Government of Quindío. 13 Feb 2017 [cited 20 May 2023]. Available in: https://www.quindio.gov.co/home/docs/items/item_196/salud_publica/Resolucion_0161_de_2017_MIAS_Y_RIAS_Secretaria_Salud_Departamental.pdf.
14. Government of Risaralda. Departmental Development Plan 2020-2023 [Internet]. 2021 [cited 2023 Jan 16]. Available at:

[file:///C:/Users/administrativo/Downloads/Plan%20De%20Desarrollo%202020-2023%20\(1\).pdf](file:///C:/Users/administrativo/Downloads/Plan%20De%20Desarrollo%202020-2023%20(1).pdf).

15. Ministry of Health and Social Protection. Comprehensive Risk Management. Perspective from Insurance in the context of the Comprehensive Risk Care Policy [Internet] Bogotá: Directorate of Regulation of the Operation of Insurance in Health, Occupational Risks and Pensions, MINSALUD; 2018 [cited 2023 Jan 16]. Available at: <https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/VP/DOA/girs-prespectiva-desde-aseguramiento.pdf>.
16. National Planning Department. Development of the Plan of Collective Interventions Manizales, Caldas, Occidente [Internet]. 2013 [cited 16 Jan 2023]. Available at: <https://www.manizales.gov.co/RecursosAlcaldia/201505072212049151.pdf>.
17. Government of Risaralda. Territorial Public Health Plan 2016-2019 [Internet]. 2016 [cited 20 Feb 2023] Available from: <file:///C:/Users/Admin/Downloads/PIC%20RISARALDA%202016-2019.pdf>.
18. LASIRC Network. Latin American Network of Young Researchers [Internet]. 2022 [cited 16 January 2023]; 4(3). Available at: <http://fundacionlasirc.org/images/Revista/REVISTALASIRCVolumen4.No.3.pdf>.
19. Di-Fabio JL, Goffín R, Goffín J. Analysis of the Cuban health system and the community-oriented primary care model. Washington. Cuban Journal of Public Health. 2020; 46(2):e2193. [Cited 16 January 2023]. Available at: <http://scielo.sld.cu/pdf/rcsp/v46n2/1561-3127-rcsp-46-02-e2193.pdf>.
20. National School of Health. Primary care in Spain 30 years after its implementation: Systematic review of the scope of plans and new strategies. [Master's Degree Final Project] Master's Degree in Public Health. Academic year 2019-2020. Available in: https://repisalud.isciii.es/bitstream/handle/20.500.12105/13464/AtencionPrimariaEspa%C3%B1a30a%C3%B1os_2020.pdf?sequence=6&isAllowed=y%20--21%20https://www.scielosp.org/article/rpmesp/2018.v35n4/678-683/.
21. Giovanella L, Vega R, Tejerina-Silva H, Acosta-Ramírez N, Parada-Lezcano M, Ríos G. *et al.* Is Comprehensive Primary Health Care part of the response to the Covid-19 pandemic in Latin America? *Trabalho, Educação e Saúde*, 2021; V (19), e00310142. DOI: 10.1590/1981-7746-sol00310.
22. United Nations [Internet]. Chile; 2020 [cited 16 January 2023]. Press release. Available in: <https://www.cepal.org/es/comunicados/impactos-la-pandemia-sectores-productivos-mas-afectados-abarcaran-un-tercio-empleo-un>
23. Ramos Velasco, J & Meneses Meneses, C. (2022). Dynamics used in rural territories to adopt Primary Health Care in relation to health, environmental protection and occupational health in the rural area of the Andean Region since 2017. Antonio José Camacho University Institution.
24. Warner G, Lawson B, Sampalli T, Burge F, Gibson R, Madera E. *et al.* Application of the Consolidated Framework for Implementation Research to Identify Barriers Affecting the Implementation of an Online Frailty Tool in Primary Health Care: A Qualitative Study. *BMC Health Serv Res*. 2018; 35(4). DOI: 10.1186/S12913-018-3163-1.
25. Ministry of Health. Results report. [Internet]: Colombia: Comisión Intersectorial de Salud Pública. MINSALUD; 2022 [cited 20 Feb 2023]. Available at: <https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/VS/ED/PSP/informe-resultados-evaluacion-cips-2022-final.pdf>.
26. Government of Quindío. First meeting of the splicing process, 2019 [Internet]. Colombia. Secretary of Health; 2019 [cited 20 Feb 2023]. Available at:

- https://www.quindio.gov.co/home/docs/items/item_100/Empalme/SECTORIALE/S/3.15_Presentacion_Salud.pdf.
27. Pan American Health Organization [Internet]. Brazil: PAHO; 2021[cited 20 Feb 2023]. Available at: <https://hia.paho.org/es/paises-2022/perfil-brasil>.
 28. Fedesarrollo. Center for Economic and Social Research [Internet].2018 [cited 20 February 2023]. Available at: https://www.fedesarrollo.org.co/sites/default/files/archivosciadernos/CDF_No_60_Marzo_2018.pdf.
 29. National Administrative Department of Statistics DANE. Sociodemographic Statistics Reports [Internet].2021 [cited 21 February 2023]. Available at: <https://www.dane.gov.co/files/investigaciones/poblacion/informes-estadisticas-sociodemograficas/2021-12-20-mortalidad-materna-en-colombia-en-la-ultima-decada.pdf>.
 30. Ministry of Health. Ten-Year Public Health Plan 2022-203 [Internet]. Colombia, MINSALUD; [cited 2023 February 25]. Available at: <https://www.minsalud.gov.co/plandecenal/Paginas/PDSP-2022-2031.aspx>.
 31. Betancurth-Loaiza DP, Vélez-Álvarez C, Sánchez Palacio N, Jaramillo-Ángel CP. Primary Social Care in Colombia: a view from a successful experience. *UIS Health*. 2022; e 22016. doi: [10.18273/greetings.54.e:22016](https://doi.org/10.18273/greetings.54.e:22016).
 32. Rojas-Torres I, Gil-Herrera R, Primary Health Care Strategies in Five Latin American Countries. *Primary Health Care Strategies in Five Latin American Countries*. Venezuelan Archives of Pharmacology and Therapeutics. Venezuelan Society of Clinical and Therapeutic Pharmacology, Bolivarian Republic of Venezuela. 2021; (40):7. doi: [10.5281/zenodo.5752275](https://doi.org/10.5281/zenodo.5752275).
 33. The Republic. GLOBOECONOMÍA: The foundations of the health system that were established in Canada for universality. [Internet]. 2023 [Cited 25 May 2023]; Available in: <https://www.larepublica.co/globoeconomia/las-bases-del-sistema-de-salud-que-se-establecieron-en-canada-para-la-universalidad-3548920>
 34. United Nations. Social Panorama of Latin America 2018 [Internet]. Santiago: ECLAC; 2019 [cited 25 Feb 2023]. Available at: https://repositorio.cepal.org/bitstream/handle/11362/44395/11/S1900051_es.pdf.
 35. Pan American Health Organization. The Essential Functions of Public Health in the Americas: A Renewal for the Twenty-First Century. [Internet]. Washington, D.C.; 2020 [cited 26 Feb 2023]. Available at: https://iris.paho.org/bitstream/handle/10665.2/53125/9789275322659_spa.pdf.
 36. Hernández L, Cruz-Caballero C, Orozco-Muñoz C. Community participation as the axis of primary health care [Internet]. 2019 [accessed 26 February 2023]; 11 (1). Available in: <http://scielo.sld.cu/pdf/edu/v11n1/2077-2874-edu-11-01-218.pdf>.
 37. Pan American Health Organization. Primary Health Care [Internet]: PAHO; 2019 [cited 26 January 2023]. Available at: <https://www.paho.org/es/temas/atencion-primaria-salud>.