

## The Longevity in A Population of a Country in Development

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*Abstract:* A study carried out on the prevalence of longevity in the Municipality of San Pedro Valle del Cauca Colombia, Municipality of 18,128 inhabitants (2015 data), found greater longevity than the one reported for Colombia in 2016, with these data the main objective was to investigate associated factors to longevity in that population with a descriptive cross-sectional quantitative study. The universe obtained was 111 elders aged 75 to 100 years old elder interviewed. The data were obtained in their homes and / or in the recreation sites, with important inclusion factors such as those in good state of lucidity to answer the questionnaire. As an important result it was found that the 111 elders reported the degree of satisfaction with life as bad 2 (1.8%), regular 12 10.8%, good 44 39.6%, very good 50 (45%), excellent 3 (2.7%). Inferential analysis between age in general and degree of satisfaction with life is performed, an average of -1.33 was found with a standard deviation of 0.8, with confidence intervals of -1.498 and -1.168 T of -16, 12 with 110 degrees of freedom and a p-value of 0.000. Analyzing the study by five-year periods we found: an average of -, 712 with a standard deviation of 1.282, confidence intervals of -0.953, and -0.471 a T-value of -5.849 with 110 or freedom and p-value of 0.000. With the above it can be concluded that the degree of satisfaction with life in this universe is associated with its longevity.

*Key words:* Longevity, degree of satisfaction with life, population of a developing country, mental lucidity.

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## 1. Introduction:

Longevity in general is increasing with an increase of 900 million for people over 60 years of 2015 to 1,400 million by 2030, according to the WHO data presented at the 69th World Health Assembly, Geneva, April 22, 2016, (1) with the conviction that the countries of the third world will hardly be able to respond to the needs of such increase, especially in relation to health and social problems.

There are epidemiological studies from developed countries such as the Iowa cohort on "predictors of extraordinary survival of the elderly": that expose factors such as health, nutrition, socioeconomic level, ethnicity, education, associated with longevity, (2) and / or reports as those of Young who report living Super centenarians, validated in the world, alive and / or recently deceased in February 2018, finding the longest living with 117 years in Kagoshima Japan. (3). The above and the WHO data make us think about the importance from now on relevant questions such as what is the association to longevity in a population of a developing country like ours, taking into account that the majority of our studies with long-lived have been practiced in the institutionalized (4)

The objective is to evaluate the association of longevity in a population of a developing country.

The reason is that by finding partnerships you can develop specific programs for that community and / or for the communities to come.

## 2. Materials and method:

A descriptive research of a quantitative cross-sectional type was carried out in a community of longevity that met the inclusion criteria: age 75 years or older, the ratio of age 75 years was by The National Administrative Department of Statistics (DANE, for its acronym in Spanish) report in May 2017, the prevalence of longevity in Colombia in that moment was 75 years old, the elders had to be in good condition to answer the form and they had to sign AND / authorized signing the informed consent, these elders were from the urban area and neighboring districts of the municipality of San Pedro Valle del Cauca

Respondents were interviewed at the recreation sites and / or in each of their homes, through a structured survey presented by the research group with variables that looked for factors associated with their longevity.

This survey fulfilled the requirements of reliability, validity and objectivity, having as a dependent variable the age proposed in the study and independent variables: sex, ethnicity, schooling, and socioeconomic stratum antecedent of toxins, exercise, and identification of skills of the elderly, prevention of abuse.

As Member States and Eurostat use the multidimensional measurement of quality of life in Europe each year, these in 2013 included the degree of satisfaction with life within the measurement of the Multidimensional scale which we used in our study with the previous ones items: 1 = Satisfaction with personal relationships, 2 = Satisfaction with the home, 3 = Satisfaction with their current job, 4 = Satisfaction with the time available, 5 = Satisfaction in the recreational areas, 6 = Confidence in most of the people, 7 = Satisfaction with the economic situation, 8 = Confidence in the police 9 =, Confidence in the judicial system, 10 = Confidence in the political system.

The survey was collected by the person in charge of the work, a monitor and two young medical students from the Unidad Central Del Valle Del Cauca (UCEVA, for its acronym in Spanish) Tuluá, Colombia, previously trained by those responsible for the study.

Initially a data cleaning was done, labeling and grouping the variables that required it for analysis.

In case of inconsistencies or incomplete data, the survey of the older adult was reviewed. Conveniently, a codebook was associated to the database in which the names of the variables used, their type and range of values, their meaning, as well as the sources were detailed.

During the study, omissions and important errors were verified, such as:

Absence of errors or transpositions in the identification number, code of the name, date, filling all the data in a correct way of the precoded variables, values of the key variables within the permissible interval and compatible with each other.

The identity of the long-lived was preserved, codes were handled that only the survey director and / or the monitors knew and they registered in a list that was in custody.

The risk of selection bias was avoided by including all older adults who met the inclusion criteria.

The data collected in the questionnaires were taken to a Microsoft Office Excel 2010 database, from where they were taken to the statistical package SPSS where they were processed.

The quantitative variables were described according to their distribution with averages and standard deviations or medians and interquartile ranges.

The categorical variables were expressed in frequencies and proportions and were compared those that merited it using the Pearson Chi2 test }

### 3. RESULTS:

The results obtained were similar to what is reported in the literature as a factor associated with longevity, female sex predominates a bit more, as they describe it in because women live longer than men: differences in longevity (5) (6) most of respondents belonged to the urban area, the prevention of abuse, similar to studies, exercise has always been linked to protective factors of longevity (7) (8), (9), (10).

The Living Conditions Survey (LCA) is an annual statistical operation aimed at households, carried out in all the countries of the European Union. The effective sample is made up of more than 32,000 people. It is a harmonized statistic that is supported by Regulation (EC) No. 1177/2003 of the European Parliament and Council of 16 June 2003 on Community statistics on income and living conditions.

Incorporated in 2013 the WELFARE module that investigates outstanding aspects of living conditions.

The selection of the questions incorporated has been the result of the work of a group of experts from different Member States and Eurostat, who in turn have followed the different international recommendations on the multidimensional measurement of quality of life.

The person is asked to rate your satisfaction with life in general and different concrete aspects. The publication of this wellness module was announced on May 20, 2014. (11)

Taken together, these prospective European studies demonstrate the importance of engaging in healthy lifestyle behaviors throughout adult life to achieve good longevity and maintain function in the last years of life

The assessment of the Eurostat scale on the degree of satisfaction with the life of Diener who validated it, and was published in the personality assessment journal in 1985, applied routinely in developed countries, indicated in our work a global satisfaction with life in 97% of the respondents. (Table 1)

GLOBAL SATISFACTION WITH LIFE	Frequency	Percentage
Valid GOOD	44	39,6
EXCELLENT	3	2,7
VERY GOOD	50	45,0
Total	97	87,3

Table 1

If we observe for five-year periods we find similar data.

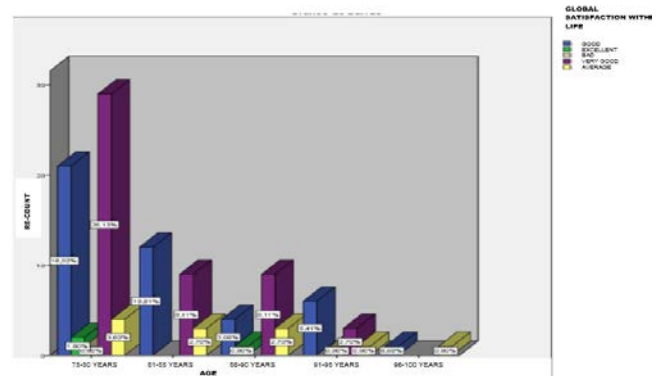


Fig1

GLOBAL SATISFACTION WITH LIFE	Frequency	Percentage
Excellent	3	2,7
Very good	50	45,0
Good	44	39,6
Average	12	10,8
Bad	2	1,8
Total	111	100 %

Table 2

It is of note of 111 long-lived people only 2 classified life satisfaction as bad and regular 12, (Table 2) can be seen similar with the findings of the study "Subjective wellbeing and longevity" 22-year cohort study published in the journal of psychosomatic research 2016 with an n of 3,777 adults between 62 and 101 years where they find satisfaction with life as a protective factor, mortality

(12), another similar study published by Diener in Applied Psychology: "health and well-being" (2011), or studies such as the one carried out using the longitudinal data of 1,224 participants in the Socioeconomic Panel Study of Germany (SOEP) with an N of 3.777 where they conclude that the greater life satisfaction prior to the loss of the spouse is associated with a better adaptation and reinforce longevity by making positive feelings improve longevity and health beyond negative feelings.

#### 4. INFERENCE ANALYSIS

TEST OF PAIRED SAMPLES	Paired differences				95% confidence interval of the difference	t	gl	Sig. (bilateral)
	Average	Standard deviation	Standard error	f				
PAR-1 AGE GRADUATE GLOBAL SATISFACTION WITH LIFE	1,333	,877	,083		-1,498	-1,168	16,012	,000

Table 3

The inferential analysis between age in general and degree of satisfaction with life shows a statistical significance with a confidence interval that does not pass through 1 and a p-value of 0.00. (Table 3)

TEST OF PAIRED SAMPLES	Paired differences				95% confidence interval of the difference	t	gl	Sig. (bilateral)
	Average	Standard deviation	Standard error	f				
PAR-1 QUINQUENNIUM DEGREE OF GLOBAL SATISFACTION WITH LIFE	,712	1,282	,122		-,953	-,471	-5,849	,000

Table 4

Evaluating the age variable by five-year periods, we can observe that it is suggested in the same way, statistically significant for the degree of satisfaction with life with confidence intervals that do not pass through the one and a p-value of 0.00

#### 5. DISCUSSION:

The objective of seeking factors associated with longevity in our environment assuming the already recognized as they are health, nutrition, education, socioeconomic status, but also seek defenses against abuse, exercise, the proper use of medicines and the

degree of satisfaction with life variable currently studied in routine, in Europe and little in those in development is considered important to investigate as a variable associated in our environment to longevity, the importance lies in the obligation that we acquire in making adjustments in social programs focused on this issue in the elderly.

It is striking that in the community studied there are no places to institutionalize the elderly, only recreation spaces that they attend, and all the interviewees remain in their homes, therefore it is very convenient to elaborate studies taking into account this variable.

The use of a universe of 111 elderly people with a lower age limit of 75 years limits the number of participants in the study, therefore, it is necessary to elaborate the same study in the same place and / or other communities in elderly people with a limit of younger age on factors associated with longevity that serve as a model in the organization of programs for current and future longevity, educating communities from very young to acquire healthy habits of life that allow them a healthy and happy old age.

#### 6. CONCLUSIONS AND RECOMMENDATIONS

It is suggested to develop similar studies in this and / or another municipality of preference with a larger universe and to compare the results due to the importance of the psychosocial factor in the aspect of the association found in the longevity.

It must be taken into account that communities from developed countries prepare these studies annually to fine-tune their public health programs towards the elderly.

This leads to the need to stimulate, in addition to studies, educational conferences for the elderly on the subject found in the research work

It is suggested that Municipal entities develop special programs for the elderly taking into account these results, therefore the study is socialized with the Municipal Mayor, the Psychologist, social worker, secretary of health and education who are very receptive to the recommendations.

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