Healthy Okinawa:
A Problem and A Program

Sumiko Ogawa\textsuperscript{a}, Eugene Boostrom\textsuperscript{a}
and Tadashi Nakasone\textsuperscript{b}

\textsuperscript{a} Meio University, Okinawa, Japan
\textsuperscript{b} Okinawa Prefectural Central Public Health Center
INTRODUCTION: OKINAWA

- Ancient Okinawa may have been “SHANGRI LA”, a fabled island with a wonderful climate and happy, active, long-lived people
- World’s highest proportion of centenarians, with traditional dietary and lifestyle factors credited with important roles in that health success
- Worsening health for recent generations, with changing life-styles, diets, etc.
- Increasing awareness of the program “Healthy Okinawa 2010” among health care providers, national health leaders, and Okinawan communities and populations
OBJECTIVES

- Analysis of the present “problem”
- Review of Okinawa’s “program(s)"
- Possible application in other Pacific countries

Who takes the initiative?
METHODS

- Review of health data and reports issued by Japan’s Ministry of Health and Welfare, by Okinawa Prefecture, and by Okinawa’s municipalities

- Interviews with health system stakeholders in Okinawa
Location of Okinawa
HEALTH TRENDS

Analysis of the present “problem”
National data
(comparisons within Japan)
Factors affecting longevity
HEALTH TRENDS
National data:
“26 SHOCK” for Okinawan Males’ longevity

HEALTH TRENDS

1-1. National data
Among Japan’s 47 prefectures, Okinawa has:

- the highest proportion of Centenarians: 54.37* (last 34 years)

among the lowest mortalities for some life-style related diseases:

- Cancer
  - M: 177.1*, 2\textsuperscript{nd} lowest**
  - F: 89.2*, 4\textsuperscript{th} lowest**

- Cardiovascular
  - M: 71.2*, 3\textsuperscript{rd} lowest**

- Cerebrovascular
  - M: 51.9*, 3\textsuperscript{rd} lowest**
  - F: 23.1, 1\textsuperscript{st} lowest**

Note: * per 100,000 population
** ranking among all 47 prefectures in Japan

HEALTH TRENDS

1-1. National data
Okinawa has, among Japan’s 47 prefectures, the **Highest** mortality rates for certain life-style related diseases:

- **Liver disorders**
  - M: 21.1*, 1st highest**
  - F: 7.5*, 1st highest**

- **COPD**
  - M: 17.0*, 1st highest**
  - F: 4.5*, 1st highest**

- **Diabetes**
  - M: 10.0*, 1st highest**
  - F: 6.3, 1st highest**

Note: * per 100,000
** ranking among all 47 prefectures in Japan

HEALTH TRENDS

National data
Okinawa has:

the HIGHEST rates of BMI>25 of any prefecture in Japan

Males: 46%
Females: 26%

Possibly due to:

less traditional food (Western foods since 1945)
less exercise (car society, sub-tropical climate)
less serious about health

(the lowest regular health check coverage)

HEALTH TRENDS

Factors promoting longevity

- Centenarians’ lifestyles:
  - 3 meals a day (more than 90%)
  - Sleep well
  - Vegetables and fruits in every meal
  - Most favorite food is fruits, then fish, potatoes, mushrooms
  - Feel “I’m healthy” (80%)
  - Good human relationship (80%)

OKINAWA’S “PROGRAM”

Review of Okinawa’s “program(s)”

- Medical Checkup System for metabolic syndrome
  - Started April 2008, Japan-wide
  - Penalty: Any municipality that cannot get at least 65% of people with BMI>25 AND high abdominal girth (males 85cm and females 90cm) to medical checkups in 2011 will receive reduced Government subsidies for elderly health insurance)
Okinawa Pref. Health Promotion Plan

Healthy Okinawa 21

9 rules for healthy forever

「CHA-A-GAN-JU-U O-KI-NA-WA」

CHA: Eat breakfast, less fat, tasty meal
A: Weigh every day
GAN: Moderate exercise, don’t try too hard, tomorrow 10 minutes walk more
JU: Enough rest, deal with stress, talk with someone before depressed
O: Dental health
KI: Away from alcohol at least one day a week
No alcohol for pregnant women
NA: Let’s go for health check with friends and family!
WA: Support your health and long life with big circle of friends.

Wanted: “Healthy Okinawa 21 Support Volunteers”
OKINAWA’S “PROGRAM”

Review of some Okinawa “programs”

- Healthy Okinawa 2010
  1. Waist Below 85 cm. (Naha City)
  2. Evening Health Check (Nanjo City)
  3. Bento Competition (Nago City)
  4. New Community-Gukuru-no-Mori (NGO)
OKINAWA’S “PROGRAM”

Waist Below 85 cm. (Naha City)

Subjects: Ages 20-64

Waist  over 85cm (M), 90cm (F)

Methods: Health professional registers subjects’ exercises to lose weight / reduce girth.

Success rewarded by certificates and/or tickets for sport facilities

Outcome: Not yet evaluated.
OKINAWA’S “PROGRAM”

Evening Health Check (Nanjo City)

- Medical Checkup System for metabolic syndrome in Evening (18:00 – 19:30 )
- Effective, especially for male working groups
- Competition among the wards for better coverage award

Outcome: Nanjo City: 2\textsuperscript{nd} highest coverage (34.68\%) among 40 municipalities in Okinawa, and one of only three municipalities over 30\% (24.1\% in average)
OKINAWA’S “PROGRAM”

Bento Competition (Nago City)

- Food education for students (junior, high)
- Awareness of healthy and traditional foods

Outcome: future (new generation)

OKINAWA’S “PROGRAM”

New community - Gukuru-no-Mori (NGO)

- Space for chatting/exchange health issues
- Flexible - no membership fees or obligations
- Member-initiated
- Covers nine municipalities

Outcome: Not yet evaluated
RELEVANT FOR OTHER PACIFIC COUNTRIES?

- Fill gap between health care providers and population through volunteer groups (e.g., Healthy Okinawa Support Volunteers) or by setting up “new community” (Gukuru-no-mori)
- “Carrots” rather than “Sticks”
- Competition among small groups
- Initiatives by the communities, populations, local and prefectural governments, NGOs and universities: All are welcomed!
CONCLUSIONS

- Okinawan programs have yet to be evaluated for their effectiveness
- Importance of social support / human relationships
- Beyond geographical communities to social, functional, work, educational and voluntary communities
- Small group focus, rather than Individual activities
Thank you