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Violation of the Rights of Older Adults

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Abstract. The present work aims to mitigate conflicts faced by older adults, due to the vulnerability to which they are subjected and the non-observance of their rights. From this, an analysis is made of the role of human rights and the constitutional rights of older adults. It is evident that to assess the living conditions of the elderly, some aspects such as culture, the social environment, food, and social security, which directly affect the reality of the elderly. To this extent, the objective of this research is to identify intervention strategies for the violation of the rights of the elderly. For the modeling of the study, the Delphi method was used to determine the factors that affect the violation of the rights of the elderly. It is concluded that the state bodies must carry out periodic assessments of plans, programs, and projects to benefit the care of the elderly and to improve, restructure or expand the coverage and quality of services for this group of people.

Keywords: violation of rights, older adult, Delphi method.

1 Introduction

The aging of the population currently experienced in Latin American countries has brought with it challenges for society and States. The elderly, due to their inactive status, their higher levels of dependence on others, and their growing frailty, are a vulnerable group that is numerically very significant. However, they are at a disadvantage when it comes to lobbying for increased rights. In addition to the prevention of the violation of the human rights and freedoms of the elderly and the elimination of all forms of abuse [1]. The Constitution of the Republic, articles 35 and 36, determines that the elderly must receive priority attention and specialized attention [2]. Just as article 37 provides that the State will guarantee older adults the following rights [3]:

- a) free and specialized health care,
- b) remunerated job,
- c) universal retirement,
- d) reduction in private transport services and shows,
- e) exemptions in the tax regime,
- f) exemption from payment of notarial and registry costs, and
- g) access to housing that ensures a decent life.

The Inter-American Convention on the Protection of the Human Rights of Older Persons implies a substantive normative advance for the protection of the human rights of these persons. This instrument presents an opportunity not only to expand legal protection mechanisms but also to place older persons in a new category. By locating the elderly as an object and subject of human rights discourse, a new form of enunciation is inaugurated that has the power to produce understanding regarding old age. They enable new emancipatory practices with the power to reinterpret the role of older people in the social space [4].

Article 17 of the Additional Protocol to the American Convention on Human Rights in the area of Economic, Social, and Cultural Rights establishes the right to special protection during old age. Provide adequate facilities, as well as food and specialized medical attention to elderly people who lack it and are unable to provide it for themselves. Execute specific work programs aimed at granting them the possibility of carrying out a productive activity appropriate to their abilities, which respects their vocation or wishes. Stimulate the formation of social organizations aimed at improving their quality of life [5].

All older adults have the right to a dignified old age, with quality and human warmth. They can live fully and without discrimination, and have access to education and culture [6]. Actively participate in society and contribute experiences and skills; as well as organize freely. Receive support and care from family; to access social, health,

and legal services. The State is responsible for adopting public policies for the protection, care, recreation, rest, and social occupation of older adults, under their capacities and possibilities. Prohibits and sanctions all forms of abuse, abandonment, violence, and discrimination against older adults [7].

There is an epidemiologically proven relationship between disease and aging. This does not mean that all diseases increase with age. Some diseases are related to age, which are more frequently associated with a specific age, and diseases that depend on age, for example, Alzheimer's disease, which increases its incidence exponentially as age increases. Privatization and decentralization of health services tend to focus on public health priorities based on the cost-effectiveness of their actions and not necessarily on the fair distribution of health resources [1, 3, 8]. Social vulnerability in old age has been addressed, above all, by identifying high-risk groups, such as poor, dependent, and isolated older adults. This approach has contributed to maintaining the stereotypes of the group rather than favoring strategies for their reduction. Vulnerability is the product of social processes that generate unequal exposure to risks and situations of crisis and stress, where certain individuals and groups, such as the elderly, are more prone [9].

The greatest vulnerability of older adults is to health problems. This means that differentiated and appropriate human, technological and material resources are required for health care, at a stage of life in which diseases tend to be chronic and not acute. The distribution of health resources and the barriers to accessing them vary enormously. The decision on the allocation of public health resources for the prevention of dysfunction and disability is an important issue of distributive justice related to public health and aging.

The human rights law provides for people over 60 years of age to:

- Live with integrity, dignity, and preference.
- Receive dignified and appropriate treatment by the authorities in any jurisdictional process.
- Receive medical services and training and guidance regarding their health, nutrition, hygiene, and all those aspects that favor their personal care.
- Education.
- Work and social assistance.
- They may have a say in decisions that directly affect their well-being.
- They have the right to report any transgression of government organizations and el Access to public services.

In society, the elderly must not be socially marginalized or discriminated against in any public or private space that violates human dignity and has the purpose of annulling or undermining their rights or freedoms. Any person 60 years of age or older who considers their rights violated, can go to the National Human Rights Commission, to hear complaints related to alleged violations thereof. Go to systems for the Integral Development of the Family. In case of crimes against the elderly, you can go directly to the Attorney General's Office or the Attorney General's Office of the federal entities.

In recent years there have been advances in the incorporation of standards and care programs for the elderly. In the direct experience of care in public services, mistreatment in the quality of care and the provision of information is common. Situations of undertreatment have been detected in health care, in which complete treatment is not granted or the total population that presents a diagnosis is not treated, due to lack of visibility, prejudice, and naturalization of the disease in old people. Thus, situations of discrimination based on age or ageism are observed, which produce a violation of the right to health protection. The elderly population shows a diversity of social realities, education, family roles, technical or cultural belonging,

Research indicates that among the factors that determine the social vulnerability of heterogeneous populations aged 60 and over, age, sex, and educational level stand out. However, the social vulnerability of older adults is not only determined by their demographic characteristics. But it is also the product of the combination of characteristics and interactions between social risks, threats and exposures, assets, and coping capacities in specific environmental contexts. One of the reasons that originate the mistreatment of older adults is given by the deterioration of family relationships. Likewise, the stress of the caregiver that can lead to abuse is highlighted, especially when it comes to caring for a sick and dependent person who constitutes a burden for the person and mainly when support is scarce, non-existent, or difficult to access for economic reasons by the community.

Family abuse is a reality, from cases of neglect and abandonment. Retirement implies a loss of the status of an active and useful person to society and can become a path to social isolation. The older adult in a situation of poverty can also experience various situations that reduce their quality of life, such as poor nutrition, difficulty in accessing some goods and services, and inadequate housing conditions. Social isolation and lack of support networks affect the mental health of older people and even more so in dependent adults. Loneliness, and lack of help to carry out their basic daily activities, can plunge them into severe depressive states.

Special attention has been paid to the increase in social vulnerability with retirement. This implies a significant reduction in income and a significant threat of falling into poverty and deteriorating quality of life, linked to factors such as isolation, exclusion, and rejection. This circumstance is aggravated in the most vulnerable individuals without a pension or with an insufficient pension, generally related to informal employment and a low level of

education, while it may be accompanied by a chronic illness and the lack of informal and welfare assistance.

Researchers show that those households, whose main provider of help and economic support is the elderly, are more exposed to threats associated with their loss, such as neglect of the care of grandchildren and dependent elderly people, and the dispersion of members of the home. Sometimes, it is often overlooked that changes in the family environment exposed to threats, such as the unemployment of the head of the household and the illness of the caregiver, can generate abandonment, mistreatment, and neglect of the elderly. Likewise, new situations in the family unit linked to separation, divorce, and the death of one of the spouses, increase the difficulties, especially for economically dependent widowed women, to face household expenses and enable family and social relation-

In developing countries, such as Mexico, where there are high rates of the population aged 60 and over without medical coverage and with very limited coverage, older adults are more exposed to problems of access to health services. The direct consequence is the delay in treatment and the worsening of the health of the elderly, as well as the loss of income that aggravates situations of vulnerability in the face of new risks. Chronic diseases generate economic costs that cannot be borne by millions of older adults or their families, even in the poorest households.

There are some deficiencies in physical and human capital, problems of accessibility to basic services and equipment, in which older adults present a high risk of disability and dependency, and a moderate risk of social exclusion; and urban areas of low vulnerability, located in central and peripheral areas with high accessibility to high-quality equipment and services and a predominance of nuclear and single-person families, where older adults register a low risk of social exclusion and a high risk of disability and dependency.

The coronavirus (COVID-19) pandemic has exacerbated discrimination and gender inequalities, while at the same time bringing to the forefront the enjoyment of all human rights by older persons [10]. Mortality rates for those over 80 years of age are five times the world average. Less visible, but no less worrying are the broader effects:

- a) medical care denied for conditions unrelated to COVID-19;
- b) neglect and abuse in institutions and care facilities;
- an increase in poverty and unemployment; c)
- d) the dramatic impact on well-being and mental health; and
- the trauma of stigma and discrimination.

All of which caused untold fear and suffering among older people around the world. So efforts to protect older people should not overlook the many variations within this category, their incredible resilience, and positivity, and the multiple roles they play in society, including as caregivers, volunteers, and community leaders. In addition to that, every citizen must intensify their efforts to support the elderly. Every effort must be made to preserve your rights and dignity at all times.

Enjoying personal integrity is a fundamental right of immediate application that guarantees all people are protected against unfair acts that harm or deteriorate their physical or mental health. Every person has the right not to be the victim of behaviors that cause detriment or impairment to their psychophysical integrity. The authorities and officials of the health system are obliged both to refrain from incurring in conduct that undermines the integrity of patients and to act in order to adopt the necessary precautions to prevent such undermining.

Aging is a natural process and longevity is a natural and desirable goal in any society. Aging is also a risk factor for decreased health and functionality. The accumulation of the normal characteristics of aging defines a threshold, which, once crossed, tends to increase the propensity for loss of functional capacities due to age. However, not all people age the same way. It is well documented that quality of life and functionality in old age is related to personal characteristics and lifestyle, societal resources, and the environment to which one is exposed. Despite the current and future importance of the population aged 60 and over in the countries of the region, the current services do not have a reorientation policy for the promotion, prevention, and health care of the elderly. Therefore, the present work has a general objective to identify intervention strategies for the violation of the rights of the elderly.

2 Delphi Method

The Delphi technique was developed in 1950 by the RAND Corporation of Santa Monica, California. The application of the scientific method aims to resolve a specific problem through a process of representing reality through a reliable, consistent, and non-arbitrary model, as a way of obtaining the highest consensus possible in the opinion of a group of experts, through a series of questionnaires on the scientific bases, as an element of work in the inexact sciences, to become a structured and effective method in the collection of information from a group, before the resolution of a specific problem [11].

Among the qualitative methods used in the scientific method, the Delphi method stands out as one of the most used in scientific research in problematic situations that include the identification of topics to the elaboration of analysis and information collection instruments, highlighting its usefulness in the field of social sciences in general.

Its use is documented throughout the scientific literature [12], as a predictive tool and even as a validation system for information collection tools.

The Delphi method is a prospective expert-based method that is defined as a "systematic and iterative process aimed at obtaining the opinions and, if possible, the consensus, of a group of experts" [13] when considering these as people who "have a close relationship on the issue, sector, technology or object of the investigation". Its methodology is appropriate for obtaining information from experts based on the knowledge of the sector and the capacity and ability to analyze the items consulted, which are especially appropriate in the "complex, dynamic, ambiguous and lacking areas of knowledge". of information" due to its low cost in obtaining it [11]. In addition, its use has been recommended in those studies that show a low rate of information on previous empirical evidence [14].

There are several forms of application of the Delphi method, generally present in empirical studies, in which the most common is established from an initial round structured and organized by the study's monitoring panel, through one or two interactions depending on the degree of agreement among the panelists until the group judgments were refined "through a mathematical procedure of aggregation of individual judgments". In its development, after the different rounds applied in a Delphi method, the responses of the panelists are analyzed qualitatively and quantitatively, usually statistically through the treatment of medians and the consequent confidence intervals. Since the goal of the Delphi method is to achieve the greatest possible consensus among the panelists involved, empirically, it will be considered that it has been reached, determining it through the measurement of the variance in the answers of the panelists through the different rounds.

The phases typically identified in the application of a Delphi method [11, 16, 17, 18] range from the definition of the problem by the Coordinating Group, identification of the objective and determination of the consensus criteria, to the evaluation of the results and conclusions, which go through the formation of the Panel of Experts using the established selection criteria, design of the questionnaire for the first and successive rounds of questions, evaluation of the Questionnaire by the group of experts, analysis of the answers and iterations until reaching the necessary degree of agreement and application of the improvements accepted by the Coordinating Group.

For the individual selection of the experts, the Expert Biogram was used in which, as a report, information was collected on their professional experience, scientific production, fields of study, and work involvement. For the definitive selection of the experts from those obtained in the Extended Tentative Panel by the Coordination Group, the Expert Competence Coefficient (K) was used, calculated from: "the opinion expressed by the expert himself on his level of knowledge about the analyzed problem, as well as the sources that allow arguing its answer" and it depends on two coefficients: the Knowledge Coefficient (K_C) and the Argumentation Coefficient (Ka).

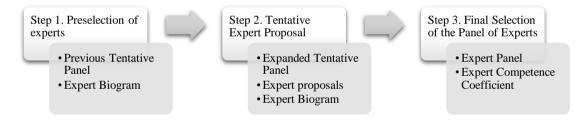


Figure 1. Steps for the configuration of the panel of experts. Source: own elaboration

$$K = \frac{1}{2}(K_a + K_c) \tag{1}$$

The so-called Knowledge Coefficient Kc, was shown to be determined by the information that the expert himself presents about the object of study, determined through a self-assessment process on a graphic closure scale multiplied by a factor of 0.1; the value of 10 would imply full knowledge of the problem under study and the value 0 the null knowledge about the topic. (see Table 1).

Knowledge level	Scale
Full knowledge of the subject of study (FK)	1.0
Very very good in the subject of study (VVGK)	0.9
Very good in the subject of study (VGK)	0.8
Good at study subject (GK)	0.7
Fairly good in the subject of study (MGK)	0.6
Know the subject of study (K)	0.5
Moderately poorly knows the subject of study (MBK)	0.4

Knowledge level	Scale
Poorly knows the subject of study (BK)	0.3
Very poorly knows the subject of study (VBK)	0.2
Very very poorly knows the subject of study (VVBK)	0.1
Null knowledge of the subject of study (NK)	0.0

Table 1: Terms used to determine K_C. Source: own elaboration

The Argumentation coefficient Ka evaluates the criteria for substantiating the expert's opinion based on the weighted sum of values obtained in a series of Influence Factors determined by the Coordinating Group: experience obtained through its activity and practice, knowledge of the state of the issue at the national and international level, intuition about the topic addressed and knowledge about technology and study of works and publications on the subject obtained the results shown in Table 2.

Finished	Scale	Points to analyze:					
High	0.5	1. Experience gained through your activity and practi	ice				
High	0.4	2. Knowledge about the state of the issue at the nation	nal				
Medium	0.3	and international level					
	0.2	3. Intuition about the topic addressed and knowledge	;				
Low	0.1	about technology					
		4. Study of works and publications on the subject					

Table 2: Terms used to determine Ka. Source: own elaboration

The evaluation of the responses of all the experts established as an objective criterion the screening of those who in the Coefficient of Expert Competence did not reach the required critical level established by the Coordinating Group in value of 0.8, as indicated. For the evaluation and validation of questionnaires through the Delphi method, the scale of the Torgerson model was used, to achieve greater objectivity in the treatment of information that allows the evaluation of the criteria exposed by the judges of the Panel of Experts of each one of the items individually. [19, 20, 21]

2.1 Interpretation of Responses and Evaluation of Actions

One of the main difficulties in the evaluation and validation of questionnaires using the Delphi method comes from the subjectivity of the criteria put forward by the judges of the Panel of Experts and, consequently, their difficulty in adapting a mathematical model for the corresponding analysis. In the development of the evaluation questionnaire sent to the experts, nominal scale values were used (Not at all adequate, Little adequate, Adequate, Quite adequate, and Very adequate) automatically associated with ordinal indicators (0.1, 2, 3, and 4 respectively) for its simple tabulation, assumes the relationships between categories and their limits as defined without considering the true real limits or values corresponding to interval scales, which may imply an error in the precision of the determination of those values. In this way, by assigning the values directly, a staggered distribution is established in integers with a fixed value that does not correspond to a valuation in a continuum and that, therefore, it does not have a distribution on a real line bounded by interval valuations (see Table 3).

Nominal value	Ordinal Assignment
Very Adequate (VA)	4
Fairly Adequate (FA)	3
Adequate (A)	2
Poorly Adequate (PA)	1
Not Adequate (NA)	0

Table 3: Assessment criteria. Source: own elaboration

To verify the correctness of this assumption of equivalence between scales, the model of [15, 24, 25] through a rescaling so that greater objectivity is achieved in the treatment of information by converting the original ordinal scale (qualitative) into an interval scale (quantitative) that allows the assessment of each item individually. In this way, Torgerson's model is based on the following assumptions:

- Each object (indicator) corresponds to the subjective dimension of a normally distributed random variable, whose mean, m, is the scale value of that object. It is also assumed that all variances are equal.
- Each category limit corresponds to the subjective dimension of a normally distributed random variable, whose mean, t, is the scale value of that limit. It is also assumed that all variables are equal.
- The random variables that represent both the objects and the limits are independent. One variable cannot contain the values of another variable.
- An object belongs to the Kth category with its scale value x, it is between the values of the order limits k-1 and k, so that the limits between the categories assumed for the indicators are clearly defined.

In our case, with the double objective of evaluating the convenience of directly assigning values to the responses of the ordinal scale in the assessment of the questionnaire items by the judges participating in the Panel of Experts for their quantification, and to analyze the adequacy of the items raised through the following steps:

- 1. A summary table of the different weightings provided by the expert judges was established, assigning a score to the answers according to the criteria.
- 2. From the evaluations, the absolute response frequencies and the accumulated frequencies were calculated, as well as the relative accumulated frequency, obtained from the quotient between the accumulated frequency in the responses and the number of existing responses or the number of experts, expressing the latter with two decimal places. It is interesting to observe how the relative accumulated frequency saturates its maximum value before the first accumulated category and its maximum probability in all the criteria so that the minimum indicator present will be "not very adequate". [22, 23]
- 3. Using the accumulated relative frequencies, the cut-off points and their respective indicator scales were calculated using the inverse standard normal values of the accumulated probabilities of each indicator in each question. For this, the approximation to the closest value of the Standard Normal curve of the accumulated probability was used. It is necessary to indicate that, for cumulative probability values equal to 1, the corresponding inverse standard value is 3.5 as a practical reduction since it is asymptotic from the value of 3.49. Similarly, for cumulative probability values equal to 0, the inverse standard value will be assumed to be equal to -3.5. Once this consideration is taken into account.
- 4. To the calculated values, the "Average" column was added, obtained from the calculation of the average of the values found per row. Similarly, the Cut-off Points were estimated, and calculated as the average of the values of the inverse standard function for each of the scale values (columns). The value of Limit N was also determined, through the average of the Cut-off Points (whose result will be the same as the average of the averages of each category) and which will delimit the true interval ranges to which each category belongs.

To determine the consensus among the participants of the Panel of Experts, the Agreement Coefficient was used, determined through the expression:

$$Cc = \left(1 - \frac{V_n}{V_t}\right) 100 \tag{2}$$

where:

Vn the number of negative votes contributed by the judges.

Vt is the number of total votes cast by the judges.

A level of consensus must be reached with the Concordance Coefficient Cc to obtain a value greater than 75%, thus producing the conclusion of the process. However, if the Concordance Coefficient does not reach a value greater than 75%, a new evaluation round must be established to consider the appropriate assessments provided by the Panel of Experts.

In this work, the application of the method was established in four fundamental stages:

- 1. Design by the Coordinating Group based on the variables identified in the dimensions determined in the qualitative analysis.
- 2. Selection of the Panel of Experts.
- 3. Obtaining responses and evaluating actions.

4. Interpretation of responses and results.

3 Results and Discussion

3.1 Stage 1. Design

The review of the literature and the identification of the main aspects in the environment of the rights of the elderly violated and their effects were obtained from initial interviews, where the Coordinating Group established a series of main objectives in obtaining the necessary basic information which was distributed among the experts. The objective of collecting information was to obtain the greatest amount of interpretable information in these aspects and to submit it to the panel of experts through the validation of the Delphi method.

3.2 Stage 2. Selection of the Panel of Experts.

The present study in a group of experts made up of the participation of individuals from heterogeneous fields grouped into four groups:

- > academic field,
- legal field,
- professional field of health and
- methodological field in social security.

Validation	Analyze and determine the factors that affect the violation of the rights of the
Objectives	elderly and contradict the constitutional norm regarding priority and
-	specialized care in public and private areas that people have.
Experts	Master, Academics, Health officer, lawyer, and doctor of sciences with
-	more than 5 years of experience.
Validation	Delphi method of multiple rounds, individual and without contact between
3.6.1	1
Mode	the experts consulted.

Table 4: Summary of the objectives and validation method by experts. Source: own elaboration

Due to the difficulty of the object of investigation, an assessment of competence as an expert was assigned"High" and "Very High" their coefficient was established above a required assessment (see table 5).

Expert	Profile	C1	C2	C3	C4	k c	Ka	K	Assessment
E1	Academic	1.0	1.0	0.8	0.4	0.4	0.80	0.600	Medium
E2	Academic	1.0	0.4	0.8	0.2	0.3	0.75	0.525	Medium
E3	Doctor	0.2	0.4	0.4	0.2	0.2	0.60	0.400	Low
E4	Academic	0.2	0.2	0.8	0.8	0.5	0.80	0.650	Medium
E5	Academic	0.8	0.8	0.6	0.6	0.6	0.55	0.575	Medium
E6	Attorney	0.6	1.0	0.6	1.0	0.7	0.65	0.675	Medium
E7	Attorney	0.6	0.6	1.0	0.8	0.7	0.65	0.675	Medium
E8	Academic	0.4	1.0	0.4	0.2	0.3	0.60	0.450	Low
E9	Academic	0.8	0.6	0.6	0.8	0.0	0.55	0.275	Low
E10	Health-officer	0.4	0.2	0.8	0.8	0.8	0.55	0.675	Medium
E11	Academic	0.2	0.4	0.4	0.2	0.2	0.60	0.400	Low
E12	Health-officer	0.8	1.0	0.4	0.2	0.8	0.60	0.700	Medium
E13	Master	0.2	0.4	0.4	0.2	0.2	0.60	0.400	Low
E14	Academic	0.2	0.6	1.0	0.6	0.9	0.65	0.775	High
E15	Academic	0.6	0.6	0.4	0.2	0.3	0.45	0.375	Low
E16	Academic	0.2	0.6	1.0	0.2	0.2	0.45	0.325	Low
E17	Academic	0.2	0.8	1.0	0.2	0.5	0.45	0.475	Low

E18	Doctor	0.6	0.8	1.0	0.8	1.0	0.45	0.725	Medium
E10		0.0		1.0		1.0			
E19	Master	0.6	0.2	0.6	0.2	0.9	0.65	0.775	High
E20	Academic	0.6	0.6	0.4	0.2	0.4	0.70	0.550	Medium
E21	Master	0.2	0.4	0.4	0.2	0.2	0.60	0.400	Low
E22	Master	0.2	0.4	0.4	0.2	0.2	0.60	0.400	Low
E23	Health-officer	1.0	1.0	0.2	0.6	0.8	0.55	0.675	Medium
E24	Master	0.2	0.2	0.4	0.2	0.4	0.55	0.475	Low
E25	Attorney	0.4	0.6	1.0	1.0	0.7	0.60	0.650	Medium
E26	Doctor	0.4	0.8	0.6	0.2	1.0	0.55	0.775	High
E27	Health-officer	0.4	0.2	0.4	0.2	0.8	0.45	0.625	Medium
E28	Attorney	0.2	0.8	1.0	0.6	0.7	0.55	0.625	Medium
E29	Master	0.4	0.8	0.2	0.4	0.9	0.55	0.725	Medium
E30	Attorney	0.4	0.6	0.6	1.0	0.7	0.70	0.700	Medium
E31	Academic	0.2	1.0	0.4	0.6	0.4	0.45	0.425	Low
E32	Academic	0.8	0.2	0.8	0.4	0.2	0.75	0.475	Low
E33	Academic	1.0	0.4	1.0	0.2	0.2	0.80	0.500	Medium
E34	Academic	0.2	0.4	0.8	0.2	0.6	0.55	0.575	Medium
E35	Academic	0.8	1.0	0.4	0.6	0.3	0.50	0.400	Low
E36	Academic	1.0	0.6	0.4	0.2	0.4	0.95	0.675	Medium
E37	Academic	0.4	0.6	0.8	0.4	0.6	0.80	0.700	Medium
E38	Academic	0.2	0.6	1.0	0.2	0.4	0.70	0.550	Medium
E39	Academic	1.0	0.8	0.4	0.4	0.2	0.55	0.375	Low
E40	Academic	0.6	0.6	0.8	0.4	0.4	0.75	0.575	Medium
E41	Academic	0.4	1.0	0.6	0.2	0.1	0.55	0.325	Low
E42	Master	0.8	1.0	0.8	0.8	0.9	0.70	0.800	High
E43	Academic	0.2	0.2	0.4	0.2	0.4	0.55	0.475	Low
E44	Academic	1.0	0.8	0.8	0.8	0.5	0.45	0.475	Low
E45	Academic	1.0	1.0	0.2	1.0	0.1	0.45	0.275	Low
E46	Health-officer	0.2	0.2	0.6	0.4	1.0	0.80	0.900	Very high
E47	Academic	1.0	0.4	0.4	1.0	0.6	0.75	0.675	Medium
E48	Master	0.8	0.8	0.2	1.0	0.9	0.70	0.800	High
E49	Academic	1.0	1.0	0.8	1.0	0.4	0.55	0.475	Low
E50	Doctor	0.4	1.0	0.4	0.4	1.0	0.30	0.650	Medium
E51	Doctor	0.6	0.2	0.6	0.8	1.0	0.80	0.900	Very high
E52	Academic	0.8	0.2	0.6	0.8	0.3	0.70	0.500	Medium
E53	Academic	0.2	0.2	1.0	0.6	0.3	0.45	0.375	Low
E54	Academic	1.0	0.8	0.4	0.2	0.2	0.55	0.375	Low
D55	Academic	0.8	0.2	1.0	0.6	0.6	0.80	0.700	Medium
E55									

E57	Academic	0.8	0.2	0.8	0.6	0.3	0.55	0.425	Low
E58	Doctor	1.0	0.4	0.4	0.6	1.0	0.85	0.925	Very high
E59	Attorney	1.0	1.0	0.6	0.8	0.7	0.80	0.750	Medium
E60	Master	0.6	0.8	0.6	0.2	0.9	0.55	0.725	Medium
E61	Attorney	0.6	0.8	0.4	0.8	0.7	0.65	0.675	Medium
E62	Doctor	0.2	0.8	0.8	0.4	1.0	0.50	0.750	Medium
E63	Academic	0.6	1.0	0.8	0.4	0.4	0.55	0.475	Low
E64	Academic	0.2	0.4	0.8	0.2	0.0	0.55	0.275	Low
E65	Master	0.2	0.2	0.4	0.2	0.4	0.55	0.475	Low
E66	Academic	0.6	0.6	1.0	0.4	0.5	0.65	0.575	Medium
E67	Academic	1.0	0.8	1.0	0.8	0.3	0.50	0.400	Low
E68	Academic	0.4	0.4	0.8	0.2	0.5	0.90	0.700	Medium
E69	Academic	0.2	1.0	0.8	0.4	0.2	0.45	0.325	Low
E70	Academic	0.8	0.8	0.6	0.2	0.3	0.55	0.425	Low
E71	Academic	0.2	0.6	0.4	0.8	0.3	0.75	0.525	Medium
E72	Health-officer	0.2	0.4	0.4	0.2	0.2	0.60	0.400	Low
E73	Academic	0.2	0.2	0.2	0.4	0.5	0.50	0.500	Medium
E74	Academic	0.6	0.4	0.2	0.2	0.6	0.75	0.675	Medium
E75	Academic	1.0	0.6	0.6	0.4	0.0	0.70	0.350	Low
E76	Academic	1.0	0.4	0.8	0.8	0.3	0.80	0.550	Medium
E77	Health-officer	1.0	0.4	0.2	0.8	0.8	0.55	0.675	Medium
E78	Academic	0.8	0.2	1.0	0.4	0.0	0.80	0.400	Low
E79	Doctor	0.2	0.4	0.4	0.2	0.2	0.60	0.400	Low
E80	Academic	1.0	1.0	0.4	0.4	0.3	0.75	0.525	Medium

Table 5: Determination of the coefficient of expert competence. Source: own elaboration

The Panel of Experts is made up of 1 academic, 1 health official, 3 masters, and 3 doctors for a total of 8 experts needed in Delphi modeling (see Table 6).

Profile	Very high	High	Medium	Low	Very low	Total
Academic	0	1	21	26	0	48
Attorney	0	0	7	0	0	7
Health-officer	1	0	5	1	0	7
Master	0	3	2	5	0	10
Doctor	2	1	3	2	0	8
Total	3	5	38	3. 4	0	80

 Table 6. Panel of definitive experts. Source: own elaboration

3.3 Obtaining Responses and Evaluating Actions

FIRST ROUND

Depending on the analyzed documentation. Each expert is sent the following question: summarize what are the factors or criteria that affect the violation of the right of the elderly.

Entrance to the Coordinator Group

The answers sent by the experts are consolidated and evaluated by the Coordinator Group, each criterion is considered a key factor in the processing and development of the method (see Table 7). From the processed results, the key indicators for the focus of the study are obtained.

Code	Criteria or indicators
I1 (1)	Protection against violence.
I2 (2)	Insufficient medical assistance
I3 (3)	Social Security Limitation
I4 (4)	Equality rights are not fulfilled as determined for some people
I5 (5)	Loss or lack of conditions to strengthen autonomy
I6 (6)	Inaccessibility to counseling services.
I7 (7)	Lack of financial resources
I8 (8)	Not having alimony or retirement

Table 7: Factors or criteria that affect the violation of the right of the elderly. Source: own elaboration

SECOND ROUND

Experts are sent the following question: Determine the level of importance of each criterion. It must take into account those with the highest incidence of the violation of the right of the elderly.

Entrance to the Coordinating Group

For the Coordinating Group, the use of Delphi modeling allows obtaining criteria, such as the level of incidence and determination between the factors.

Each expert was asked to establish in which categories the eight proposed indicators were considered to have a relationship with the violation of the rights of the elderly. They evaluated the factors according to the Torgerson scale, respectively, to determine the cut-off points and scale of the indicators. (see tables 8 to 11).

Profile	VA	FA	A	PA	NA	Total
C1	1	3	3	0	2	9
C2	4	3	0	1	1	9
C3	0	0	2	4	3	9
C4	0	4	3	1	1	9
C5	2	3	2	0	2	9
C6	2	2	3	0	2	9
C7	4	1	0	3	1	9
C8	1	1	3	3	1	9

Table 8: Criteria validation level. Source: own elaboration

Indicators	VA	FA	A	PA	NA
I1 (1)	1	4	7	7	9
I2 (2)	4	7	7	8	9
I3 (3)	0	0	2	6	9
I4 (4)	0	4	7	8	9
I5 (5)	2	5	7	7	9
I6 (6)	2	4	7	7	9

Indicators	VA	FA	A	PA	NA
I7 (7)	4	5	5	8	9
I8 (8)	1	2	5	8	9

Table 9: Cumulative frequency. Source: own elaboration

	Indicators	VA	FA	A	PA	NA	
_	I1 (1)	0.1111	0.4444	0.7778	0.7778	1,0000	
	I2 (2)	0.4444	0.7778	0.7778	0.8889	1,0000	
	I3 (3)	0.0000	0.0000	0.2222	0.6667	1,0000	
	I4 (4)	0.0000	0.4444	0.7778	0.8889	1,0000	
	I5 (5)	0.2222	0.5556	0.7778	0.7778	1,0000	
	I6 (6)	0.2222	0.4444	0.7778	0.7778	1,0000	
	I7 (7)	0.4444	0.5556	0.5556	0.8889	1,0000	
	I8 (8)	0.1111	0.2222	0.5556	0.8889	1,0000	

Table 10: Relative frequency and cumulative probability. Source: own elaboration

Indicators	VA	FA	A	PA	NA	Average	N-	Order
							Avg.	
I1 (1)	-1.22	-0.14	0.76	0.76	3.50	0.73	-0.13	5
I2 (2)	-0.14	0.76	0.76	1.22	3.50	1.22	-0.62	1
I3 (3)	-3.50	-3.50	-0.76	0.43	3.50	-0.77	1.37	
I4 (4)	-3.50	-0.14	0.76	1.22	3.50	0.37	0.23	
I5 (5)	-0.76	0.14	0.76	0.76	3.50	0.88	-0.28	3
I6 (6)	-0.76	-0.14	0.76	0.76	3.50	0.82	-0.22	4
I7 (7)	-0.14	0.14	0.14	1.22	3.50	0.97	-0.37	2
I8 (8)	-1.22	-0.76	0.14	1.22	3.50	0.58	0.02	
Cut-off	-1.41	-0.46	0.42	0.95	3.50	N=0.	N=0.60	
points								

Table 11: Calculation of cut-off points and scale of the indicators. Source: own elaboration

4 Discussion

4.1 Stage 4. Interpretation of Responses and Results

From the modeling, it is highlighted that the factors indicated to determine the violation of the right of the elderly corresponds to:

- Criteria C2, C7, C5, C6, and C1; and between the given evaluation, with greater incidence in factor
- The determinations of the degree of relevance of each dimension by the experts indicate that criteria C3, C4, and C8 should not be included in the study as significant factors in the fight against the violation of the right of the elderly.
- Insufficient medical assistance is considered the main factor that directly affects them.

To determine the consensus among the participants of the Panel of Experts, the Coordinating Group considered that this level of consensus had been reached with the Concordance Coefficient Cc obtaining a value greater than 75%, thus producing the conclusion of the process (see Table 12).

Expert	C1	C2	С3	C4	C5	C6	C7	C8
E1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
E2	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
E3	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
E4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
E5	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
E6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
E7	No	Yes	No	Yes	Yes	Yes	Yes	Yes
E8	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
E9	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	7	9	7	8	9	9	9	7
No	2	0	2	1	0	0	0	2
Coefficient	77.78	100	77.78	88.89	100	100	100	77.78

Table 12: Final evaluations of the criteria. Source: own elaboration

The analysis of the Delphi method determines that the following criteria are considered fundamental among experts, so it is required that measures be taken to mitigate its impact on the violation of the right of the elderly.

- 1. Insufficient medical assistance
- 2. Lack of financial resources
- 3. Loss or lack of conditions to strengthen autonomy.
- 4. Inaccessibility to counseling services.
- 5. Protection against violence.

For this, the following solutions are proposed:

- For the benefit of the elderly, free and specialized health care must be guaranteed, as well as free access to medicines.
- Priority and specialized attention in the public and private spheres, especially in the fields of social and economic inclusion, and protection against violence.
- Guarantee care units in alternative spaces with home care, in such a way as to optimize the use of existing resources for the service and care of a larger population of older adults, in their most diverse needs.

Improve the quality of life through the rights of older adults, through comprehensive care, which implements actions aimed at strengthening the enjoyment of their physical, social, and mental well-being.

Conclusion

The aging of the population, health, and poverty has implications for development and can become an obstacle if the appropriate measures are not taken on time. Therefore, the development of a fair and sustainable infrastructure for the aging population should be part of the international development agenda. The notion of older adults as subjects of rights involves placing these people as rights holders with the capacity to demand that the state fulfill its obligations. They are part of a vulnerable group of priority care and require that the care provided be of a reinforced nature. The level of access that the elderly have to appropriate care to health services must be evaluated and public health policy implemented to address the needs of the elderly with respect to the coverage and accessibility of appropriate health services.

The special and reinforced protection determined by the Constitution and international instruments must be specified and thus respond to the real expectations of older adults in the workplace. From the family, the contribution of older adults within the life and economy of the home must be revalued, and generate mechanisms so that older adults feel useful and with the possibility of giving their opinion and deciding on family agreements. It should contribute to improving the image of older adults by banishing negative myths and stereotypes that generally surround their figure. From the national, departmental, and municipal governments, their integration must be promoted and integrative and intergenerational spaces generated in the community, to promote greater participation of this population so that they can contribute with alternative solutions to this problem and continue contributing to the country's development.

The population of older adults living in poverty will continue to grow. As the number of older adults increases,

the costs to protect them also increase. Unless society organizes itself and develops policies aimed at the elderly, the combination of aging with the increase in poverty could become a serious problem that affects individuals as well as society.

References

- [1] J. A. Ivarado Vélez, "On the rights of the elderly in Ecuador: from constitutional dogmatic to local reality.," *Universidad y Sociedad*, vol. 13, pp. 21-28, 2021.
- [2] G. D. J. Bastida Tello, R. Comas Rodríguez, and J. L. García Delgado, "Selection of Non-Pharmacological Treatments for mild Cognitive Impairmentin older Adults with Neutrosophic-AHP," Neutrosophic Sets and Systems, vol. 37, pp. 132-140, 2020.
- [3] P. Sloane and S. Zimmerman, Long-Term Care Options for Retired Americans in Cuenca, Ecuador and San Miguel de Allende, Mexico: Retirement Migration from the U.S. to Latin American Colonial Cities, 2020.
- [4] Benjamin Mason Meier, Hannah Rice, and S. Bandara, "Monitoring Attacks on Health Care as a Basis to Facilitate Accountability for Human Rights Violations," Health and Human Rights Journal, vol. 23, no.1, pp. 55-70, 2021.
- [5] D. S. Palloni A, "Aging and Latin America and the Caribbean," *Madison: Center for Demography* and Ecology. University of Wisconsin, CDE Working Paper vol. 99-02, 1989.
- XinQi Dong, Ruijia Chen, Terry Fulmer, and M. A. Simon, "Prevalence and Correlates of Elder [6] Mistreatment in a Community-Dwelling Population of U.S. Chinese Older Adults " Journal of Aging and Health, vol. Volume: 26, pp. 1209-1224, 2014.
- [7] O. R.-C. Liliana Giraldo-Rodríguez, "Development and psychometric properties of the Geriatric Mistreatment ScaleLiliana Giraldo-Rodríguez, Oscar Rosas-Carrasco," Geriatr Gerontol, vol. 13, pp. 466-474, 2012.
- [8] I. Sisa and R. Vega, "Knowledge Gaps in Health Care Research in Older Adults in Ecuador: Policy Challenges and Opportunities," Ageing International, vol. 47, pp. 1-11, 06/01 2022.
- [9] M. S. Lachs and K. A. Pillemer, "Elder Abuse," New England Journal of Medicine, vol. 373(20=, pp. 1947-1956, 2015.
- Secretary-General's Policy Brief: The Impact of COVID-19 on older persons. 2020. , 2020. [10]
- [11] F. ORTEGA. (2008) "El método Delphi, prospectiva en ciencias sociales". Revista EAN. 31-54.
- [12] T. S. BAINES and V. G. Shi. (2015). "A Delphi study to explore the adoption of servitization in UK companies". Production Planning & Control, (August), 1–17. . Available: https://doi.org/10.1080/09537287.2015.1033490
- [13] J. LANDETA. (2005) "Current validity of the Delphi method in social sciences". . Technological Forecasting & Social Change. 467-482.
- M. E. ASSELIN and M. HARPER, ""Revisiting the Delphi technique: Implications for Nursing [14] professional development". ," Nurses in Professional Development, vol. 30 (1), pp. 11-15, 2014.
- [15] W. S. TORGERSON. (1958) Theory and Methods of Scaling. New York, New York, USA: Wiley. Psychometrika, . 401-419. Available: https://doi.org/10.1007/BF02288916
- [16] E. B. Prado Calderón, W. A. Cacpata Calle & A. S. Gil Betancourt. "Sistemas de votación, su impacto sobre el comportamiento de los votantes y los resultados electorales". Universidad y Sociedad, Vol. 14 Num. S2, pp- 330-336, 2022.
- [17] D. A. Freire Muñoz & D. S. Diaz López. "Método de fermentación y secado para el beneficio de la obtención del chocolate blanco a partir del cacao criollo (Theobroma cacao L.), ecuatoriano". Universidad y Sociedad, Vol. 14 Num. S2, pp- 323-329, 2022.
- [18] P. E. Salas Medina & R. Acosta Lizano. "Análisis del uso del marketing digital ante la emergencia sanitaria Covid-19 en la industria turística de Ambato, provincia de Tungurahua". Universidad y Sociedad, Vol. 14 Num. S2, pp- 315-322, 2022.
- [19] R. F. Sánchez Santacruz, L. I. Barahona Tapia, & R. L. Maldonado Manzano. "Causas fundamentales de la migración hacia y desde el Ecuador". Universidad y Sociedad, Vol. 14 Num. S2, pp- 308-314, 2022.
- [20] R. F. Sánchez Santacruz, R. L Maldonado Manzano & L. I. Barahona Tapia. "La rehabilitación social en el Estado Constitucional del Ecuador". Universidad y Sociedad, Vol. 14 Num. S2, pp-300-307, 2022.
- [21] M. J. Cabezas Arellano, F. M. Pozo Hernández & O. R. Aldaz Bombón. "Competitividad de empresas envasadoras de agua en Santo Domingo". Universidad y Sociedad, Vol. 14 Num. S2, pp-290-299, 2022.

- [22] Ramos Sánchez, R. E., Ramos Solorzano, R. X., & Estupiñán Ricardo, J. "La transformación de los objetivos de desarrollo sostenible desde una dinámica prospectiva y operativa de la Carrera de Derecho en Uniandes en época de incertidumbre". Conrado, vol. 17 no. 81, pp 153-162, 2021.
- [23] Caballero, E. G., Leyva, M., Ricardo, J. E., & Hernández, N. B. "NeutroGroups Generated by Uninorms: A Theoretical Approach". In Theory and Applications of NeutroAlgebras as Generalizations of Classical Algebras (pp. 155-179). IGI Global, 2022.
- von Feigenblatt, O. "Mediation for management: Dealing with Conflict in the Workplace". Innovaciones de Negocios, vol. 18 no. 35, pp 113-119, 2021. 4 OK
- von Feigenblatt, O. F. "Un estudio de caso sobre la competencia diplomática entre la República Popular China y la República de China (Taiwán): La experiencia de la República de Costa Rica de 1995 a 2010". Dilemas contemporáneos: Educación, Política y Valores. Vol. 9no. (Edición especial), pp 1-19, 2021. 4 OK

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