A Study of Puertorican Centenarians was conducted in eighteen towns of the island in 2013. It was sponsored by the Society of Gerontology of Puerto Rico, MMM Health Insurance and Housekeeper Services (Programa de Amas de Llaves).

**Methodology**

Using a close end questionnaire and an interview to those centenarians who agreed to participate and among those the ones that passes with twenty or more points a Mini Mental, thirty-six were selected. The questions were made to verify if the centenarians shared or not the characteristics of most centenarian studies in the world as to longevity in their close family, social relations, dietary habits, health profile and overall self assessment.

**Results**

- Of those interviewed, 69% were female and 31% were male.
- Ten (28%) lived in rural areas and 26 (72%) lived in cities. Those numbers are very close to the demographical data of Puerto Rico according to the 2010 Census. According to that population census in the island and its two island municipalities lived 540 centenarians.
- The mean age of those who participated was 102 years, the two oldest were 107 years old.
- Fifty percent had close relatives who had lived to the age of ninety or older. These were parents, siblings, grandparents, aunts or uncles or even great grandparents. The oldest of the relatives reached the age of 115 years.

Graphic No 1 Age distribution
Education

As far as formal education goes, the majority had elementary school and seven had attended high school. Only two had earned a bachelor’s degree. This is in harmony with the education available at the time they were young in Puerto Rico that was a rural society. Actually only one said he had no formal schooling which is a rather low number.

Household Characteristics

Their reproduction rate was not very high; the average is three children although two had more than ten children. Large families were very common in the early and mid nineteen century so this cohort is not representative of their peers. Their children are mostly still alive; only eight had no children alive or have had none.

Only ten centenarians had raised children not their own and mostly they were relatives. They are called in Spanish “hijos de crianza” and many times receive a share of the inheritance even when they are not legally adopted.

Fifty percent (18) of the centenarians questioned lived with a child or spouse. Only 22% lived alone, two lived in an Elder’s Home, one said to share the home with another elderly person and the rest lived with other family members. Thus it is understandable that most , 83%, see a family member daily and their feeling in regard to those relations are that they are loved and
in good company. These last were 70.1% in contrast to five (14%) that felt alone and not loved. Another 14% said they had company. It is to be noted that in rural communities many family members lived in shared land plots so some who lived alone received daily visits from their children and grandchildren who sometimes sleep over and take turns attending the elder, taking him or her to the doctor, and staying overnight.

During the interview to a male and female in Homes for the Elderly, a daughter of each was present. Both said they visited their parents frequently, almost daily. However the gentleman wanted to go back and live with his daughter. Said he dreamt he was already there. The daughter said he had fallen in the bathroom and she could not prevent another fall. This gentleman had been very active before joining the Home. He went daily to a Center of Multiple Activities for the elderly and spent the weekends in the home of a lady he met at the Center. He had wanted even to marry her but the daughter objected. In the Home he was almost always in bed sleeping. The other lady who her daughter was “hija de crianza,” refused to answer the question who she wanted to be in contact with. The daughter said she takes her out strolling in the capital, San Juan, and they eat in a restaurant by the sea in the town of Loiza. According to her, the centenarian lady is always happy and independent. The daughter visits her once a week.

Health

The centenarians surveyed were quite healthy. Sixteen suffered from high blood pressure, that is, 29% of the whole. Arthritis was the second most common disease, 12%, diabetes followed with 9% and cardiovascular disease with a 5%. Seven percent or four persons said to have no diseases. And another 25% had various health problems. The pie chart illustrates the answers.

Graphic No. 2 Prevalence of Chronic Diseases among the Centenarians
Visits to the doctor or by the doctor were fairly often. Twenty seven persons answered to be in contact with their doctors at least every three months but in conversation a few mentioned the doctor visited them once a month. Six went in case of necessity and one nearly never. Two went twice a year- Their good health is further illustrated by hospital visits. Forty four per cent said they have never had a hospital stay or only once in their lives. Forty two percent (11), had been interned twice or more times but less than six times. Only one had been interned many times, many more than 4 who had gone six times or more. Their medicine intake is moderate. Eight per cent do not take any while 69% take less than six medicines daily.

Social Interaction

The world of social relations is mainly in family and medical relationships. Of their relation with their primary doctor, doctors in general who are in attendance and the nurses assisting them, the opinion of 64% is that the relation is very closed and friendly while another 28% say they have friendly relations. That is, 92% feel close to their medical caretakers. The other eight per cent say they are related in a formal or very formal way. This feeling of closeness maybe due to the fact that the doctors and nurses deal with them in a friendly and familiar way using
their first name and the informal way of address. Of their relationship with neighbors 51% (18 out of a total of 35) said they enjoyed them very much; the rest answered that do not relate much with them or very little. However of those who lived at home 78% per cent said they knew many neighbors and were frequently in touch with them. Almost none went to the Center for Multiple Activities any longer even though six had attended and felt they knew and shared with others much.

During hospital stays their relatives, their children more than other relatives, spent the night with them. These were twenty five centenarians. Five said nobody stayed over, three had hired a person and one church fellow did so. A great majority see a relative daily, 88%, this correlates with the fact that most live with a child, relative or spouse.

**Marital Status**

Eleven per cent is still married, 67% are widows or widowers, eight per cent was divorced and the rest stayed single. The single ones were women but many stayed with their sisters and/or nieces.

**Engagement in Organizations**

As is true of the most in Puerto Rico twenty two of the thirty six are Catholic and of those thirty six, 58% receive frequent visits from their churches, 17% only occasionally and 25% are never visited. This means ties with their churches continue for 75% of them. One lady in a Home goes to church every Sunday and many Catholic centenarians were active in church working groups. Of those interviewed, few were members of community clubs although a lady was still very active in various. Their ties with the divinity are very strong: 92% pray daily. This sums up to the fact that ninety three percent do not feel alone and of those 69% feel also loved-

**Income and Satisfaction with achievements**

To this feeling of well being is added the fact that thirty one of them (86%) are of the opinion that their financial means are good. Only five are not satisfied. Seventy eight percent say they pay their expenses from their own income, 17% their children and only two percent live from government aid. They also report a lack of worries and stress although 14% said these affect them very much and 25% somehow. Another positive factor is that 75% are of assert that they reached almost all of their live` s goals and had many achievements.
Diet

Centenarians in Puerto Rico said they liked meat, poultry specially. Some 50% said they liked or liked very little to eat vegetables; the other 50% said to like them very much. When asked about their daily diet they said they ate everything and what was served to them. It really is a typical diet for Puerto Rico: coffee, white bread, juices, fruit, milk, corn pudding, oats, rice and beans almost every day, sometimes fish, vegetables, meats, poultry, at times sea food, root starches, water. Some of the men used to drink alcoholic beverages and three ladies still enjoyed a glass of wine. (The doctor recommended it said one.) None mentioned gaseous refreshments like Sprite or Coca Cola but it is likely that at social gatherings they may take some. They assured that in their youth they had the same diet but it is likely they ate more tropical fruits, more native root starches and less red meat as this was the most common diet in those times. Very few had smoked and none did it any longer.
Sports

Sports were practiced a bit in youth by 44.5%. Another 11% said they practiced a sport up to a few years ago. Two were semi-professional. One as a boxer and another as a baseball player. The sports mentioned were swimming, horse riding, baseball, volleyball, boxing, skating with roller blades and running. However they had activities they enjoyed still. Among these are walking every day, planting the garden, doing household chores, going to the Mall. To entertain themselves they saw T.V., heard the news, read the Bible and the newspaper, prayed, knitted, sew, played with the dogs, travelled, danced and did word searching.

Personal perception – emotional wellbeing

Only 33% said their character had changed very much since being middle aged, 31% said it had changed a little and thirty six per cent said it had not changed. In their youth the great majority did not let problems worry them but solved them or let them go. In the present none said to have one although there were a small few who complained about their present situation. Ninety one per cent agreed that their state of health was good or very good. None said that it was bad. However two said in the interview that they did not feel so well. A gentleman for having fallen in the bathroom three years ago and feeling pain in his left leg and a lady for being confined to bed and having pain in her hip.

They as a whole like jokes, some make jokes, sing and recite poetry. There are two who play the guitar. Two said they did not like any type of joke. Most did things by themselves up to recently and slept from eight to nine hours. Many took and afternoon nap and a few fall slept during the day. Two said they could not sleep well at night and one of those had to take sleeping pills.

Age of last delivery

Many women did not remember the age at which they last gave birth. However of those who did the ages of 30, 39, 40, 50 and 55 were mentioned along with in the twenties.

Views as to their future

When asked what desires or hopes they had for the future many said none. Among those who did have some wish or desire the following were mentioned: to be taken away by God, to die,
learn to saw, travel, go dancing, see the grand-daughter married, have the youngest son visit her because he had not done so in a year and three months even while living close by and she did not understand why. Also mentioned were buy a car, have a house, go to New York, go shopping, make the activities he did before, embroider, go back to reside in his daughter’s home. It is to be noted that most seemed fulfilled and two did not want to live any longer. Nevertheless some wanted to learn new things, do something to entertain themselves or repeat an experience.

Memory of significant happenings in life

Not all thirty six could list five significant happenings in their life. One of the most unusual was going to Israel to be baptized in the River Jordan and helping another person to do the same. Included were religious conversion, marriages, birth of children, divorces, raising children and nephews, winning in politics and cock games, boxing as a professional, having an accident and being raped. Deaths in the family, playing baseball in the United States, moving to another town, visiting the capital, being elected the first Miss Puerto Rico in a beauty pageant, having danced much while a teenager, belonging to social, religious and civic clubs and seeing the family at peace were also included.

Longevity Secrets

To the question regarding to their secret for longevity the most mentioned was a healthy diet, next a peaceful and tranquil life and having no vices. Besides these, everyone had a different view. Some were: take it easy, dance, leave your problems in God’s hands, think of God, be organized, wish everyone well, have a good spouse, do exercise, laugh always, be in company, have a happy disposition, be close to the family, sleep well, stroll, walk, have a work ethic, be spiritually aware, be in peace, have a good character and hear sports on the radio. A healthy diet for one was eating rice and beans, other fish, another food without preservatives. Others formula contain consume goat’s milk, raise your own meat, eat organic eggs, and even consume green bananas and hot peppers.
Conclusion

If we compare centenarians in Puerto Rico to other studies like the New England Centenarian Study, the Blue Zone, the Okinawa Study and the Georgia Centenarian Study plus the studies made as to life styles, diet and longevity in other parts of the world we find many similarities. Genetical and environmental factors are involved but they are not solely determinant.

Attitudes related to culture and a positive character disposition are present in the lives of centenarians. Health care is another important factor. All of these result in a positive self assessment as to their quality of life and financial security provided by the social insurance plans together with government services and aids and the active support of their families. By and large centenarians in the world and Puerto Rico feel integrated in a close knit net of social relationships. Few in this study were sad, unsatisfied and negative about their life. Their desires and hopes for the future were few, having realized most of their goals. The healthy diet they proposed had a cultural bias and was different than that in other countries although it must have provided most of the necessary nutritional content. The formula or secret for longevity varies from person to person in Puerto Rico but many agree on a healthy diet, a peaceful and tranquil life and the absence of vices. Absence of vices means in Puerto Rico no womanizing, no hard liquor and not smoking.

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