Social determinants of cardiovascular health in middle-aged men from Northern Ghana: An AWI-Gen sub-study

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Introduction

The American Heart Associations (AHA) cardiovascular health index is an important metric for monitoring overall cardiovascular health (CVH) at individual and population level utilizing the well characterized seven classical cardiovascular risk factors. We examined sociodemographic factors that contribute to the CVH of middle-aged adults from Northern Ghana.

Methodology

A cross sectional study was conducted in 2015 among 40-60 year old women and men in the Navrongo Health and Demographic Surveillance Site. CVH index was constructed as poor, intermediate and ideal using smoking, body mass index (BMI), physical activity, diet (fruit and vegetables), blood pressure, fasting glucose and total cholesterol and re-categorized as a binary outcome - poor versus intermediate plus ideal. Adjusted logistic regression analyses were used to determine the association between the sociodemographic factors and CVH.

Results

Table 1. Distribution of sociodemographic factors

Factors	N (%)
women	1092 (51.5)
Men	923 (50.5)
Married	1481 (73.6)
Single	532 (26.4)
No formal education	1413 (70.3)
Some formal education	594 (29.5)
Poor household economic status	894 (44.4)
Employed	1258 (62.5)

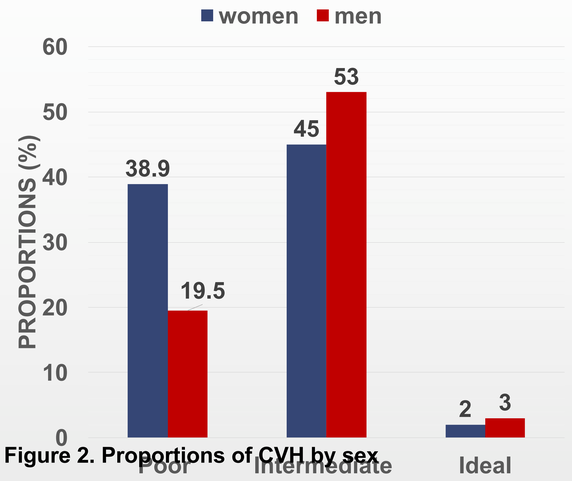

Figure 2. Proportions of CVH by sex

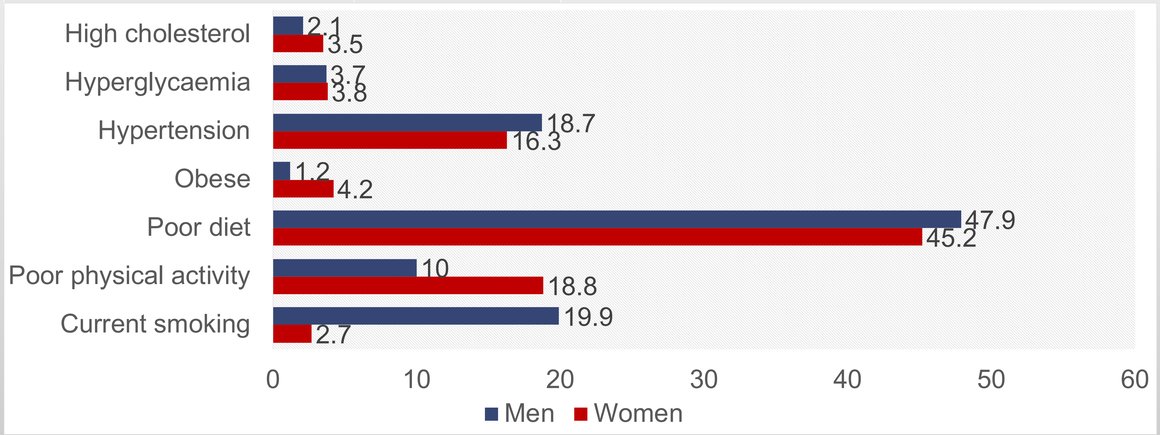

Figure 1. Prevalence of the component of the CVH index by sex

We studied 2005 adults with a mean age of 51±6. More men then women were obese and physically inactive while men had poor diet and were currently smoking

The odds of poor CVH were higher in men (AOR= 1.78, [95%CI: 1.63, 1.95]) compared to women. Participants with formal education (1.59 [1.44, 1.76]) had a higher odds of poor CVH compared those without. Married (0.88 [0.80, 0.97]) and employed participants (0.81 [0.74, 0.89]) had lower odds of poor CVH.

Conclusion

Some of the social determinants of health continue to influence cardiovascular health. Building social support systems and access to screening services especially for the aged and men may prevent poor CVH.

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