



Chronic Disease Trends in Older Native Americans

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Introduction

The *Identifying Our Needs: A Survey of Elders* instrument is used to collect tribal elder data on: general health status, activities of daily living, vision, hearing, dental care, screening, health care access, tobacco/alcohol usage, weight/nutrition, social support/housing, demographics, and social functioning. The survey was constructed using questions from nationally administered questionnaires so comparisons could be made with data from the general U.S. population. These results are collected by participating tribes and are compared to statistics from the general U.S. population to determine the extent of existing social and health differences.

This study looked at the prevalence of chronic health disease (hypertension, arthritis, obesity, asthma, congestive heart failure, osteoporosis) trends over the four cycles of the study. The prevalence was also adjusted and separated for sex for arthritis, hypertension, and obesity.

Methods

Data was gathered over four cycles, each cycle is three years, and was collected using the *Identifying Our Needs: A Survey of Elders IV* instrument.

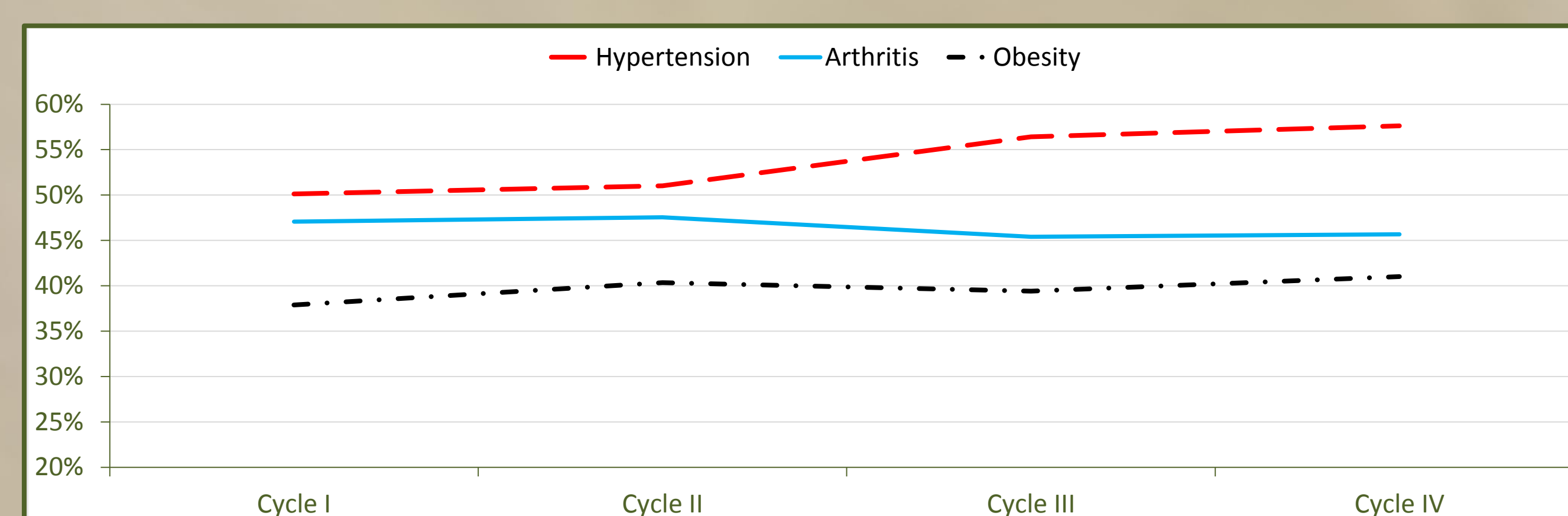
- ❖ Cycle 1 (1999-2002) 9,513
- ❖ Cycle 2 (2002-2005) 9,762
- ❖ Cycle 3 (2005-2008)
- ❖ Cycle 4 (2008-2011) 15,773

Information on the prevalence of six chronic conditions (hypertension, arthritis, obesity, asthma, congestive heart failure, and osteoporosis) was obtained. The prevalence of these six conditions was compared between each cycle and trends were noted. Important gender differences in three conditions over the cycles was described. Chi-square statistics were used to test associations between prevalence's of the conditions during the cycles.

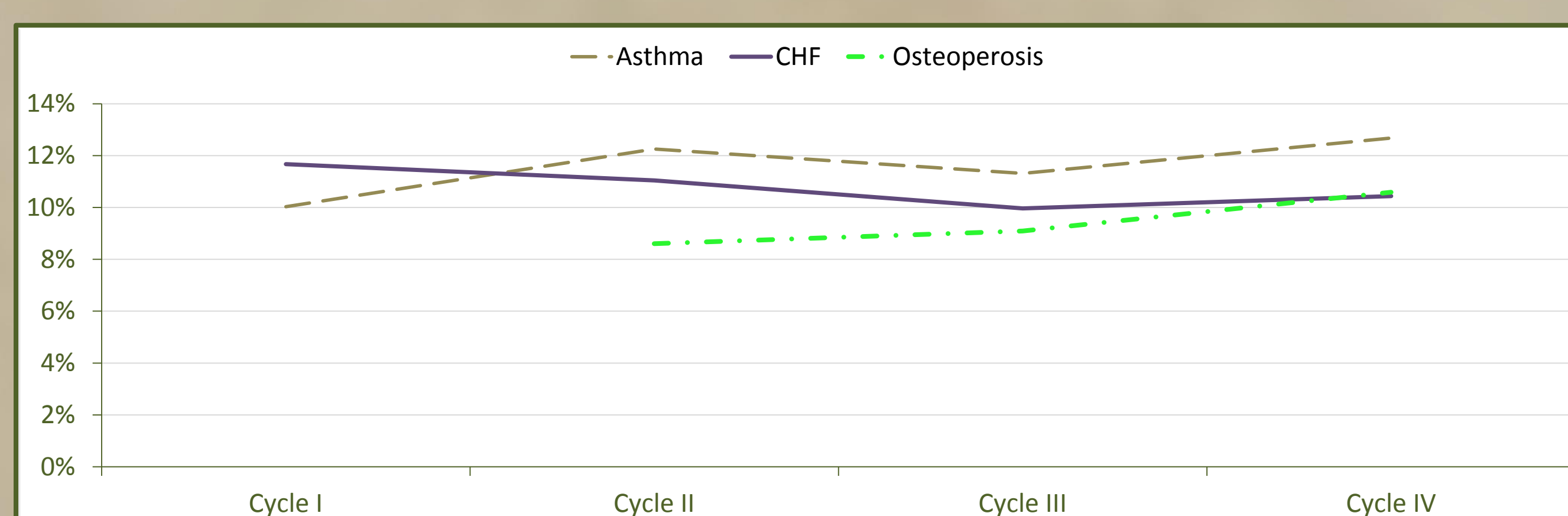


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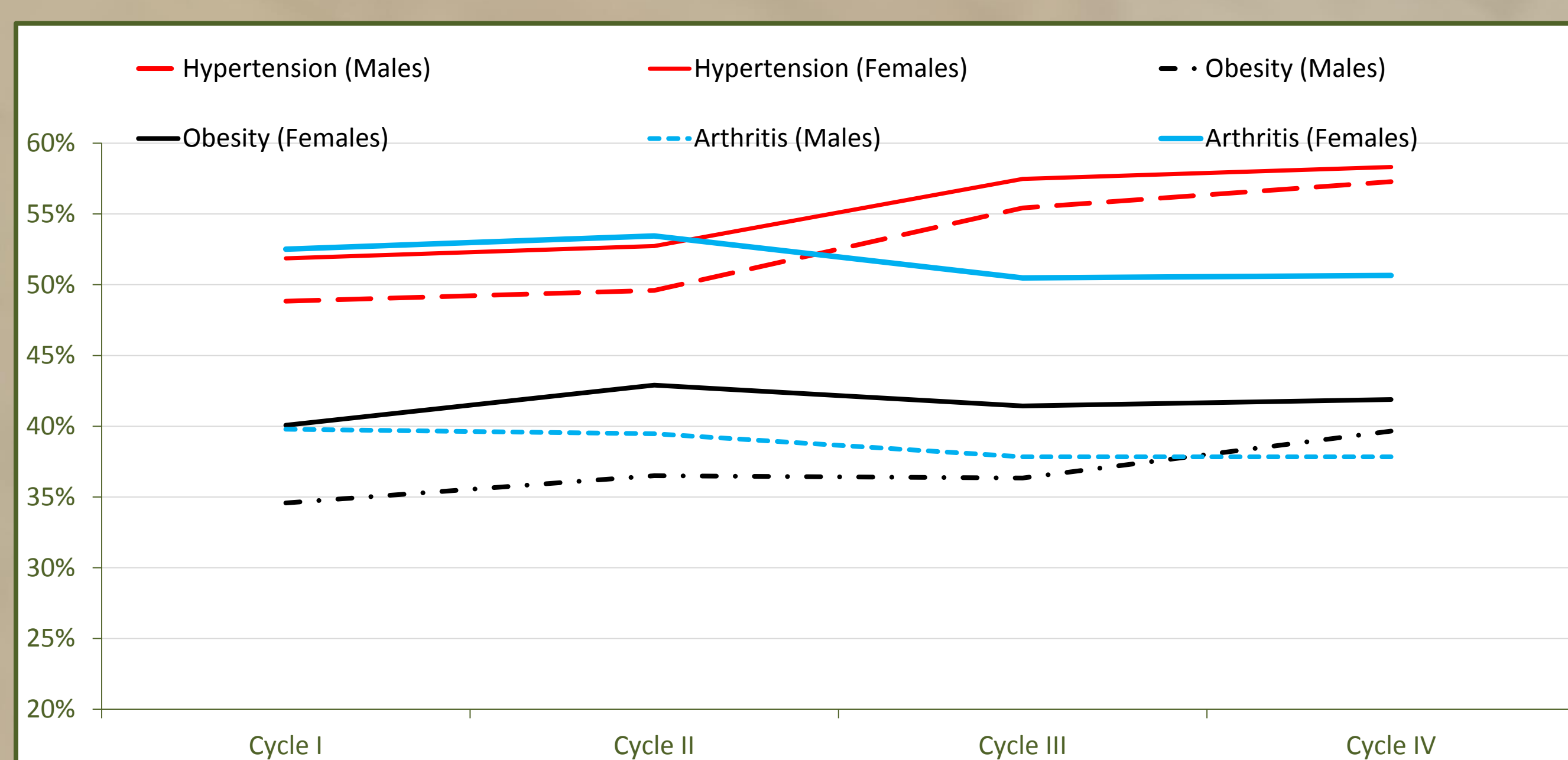
Results



This figure shows the prevalence of hypertension, arthritis, and obesity over time. All showed a significant change over time or change in prevalence by cycles ($p < .001$). The prevalence of hypertension and obesity have increased with time, while the prevalence of arthritis has decreased.



This figure shows the change in prevalence of asthma, congestive heart failure, and osteoporosis. All showed a significant association or prevalence to cycles ($p < .001$). Asthma and osteoporosis have been increasing in prevalence, while congestive heart failure has been decreasing.



This figure shows the difference by gender for the three most prevalent chronic diseases. For all three conditions females have a higher prevalence, though for arthritis that difference is much higher (12%) and for hypertension lower (3%). The increase in hypertension and obesity is greater for males. The decrease in arthritis is about the same for males and females.

Conclusion

Though they make up a small proportion of the overall population, Native American seniors are one of the fastest growing in the United States. As they increase, their needs for adequate care and services will also increase.

Obesity, hypertension, congestive heart disease, and other chronic conditions are preventable and manageable diseases with changes in diet and exercise. These changes can be difficult, however, given the unique situations and environments Native American elders live in. Poor access to services and resources, socio-economic status, inadequate care systems, rurality, and other factors can all exacerbate or contribute to the onset of certain chronic conditions. Recommendations for preventing/decreasing the impact of chronic disease in Indian Country are as follows:

1. Increase chronic disease management programs to prevent co-morbidity and increase access to services.
2. Increase availability of home/community based long-term care services in rural areas.
3. Increase disease prevention efforts including health promotion and wellness programs.
4. Increase wellness/healthy living efforts in younger generations of Native Americans, to prevent disease and make healthy living a way of life as they age.

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