CARIBBEAN CONFERENCE ON AGING
30\textsuperscript{th} November – 01 December 2015
FORT YOUNG HOTEL DOMINICA
MA PAMPO AND THE CENTENARIANS OF DOMINICA

ROSS UNIVERSITY
SCHOOL OF MEDICINE
The Elderly and the Centenarians

Grell 1987: Book Published by the University Press UWI Mona
Dominica

**Geography:** 290 mi² island in the Lesser Antilles of eastern Caribbean; mountainous terrain, largely forested, with numerous rivers.

**Population:** 72,727 (May, 2001 census); Largest Caribbean enclave of Carib Amerindians; Large population of African descent; Small European population; Admixture among all the 3 Racial groups.

**Life Expectancy:**
- Male - 75 years;
- Female - 81 years

**Languages:**
- French Creole (“patois”)
- English (“kokoi”), Carib/Arawak (extinct)
Extreme Longevity in Dominica noted on Review of our Statistical Data in 2001

- Dominica had 22 confirmed centenarians (in a population of 72,727 (May, 2001 census)).
- Prevalence is 3.02/10,000, over 3 times the incidence of Centenarians in Western Countries (Perls, T. 1995 Sci. Am. 272:7-75).
  - ≤ 1/10,000 from Boston, Danish, French, and Italian Centenarian Studies
- Prevalence was similar to extreme longevity seen in Okinawa and Sardinia

Centenarians with Dr. Grell
Population Statistics
FOR DOMINICA

• Population growth rate  -1.14%
• Birth rate  18.27 births/1,000 population
• Death rate  7.3 deaths/1,000 population
• Net migration rate  -22.39 migrant(s) /1,000 population
Geriatrics and the Future of Healthcare

Where will we be in 2017 Thirty Years after I wrote my book on the Elderly!
Extreme Longevity in Dominica, West Indies: The First Study

1 Sept 2001 to 30 Aug 2004

Noel T. Boaz PhD. MD.
Gerald A.C. Grell MD. FRCP. FACP.
Robert Nasiiero MB.BS MPH
Paul Ricketts MB. BS. MSc.
Methods: Documenting the Phenomenon

- In visits to each centenarian
  - Photographing of subjects and their birth documents
  - 4-page form recording
    - Health history
    - Data for assessment scales (ADL’s)
    - Weight
    - Height
    - Blood pressure
    - Other information

U.K. passport accepted as documenting a birth date as April 2, 1898
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Centenarians are evenly distributed geographically
Dominica Centenarian Statistics

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Make-Up by Gender</strong></td>
<td>86%</td>
<td>14%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(N=19)</td>
<td>(N=3)</td>
<td>(N=22)</td>
</tr>
<tr>
<td><strong>Mean Age</strong></td>
<td>102.1</td>
<td>102.3</td>
<td>102.1</td>
</tr>
<tr>
<td><strong>Mean BMI</strong></td>
<td>20.5</td>
<td>17.0</td>
<td>19.0</td>
</tr>
<tr>
<td><strong>Married</strong></td>
<td>95%</td>
<td>100%</td>
<td>96%</td>
</tr>
<tr>
<td></td>
<td>(N=18)</td>
<td>(N=3)</td>
<td>(N=22)</td>
</tr>
<tr>
<td><strong>Children</strong></td>
<td>6.7</td>
<td>4.7</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>(N=18)</td>
<td>(N=3)</td>
<td>(N=22)</td>
</tr>
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Can Ma Pampo
Give us Clues?

- Age 126 in 2001
- Lived in the Rural area
- Was a Farm worker
- Ate only local food
- Non Smoker
- Got Married
- Had only one Child
126-year-old just may take the cake, if Guinness counts the birthday candles

By Mike Williams
Cox News Service

PORTSMOUTH, Dominica — Yuppies pay thousands for courses in stress relief and guidance on how to live longer by cleaning up their diet, simplifying their lives and focusing on the basics.

They could all take a lesson from Elizabeth Israel.

In January, the lifelong resident of this tiny Caribbean island turned 126, according to her 1875 baptismal record from a local church. Neighbors and the Dominican government already proudly proclaim she is the world’s oldest person, a title they hope to certify with the Guinness Book of Records, which currently lists a 114-year-old Michigan woman as the oldest.

A spokeswoman for Guinness in London said documents have been submitted for Israel’s claim and are currently under review.

Portsmouth Mayor Julian Brewster, who regularly checks up on his most durable constituent, calls her “the pride of our community.”

Israel lives in a tiny home, a two-room wooden structure smaller than the typical American garage with a full-time caretaker who sleeps on a cot.

She thinks the most important factor in her long life is her diet: heavy on fresh fruit and vegetables, all grown organically (her favorite food is dumplings). She also notes that she “never missed an opportunity to go to church.” She has never touched a drop of alcohol, and only dabbled at smoking — a pipe — for a few years.

Israel also has never left her 29-by-16-mile island home. She worked for 90 years as a supervisor at the Picard Estate, a large plantation about two miles from her home. She didn’t retire until she was over 100.

Israel believes her long life is also due in part to the absence of stress from marital discord. “I was only married once, and my husband died shortly after,” she said.

She bore one child and had three grandchildren, but she has outlived all her progeny.

Remarkably, she is one of 22 Dominicans who have lived more than 100 years, a figure that is drawing attention to the island’s culture and lifestyle.

Israel says she regularly drinks bush tea, a variety of herbal remedies concocted by traditional healers on Dominica. She’s never been to a hospital, and her only major health failing has been her recent loss of eyesight.

She passes much of her days listening to music on the radio. Even before she lost her sight, she says she rarely watched television.
SOME TEN CHARACTERISTICS OF THE DOMINICAN CENTENARIANS

1. Females are more likely to become a Centenarian than Males.
2. Males can only make it to be a Centenarian if they are married!
3. All but ONE Dominican in the study were involved in jobs involving physical activity particularly FARMING.
4. Only ONE Dominican in the study, a Female, worked as a Clerical Officer (A SEDENTARY JOB) : In the Government Service in Roseau.
5. Women generally bore several children (only ONE had 1 Child)
6. Alcohol as a “ti Poche” (before the main meal especially) was used by everyone as a lifestyle habit of their time.
7. Smoking was uncommon, and no one could afford more than one or two cigarettes per week!
8. While a few Females were overweight but none were obese.
9. All the women had “outgoing personalities” welcomed our team and other visitors to their home. They all went to Church and were religious. They loved to sing, and would sometimes dance for the team if there was music around.
10. None were bed-ridden or had a limb fracture (MaPampo had limb gangrene as her terminal disease at age 126 Yrs)
Dominica Centenarian medical conditions contrast with US and other Caribbean “Diseases of Westernization”

- Dominica centenarians have a low incidence of HTN, TIA/CVA, and diabetes mellitus, both for their population and in comparison with U.S. geriatric patients, despite being a population at risk (African American); Factors: exercise, diet, fitness
- Osteoporosis is rare among Dominica centenarians, but osteoarthritis/DJD is the most common ailment; trend is opposite in U.S. sample; Factors: strength, weight bearing, joint stress
- U.S. cancer and hypercholesterolemia prevalence are high compared to Caribbean; Factors: diet, toxins, exercise
- Blindness (cataracts, glaucoma, macular degeneration) prevalence similar across samples, where measured

US-Glennan = Glennan Center, EVMS geriatric patients > 85 years of age (N=36); Anonymous data courtesy of Rosanne Newman, M.D.
Barb Elder = Diagnoses of patients at Geriatric Hospital, Barbados from Fraser. (Grell, G.A.C. 1987 The Elderly in the Caribbean, p. 8. Kingston, Jamaica: University Printery.)
Summary: Factors Postulated as Important to Longevity Among Dominica Centenarians

• **Active, athletic life-style**: Lifelong cardiovascular fitness, low BMI, muscularity. Occupation mainly farming.
• **Diet**: High-fiber, low salt, low sugar, high protein, many fresh fruits, root staples, Fish v.s Bacon.
• **High environmental quality**: Low exposure to toxins, no air pollution, no water pollution, no noise pollution
• **Low stress**: Low population density, no crowding, access to forest, river, and marine resources
• **Low rates of tobacco use**
• **Effective public health and low environmental contamination may** explain low incidence of infectious and some malignant diseases
LIVING LONG: 
A lifestyle Issue the choice is OURS!
DOMINICA INFIRMARY
Home for the Aged

Visiting Hours:-
Monday - Saturday 11:00 am - 5:00 pm
Sunday 2:30 pm - 5:00 pm

For more information call 82636

"Whatsoever you do to the least of my brethren that you do unto me."
The Centenarians of Dominica Re-examined

15 Years Later September 2016

Lessons from our first study
1 Sept 2001 to 30 Aug 2004
The Aging Population

• The aging of populations is largely a phenomenon of the twentieth century, and stands as a testimony to our improved Quality of life, Healthcare, & Technological Advancement.

• The world’s Elderly population, 65Yrs+, is growing at a rate of 2.5% per year.

• Of the developed countries, Sweden has the highest proportion (18%) of its population, aged 65 and over.

• The fastest growing age segment in many countries is the “old old” aged 80 and over.

• **IN DOMINICA WE ARE ALREADY AHEAD WITH THE ISSUE OF THE ELDERLY ELDERLY.**

• **MAY THIS CONTINUE TO BE SO !**

• **BE PREPARED !**
BUT, EVERYTHING POTENTIALLY GOOD COMES WITH A COST!
THE END