



CHARACTERISTICS OF PHYSICAL AND LABORATORY DATA AND LIFE STYLE IN WOMEN HAS FAVORABLE INFLUENCE ON THE RISK FOR CARDIOVASCULAR DISEASE

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Authors: <u>Masanari Kuwabara</u>, Koichiro Niwa, Hiroyuki Niinuma, St. Luke's International Hospital, Tokyo, Japan, Graduate School of Medical Sciences, Tottori University, Yonago, Japan

Background: The purpose of this study is to clarify whether gender difference of life style can influence the risk for future cardiovascular disease or not using mass medical check-up data.

Methods: We collected data from the medical records of 90,143 Japanese (45,906 women(50.9%), age;women 45.7±11.9years, men 46.9±12.1years) who had annual medical check-up in our hospital from January 2004 to June 2010, and compared the following data between men and women; physical examination;BMI, abdominal circumference, blood pressure, pulse rate, laboratory data;Total-cholesterol, LDL-cholesterol, HDL-cholesterol, triglyceride, fasting blood sugar, HbA1c, uric acid, life style data;weight gain, sleep period, dietary intake, salt intake.

Results: The data indicated women's character in comparison with men. BMI is lower $(21.0\pm3.0 \text{ vs } 23.8\pm3.1, \text{p}<0.001)$, and abdominal circumference is smaller $(76.1\pm9.5 \text{ vs } 84.3\pm9.4\text{cm}, \text{p}<0.001)$. Blood pressure is lower $(112.6/69.6\pm17.0/10.6 \text{ vs } 122.4/76.4\pm16.4/10.7\text{mmHg}, \text{p}<0.001)$, and pulse rate is faster $(75.6\pm10.8 \text{ vs } 72.0\pm10.7\text{bpm}, \text{p}<0.001)$. Total-cholesterol is no significant difference $(201.4\pm35.6 \text{ vs } 201.5\pm33.2\text{mg/dl})$, but LDL-cholesterol is lower $(112.7\pm31.1 \text{ vs } 121.0\pm29.6\text{mg/dl}, \text{p}<0.001)$ and HDL-cholesterol is higher $(69.4\pm14.5 \text{ vs } 55.0\pm13.1\text{mg/dl}, \text{p}<0.001)$. Triglyceride is significantly lower $(74.0\pm47.0 \text{ vs } 127.6\pm99.5\text{mg/dl}, \text{p}<0.001)$. Fasting blood sugar is lower $(95.1\pm11.5 \text{ vs } 103.9\pm18.0\text{mg/dl}, \text{p}<0.001)$, and HbA1c is also lower $(5.04\pm0.47 \text{ vs } 5.17\pm0.68\%, \text{p}<0.001)$. Uric acid is lower $(4.39\pm0.94 \text{ vs } 6.22\pm1.22\text{mg/dl}, \text{p}<0.001)$. Weight gain from late 10s is lower $(49.8\pm47.2 \text{ to } 52.5\pm7.8\text{kg vs } 61.8\pm12.0 \text{ to } 69.4\pm10.2\text{kg}, \text{p}<0.001)$. Sleep period is longer $(6.59\pm4.60 \text{ vs } 6.41\pm3.53\text{hours}, \text{p}<0.001)$. The amount of dietary $(2131\pm533 \text{ vs } 2428\pm632\text{kilocalories/day}, \text{p}<0.001)$ and salt intake $(11.8\pm3.7 \text{ vs } 12.5\pm4.0\text{g/day}, \text{p}<0.001)$ is smaller.

Conclusion: In Japan, with their better life style, women may be tendency to have lower risk of cardiovascular disease than men in almost parameters.