

Analysis of Geriatric Longevity in Rural Northwest Illinois

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Introduction/Background

- “Oldest old” = defined by the National Institutes of Aging as individuals 85 yrs and older
- These individuals have outlived life expectancies at birth of their cohort (61 yrs) and of those born today (79 yrs)
- **Henry-Stark Counties vs National Averages**
 - “Oldest old” make up 2.6% of population vs 1.7% (diff. of 53%)
 - 6,275 people per NH and ALF facility vs 6,741 (diff. of 7.4%) (NH = nursing homes, ALF = assisted living facility)

Methods

- Analysis of “oldest old” through the use a questionnaire
- **Questionnaire created subjectively**
 - attempted to encompass a variety of information important to health and wellbeing
 - total of 113 questions
 - Many questions specified by stage of life
 - “Childhood” = 14 – 25 yrs
 - “Young Adulthood” = 26 – 35 yrs
 - “Adulthood” = 36 – 65 yrs
 - “Late Adulthood” = 66 – 84 yrs
 - “Current/Now” = 85+ yrs

Results

- **31 participants**
 - 27 completed questionnaire independently
 - 4 completed questionnaire with assistance
- **Living Status**
 - Age range: 85 – 94 yrs
 - 71% were female participants
 - 48 % live independently or with spouse
 - Of those not living independently, 63% live with family and the rest in NHs and ALFs
 - Average number of children: 3.4
 - Hours of weekly assistance (see CHART 1)
 - 72% drive legally
- **Health Insurance and Medications**
 - Nearly all have Medicare Part A and B and have supplemental private insurance
 - Average number of medications: 8.3 (3 – 26)
 - 83% take blood pressure meds
 - 76% take cholesterol lowering meds
 - 57% take thyroid hormone replacement
 - 32% take diabetes meds
 - 61% take blood thinning meds

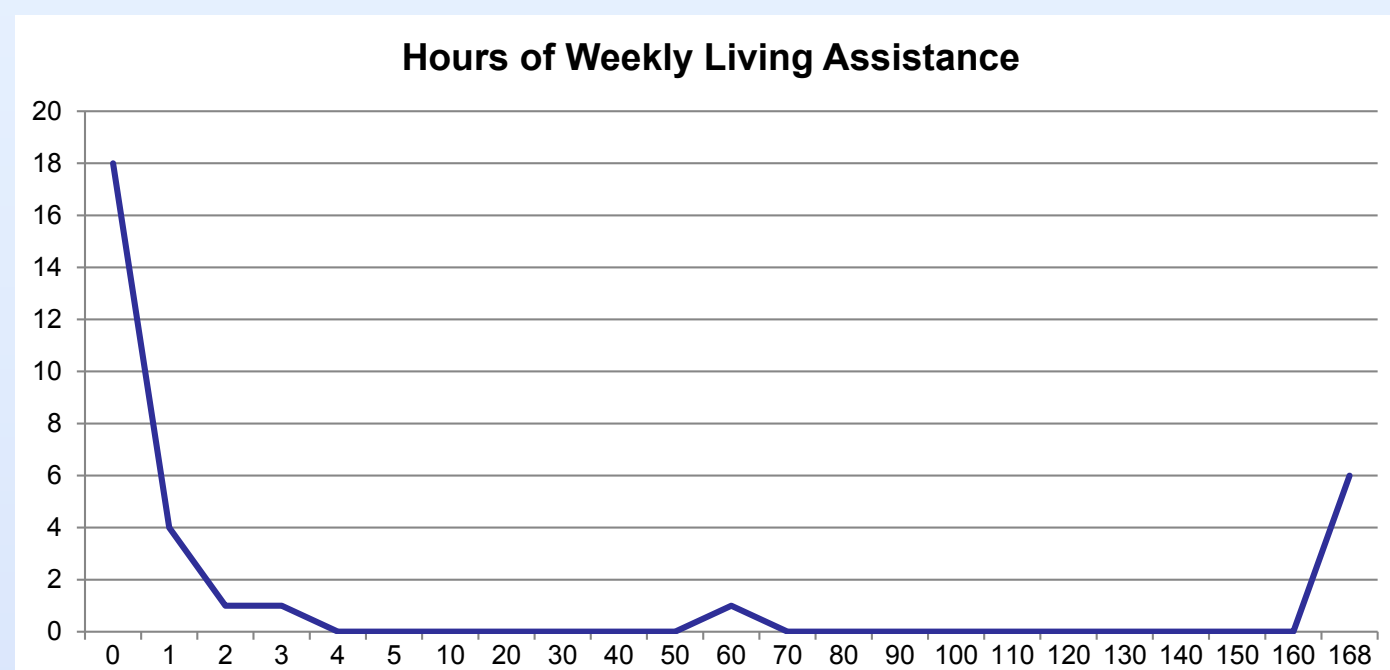


CHART 1: Number of participants (y) per hour of weekly assistance (x)

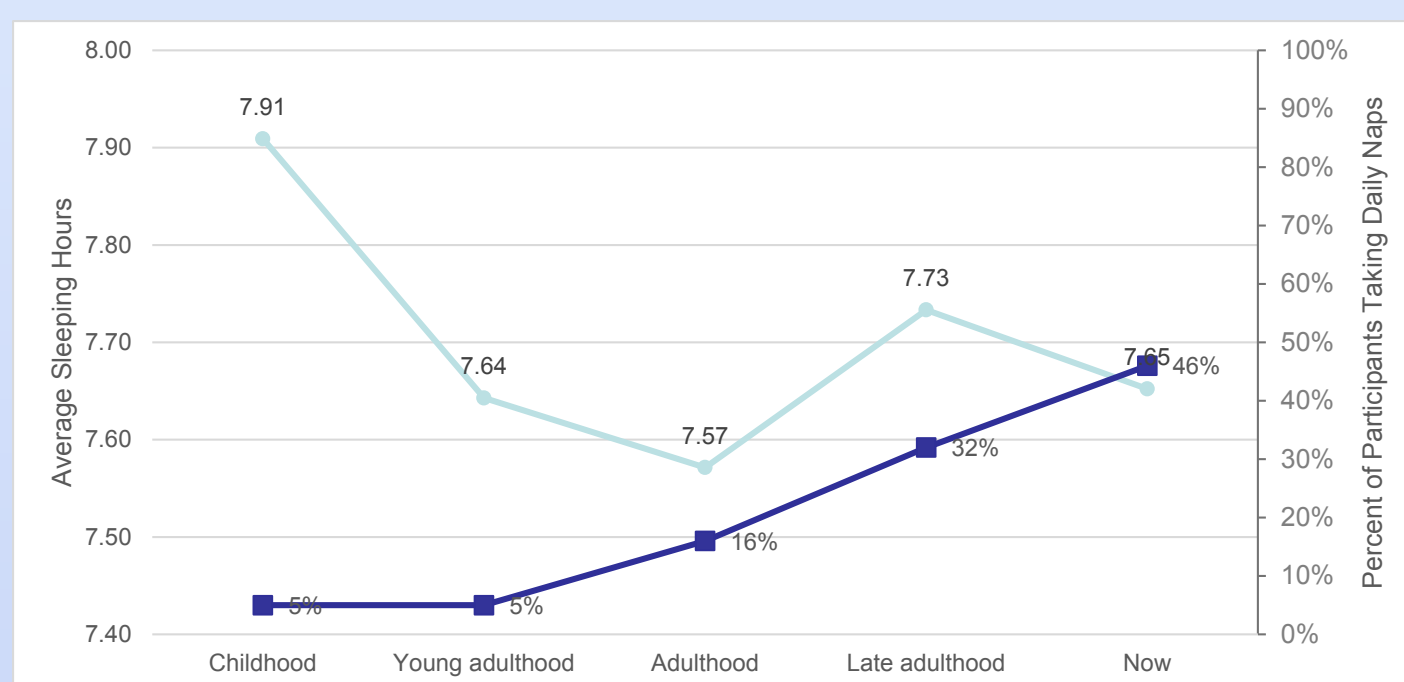


CHART 2: Average sleep hours per day and percent of participants taking daily naps for each stage of life

- **Smoking, Alcohol, and Illicit Drug use**
 - 32% smoked tobacco in their lives at an average 0.8 pack per year for an average total 36.5 yrs
 - Little alcohol use reported, heaviest drinker was 4 drinks/wk
 - No reported use of smokeless tobacco or illicit drug use
- **Education, Employment, and Income**
 - 76% had high school as highest grade completed
 - Main industries worked in were Farming and Military
 - 18 participants shared average income information and 76% or those reported average income of < \$50K
- **Weight and Diet**
 - Average change in weight was 48.3 lbs
 - Average number of meals per day 3
 - Food categories most incorporated in daily meals were “Grains/Potatoes” and “Meats/Proteins”. (See article TABLE 3 for full detailed report of food category choices per meal and life stage)
 - Most common beverage reported was water for all life stages
 - Most common supplements reported were Multivitamins, Vitamin C, and Fish Oil for all life stages

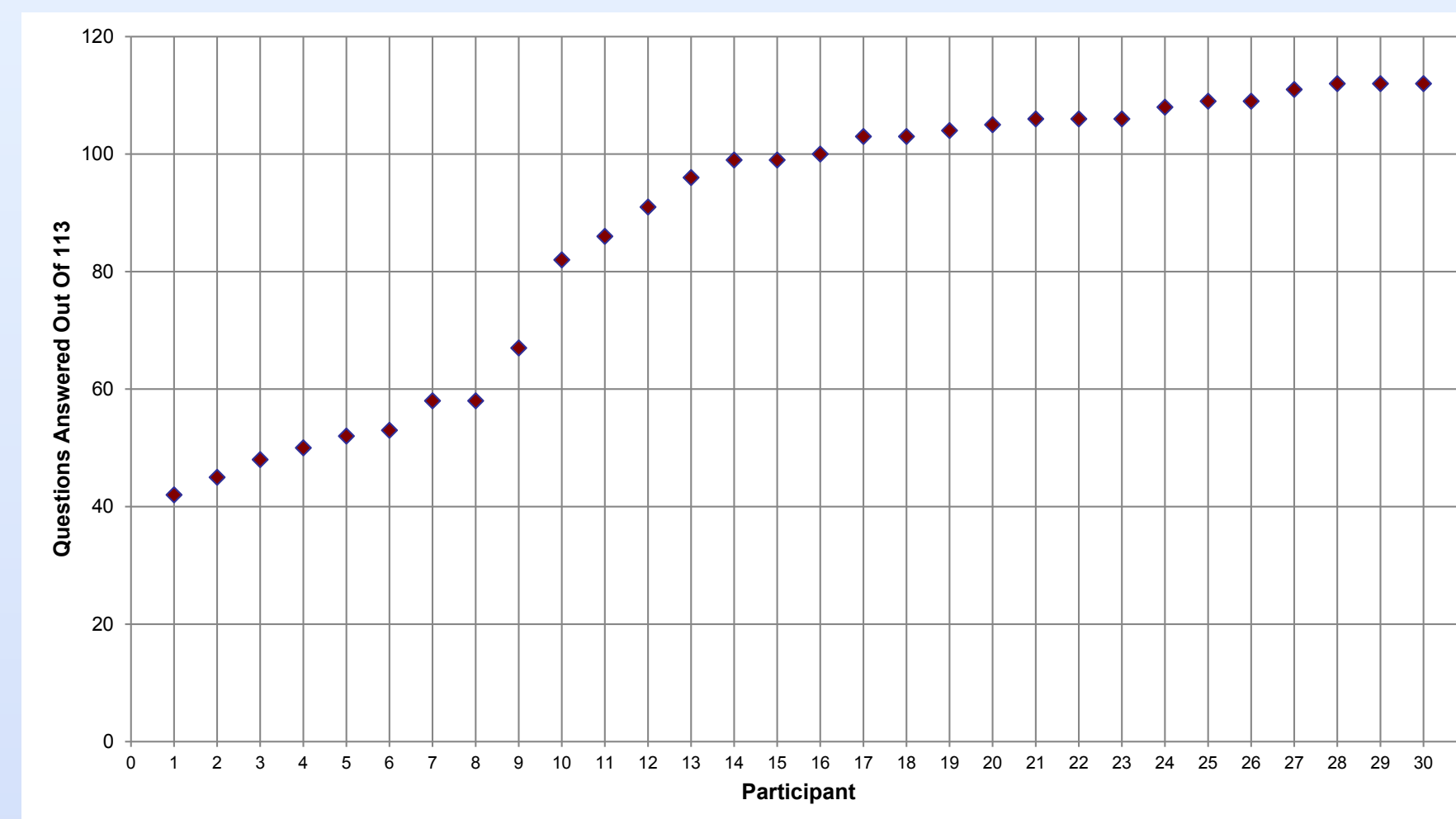


CHART 3: Total number of questions completed on the questionnaire by each participant, ascending order

Blood Relative	Average age of death	Average of death minus outliers
Maternal Grandmother	74.4 yrs	76.7 yrs
Maternal Grandfather	72.3 yrs	76.1 yrs
Paternal Grandmother	70.5 yrs	77.9 yrs
Paternal Grandfather	73.1 yrs	73.1 yrs
Mother	76.2 yrs	76.2 yrs
Father	74.2 yrs	74.2 yrs
Siblings	75.8 yrs	75.8 yrs

[TABLE 2: Average age of death of blood relatives with and without low outliers]

- **Physical activity**
 - Minimal participation in organized sports
 - > 70% of participants reported weekly exercise for all stages of life, except for “Currently/Now” stage (54%)
 - Most common reported form of exercise was walking
- **Longevity of Blood Relatives**
 - See TABLE 2
- **Hobbies and Skills Learned**
 - 11/27 repondents learned a musical instrument
 - 12/23 respondents learned some other art form
 - 27/28 respondents learned a trade skill
 - 26/29 respondents practice or practiced a hobby regularly
- **Sleep Habits**
 - See CHART 2

Considerations for the Community

- Many individuals of this age group live alone or with a spouse of similar age and many don’t utilize any outside living assistance
 - Is there appropriate utilization of living assistance services?
 - Are individuals safe at home?
- Individuals in this age group seem to be appropriately insured medically
- Individuals in this age group lead “healthy lives”
 - Majority have refrained from tobacco, alcohol, or drug use
 - Majority have been physically active
 - Appropriate sleep patterns
- In this study genetics is a less significant measure to associate longevity
 - Individuals have surpassed the longevity of their blood relatives by at least 7 years
- The shape of the distribution of total questions answered (CHART 3)
 - Is there an explanation for the shape? A single prominent drop in questions between two gradual down-sloping plateaus

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