

Characteristics of Caregivers and Care Recipients—Hawaii, 2007
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Characteristics of Caregivers and Care Recipients—Hawaii, 2007

These data are from the 2007 Hawaii Behavioral Risk Factor surveillance System (BRFSS) and are designed to provide estimates of the adult, non-institutionalized Hawaii residents.

Caregiving and the Caregiver Module

America's 53.4 million caregivers form an integral and frequently unrecognized part of the health care team, providing an estimated \$257 to \$389 billion in unpaid care to individuals with disabilities and chronic disease.¹ These informal or family caregivers may be a family member, friend, or neighbor of a person with a disability or chronic health condition. Currently, the prevalence of caregiving and the health impacts of caregiving are not known at the state and local level. State and federal agencies, as well as private organizations are concerned about issues surrounding caregiving and could employ these data to design needed programs and interventions to address an increasingly important public health issue. Many community and public health groups also express interest in specific conditions as they relate to caregiving—notably cancer, Alzheimer's and dementia, and developmental disabilities. Thus, there is an emerging and increasing audience requiring this information. Learning more about caregivers and how their caregiving activities impact their risk of poor health outcomes will improve our understanding of how to provide support to them, in turn improving the ability of care recipients to maintain independence and experience an improved quality of life.

During the past four years, the National Center on Birth Defects and Development Disabilities (NCBDDD) at the Centers for Disease Control and Prevention (CDC) has made a systematic attempt to adequately identify and describe caregivers as part of the total health care system, and to identify public health dimensions of caregiving. One result of this work has been the development of the Caregiver Module, a series of questions about caregivers and their experiences that can be added to the Behavioral Risk Factor Surveillance System (BRFSS).² The BRFSS is a state-based, random-digit-dialed (RDD) telephone survey of non-institutionalized U.S. adults aged 18 and older. This survey is administered by state health agencies, territories, and in the District of Columbia with assistance from the CDC.³ The Caregiver Module is designed to collect information about a population-based sample of adult caregivers (age 18 and older) who care for individuals with a disability or chronic condition regardless of the individual's age, level of need, or diagnosis. Data are weighted so that people who respond to surveys represent the entire state of Hawaii based on age, gender, and race.

Caregiving in Hawaii

Like the rest of the nation, Hawaii will experience a rapid aging of its population in the coming decades. The number of Hawaiians age 65 and older is projected to increase 86 percent by 2030,⁴ growing at a rate that is two-and-a-half times the national average.⁵ Because the risk of disability increases with age, it is expected that as the population ages, the need for informal caregivers will increase as well. Therefore, it is imperative to acknowledge the important role caregivers will play in the state's health care system, and to understand the characteristics of these caregivers.

In 2006, the value of unpaid labor among family caregivers in Hawaii was estimated at \$1.25 billion. During the 2008 legislative session, the American Association of Retired Persons (AARP) of Hawaii is supporting two long-term care bills. An omnibus bill (SB 2830) would generate a program providing Medicaid beneficiaries a monthly allowance to hire a family member or friend as caregiver if needed, and to select services according to their varying needs. The second bill (SB 3255) would establish a commission to find a way to fund the state's long-term care goals.⁴

To study the characteristics and health of caregivers and their care recipients in the state of Hawaii, the thirteen question Caregiver Module² was added to the 2007 Hawaii BRFSS (Appendix A, pages 14-15). The 2007 Hawaii BRFSS not only allows for the analysis of demographic differences among caregivers and non-caregivers but also assesses health behaviors, such as exercise frequency, smoking status, and alcohol use. In addition, through the use of this module, caregivers can be compared to non-caregivers on quality of life measures such as general life satisfaction, the amount of emotional and social support received, and self-reported general health status.

There were 6,603 adults that responded to the 2007 Hawaii BRFSS question, "People may provide regular care or assistance to someone who has a long-term illness or disability. During the past month, did you provide any such care or assistance to a family member or friend?" A total of 761 people, or 11.1% (weighted) of these respondents said "yes" to this question. These respondents were classified as caregivers and answered the remaining Caregiver Module questions about themselves and their care recipient. (Note: if the caregiver reported providing care to more than one recipient, the caregiver was asked to answer the remaining questions based on the recipient who required the most care).

Questions on the Caregiver Module included the age and gender of the care recipient and their relationship to the caregiver. Module questions also assessed the major health problem of the care recipient, and up to two areas in which the care recipient required the most assistance. Other questions asked the caregiver if they were the primary caregiver for the care recipient, how long they have provided care for the recipient, the average number of hours per week they provided care, how far they lived from their care recipient, and their greatest difficulty faced as a caregiver. The complete Caregiver Module used on the 2007 Hawaii BRFSS appears in Appendix A, pages 14-15.

Data Analysis:

In order to understand the best way to target and serve the needs of caregivers, it is necessary to understand who they are. Demographic and health behavior characteristics of caregivers and non-caregivers are presented in Table 1, pages 9-11. A significant majority of caregivers identified in the survey were women (59.2%). Caregivers and non-caregivers had similar age distributions. The mean age of caregivers was 47.6 years and the mean age of non-caregivers was 47.0 years. Caregivers were more likely to have received a college degree or higher (36.5%) compared to non-caregivers (33.6%). Caregivers and non-caregivers have similar marital status (approximately 62% married or coupled) and employment status (approximately 73% employed, homemakers, or in school) distributions (Table 1).

The three most commonly reported race/ethnic groups of caregivers in Hawaii were White (30.0%), Japanese (22.7%), and Hawaiian (17.3%). Among non-caregivers, the three most commonly reported races were White (32.2%), Japanese (21.6%) and Filipino (18.0%). Additionally, the typical adult caregiver in Hawaii most commonly lives on the island of Oahu (67.6%), as do most non-caregivers (71.4%).

Respondents were categorized as having a disability according to the BRFSS definition of disability. If respondents answered “yes” to either of two questions: “Are you limited in any way in any activities because of physical, mental, or emotional problems,” or “Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone,” they were classified as having a disability. The prevalence of disability was higher among caregivers (21.6%) compared to non-caregivers (16.7%).

Health related quality of life (HRQOL) was assessed using the following variables: physical unhealthy days in the last 30 days, mental unhealthy days in the last 30 days, general life satisfaction, emotional support, and general health status. The number of physical unhealthy days was assessed in the question: “Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?” Frequent physical distress (FPD) was defined as having 14 or more days in the last 30 days. Caregivers reported a slightly lower frequency of FPD in the past month; 7.0% compared to 8.6% of non-caregivers. Mentally unhealthy days were assessed as: “Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?” Respondents who experienced 14 or more days in the last 30 days that their mental health was not good were also considered as experiencing frequent mental distress (FMD). Caregivers reported a higher frequency of FMD per month (14.0%) than non-caregivers (8.2%). Ratings of general life satisfaction were nearly identical for caregivers and non-caregivers; 96.2% and 96.4% reported feeling very satisfied or satisfied with their life. Emotional support was assessed by the question: “How often do you get the social or emotional support you need?” Caregivers reported always or usually receiving the social and emotional support needed more frequently than non-caregivers (77.5% compared to 74.9%). Finally, caregivers reported that their general health was similar to non-caregivers: 84.5% of caregivers compared to 85.6% reported their health was excellent, very good, or good.

Caregivers reported meeting physical activity recommendations more often than non-caregivers (57.2% compared to 50.6%), and were less likely to report no physical activity (8.2% compared to 12.6%). Caregivers also reported consuming five or more servings of fruits and vegetables more often than non-caregivers (33.4% compared to 28.1%). Although caregivers reported meeting physical activity recommendations and consuming the recommended amounts of fruits and vegetables more often than non-caregivers, caregivers were more likely to be obese (24.3% of caregivers versus 21.3% of non-caregivers had a body mass index (BMI) of 30 or higher).

The CDC defines heavy drinking as more than two drinks per day for men and more than one drink per day for women. Binge drinking is defined as men having five or more drinks on one occasion, and women having four or more drinks on one occasion. The prevalence of binge

drinking in the last 30 days was 18.6% among caregivers and 18.4% among non-caregivers. Nine percent of caregivers reported heavy alcohol consumption compared to 7.5% of non-caregivers. Caregivers were more likely to be current smokers than non-caregivers (21.0% compared to 16.5%).

Caregivers age 65 and older were slightly less likely than non-caregivers of the same age to have received a flu shot within the past year (77.8% compared to 78.9%), but more likely than non-caregivers to have ever received the pneumonia vaccine (73.6% compared to 68.2%). Compared to non-caregivers, caregivers were also more likely to report having a living will (39.4% compared to 36.0%), and more likely to have health care Power of Attorney in place (40.8% compared to 33.4%). There appears to be no difference among caregivers and non-caregivers regarding long-term care insurance (35.7% of caregivers and 35.2% of non-caregivers reported long-term care insurance).

The results of the thirteen question Hawaii Caregiver Module based on the 761 identified caregivers are found in Table 2, pages 12-13 and are discussed below. A substantial majority of care recipients were women (61.2%) and age 65 and older (70.0%). Care recipients were most commonly a family member of the caregiver, with a parent or parent-in-law being the most frequently reported relationship (43.9%). Another 10.7% of caregivers provided caring for a friend, and 12.5% cared for a grandparent. The most common care recipient diagnosis reported by the caregiver was Alzheimer's disease or dementia (14.5%). Diabetes (8.3%), stroke (7.3%), cancer (6.9%), and heart disease (6.1%) completed the list of the five most common diagnoses reported.

Caregivers reported providing help in a variety of areas. Caregivers most frequently reported providing assistance with activities of daily living (ADL's) such as self care, moving around, medicine, and assisting their care recipient with learning, hearing, or vision conditions (85.3%). When asked the greatest difficulty faced personally, caregivers most often said that caregiving did not create a difficulty for them (38.9%), or that caregiving created stress (36.7%) or did not leave enough time for themselves (18.8%).

Overall, 50.0% of caregivers provided zero to eight hours of care in an average week, and 17.2% provided 40 hours of care or more in an average week. One-third (33.0%) of caregivers had provided care for more than five years. Caregivers most commonly reported caring for one care recipient age 60 and older (70.4%), and 11.2% reported caring for two or more recipients age 60 and older. These caregivers tended to live with the care recipient (42.1%) or within 20 minutes of him/her (31.7%). Of those care recipients who did not live with the caregiver completing the survey, 31.1% were reported to live with another family member or friend, 9.0% were reported to live in an institutional setting or have professional home care or hospice care, and 13.9% were reported to live alone. Among caregivers, 37.9% stated that they were the primary caregiver for the recipient about whom they answered the survey.

The caregiver module gives a population-based picture of caregivers in the state of Hawaii. Within caregivers, however, there are differences. These different attributes among caregivers may increase or decrease the risk of health behavior outcomes. The following analysis

describes the attributes of those respondents who identify themselves as primary caregivers compared to secondary caregivers.

Out of the 761 reported caregivers on the Hawaii BRFSS, 300 or 37.9% (weighted) identified themselves as the primary caregiver for their care recipient. A significant majority of primary caregivers were women (66.6%). Primary caregivers were typically older than their secondary caregiver counterparts. The mean age of primary caregivers was 55.2 years compared to secondary caregivers whose mean age was 43.0 years. Primary caregivers were less likely to have received a college degree or higher (32.3%) compared to secondary caregivers (39.0%), and were less likely to be employed, a homemaker, or in school (60.7%) compared to secondary caregivers (80.1%). Primary caregivers were more likely than secondary caregivers to be married or coupled (70.3% compared to 58.0%).

The three most commonly reported race/ethnic groups of primary caregivers in Hawaii were White (32.2%), Japanese (20.8%), and Hawaiian (16.4%). Additionally, the typical adult primary caregiver in Hawaii most commonly lives on the island of Oahu (64.3%), as do most secondary caregivers (69.6%).

The prevalence of disability was higher among primary caregivers (27.4%) compared to secondary caregivers (18.1%). In addition, ratings of general life satisfaction were lower for primary caregivers compared to secondary caregivers; 94.3% and 97.3% reported feeling very satisfied or satisfied with their life. Primary caregivers also reported always or usually receiving the social and emotional support needed less frequently than secondary caregivers (73.6% compared to 79.8%). Finally, primary caregivers reported that their general health was excellent, very good, or good less frequently than secondary caregivers; 79.4% compared to 87.6%.

Primary caregivers reported a higher frequency of frequent physical distress (FPD) in the past month; 10.7% compared to 4.8% of secondary caregivers. Primary caregivers also reported frequent mental distress (FMD) more often than secondary caregivers; 17.8% compared to 11.7%, respectively.

Primary caregivers reported providing help in a variety of areas. Primary caregivers most frequently reported providing assistance with activities of daily living (ADL's) such as self care, moving around, medicine, and assisting their care recipient with learning, hearing, or vision conditions (96.7%). When asked the greatest difficulty faced personally, primary caregivers most often said that caregiving created stress (36.9%), or did not leave enough time for themselves (27.7%). However, 31.6% of primary caregivers said that caregiving did not create a difficulty for them.

Overall, 22.5% of primary caregivers provided zero to eight hours of care in an average week, and 35.3% provided 40 hours of care or more in an average week. Nearly 42% of primary caregivers had provided care for more than five years. Primary caregivers most commonly reported caring for one care recipient age 60 and older (70.3%), and 7.6% reported caring for two or more recipients age 60 and older. These primary caregivers tended to live with the care recipient (74.7%) or within 20 minutes of him/her (17.9%).

References

1. Talley RC, Crews JE. Framing the public health of caregiving. *Am J Public Health* 2007; 97:224-228.
2. Neugaard B, Andresen EM, DeFries EL, Talley RC, Crews JE. The characteristics of caregivers & care recipients: North Carolina, 2005. *MMWR* 2007; 56(21):529-532. [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5621a3.htm?s_cid=mm5621a3_e]
3. Remington PL, Smith MY, Williamson DF, Anda RF, Gentry EM, Hogelin GC. Design, Characteristics, and Usefulness of State-Based Behavioral Risk Factor Surveillance: 1981-1987. *Public Health Reports* 1988; 103(4) 366-375.
4. American Association of Retired Persons. *Hawaii Bulletin State News*. 2008. Retrieved June 16, 2008. [http://www.aarp.org/states/hi/articles/hawaii_bulletin_state.html].
5. The Healthcare Association of Hawaii (HAH). *Long term care: Building Momentum for Hawaii's Elderly*. Retrieved June 16, 2008. [<http://www.hah.org/000131d/hah.nsf/d592fbc3805105fd0a2565e1007be71a/f2b52ee9ffb72dc00a256db100711b20?OpenDocument>].

Table 1

Table 1: Weighted demographic & health behavior characteristics of caregivers & non-caregivers, Hawaii Behavioral Risk Factor Surveillance System (BRFSS), 2007.

Variable	Categories	Caregivers (n= 761)	Non- caregivers (n=5,562)
		Percent (95% CI)	Percent (95% CI)
Age	18-24	14.8% (10.2- 20.8)	12.6% (11.0- 14.4)
	25-34	10.8% (7.8- 14.7)	16.9% (15.4- 18.5)
	35-44	15.8% (12.6- 19.7)	17.9% (16.6- 19.3)
	45-54	21.3% (17.9- 25.1)	18.8% (17.6- 20.2)
	55 to 64	20.4% (17.0- 24.2)	15.3% (14.2- 16.5)
	65 and older	16.9% (13.7- 20.7)	18.5% (17.3- 19.8)
Gender (% Female)	Female	59.2% (53.8- 64.3)	49.6% (47.7- 51.4)
Education status	Less than or graduated high school	34.6% (29.5- 40.1)	36.8% (35.0- 38.7)
	Some college or technical school	28.9% (24.6- 33.6)	29.6% (27.9- 31.3)
	College degree or higher	36.5% (31.9- 41.3)	33.6% (31.9- 35.3)
Employment status	Employed/Homemaker/Student	72.7% (68.2- 76.8)	73.6% (72.1- 75.2)
	Unemployed/Unable to work	6.0% (3.8- 9.3)	6.5% (5.6- 7.6)
	Retired	21.3% (17.7- 25.3)	19.9% (18.6- 21.2)
Race/ethnicity	White	30.0% (26.0- 34.4)	32.2% (30.6- 33.8)
	Japanese	22.7% (18.9- 27.1)	21.6% (20.2- 23.2)
	Hawaiian	17.3% (13.8- 21.4)	13.5% (12.3- 14.9)
	Filipino	13.9% (10.2- 18.6)	18.0% (16.4- 19.7)
	Chinese	6.5% (3.7- 11.1)	5.3% (4.5- 6.1)
	Other race (Thai, Samoan, Puerto Rican American Indian/ Alaska Native/Eskimo/Inuit)...	9.6% (6.9- 13.3)	9.4% (8.3- 10.7)

Table 1: Continued

Island on which caregiver resides	Oahu	67.6% (63.4- 71.5)	71.4% (70.0- 72.8)
	Hawaii	15.1% (12.5- 18.0)	13.0% (12.1- 13.9)
	Kauai	5.0% (3.7- 6.6)	4.8% (4.3- 5.4)
	Maui	11.0% (8.8- 13.6)	9.8% (9.0- 10.7)
	Molokai	1.0% (0.7- 1.5)	0.8% (0.7- 0.9)
	Lanai	0.3% (0.2- 0.5)	0.2% (0.1- 0.2)
Marital status	Married/Coupled	62.7% (57.2-67.8)	62.4% (60.5-64.3)
	Divorced/Widowed/Separated	13.7% (10.9- 17.0)	14.4% (13.4- 15.5)
	Never married	23.6% (18.8- 29.3)	23.2% (21.4- 25.1)
Disability status	Respondent has a disability	21.6% (18.0- 25.7)	16.7% (15.5- 18.0)
Physical unhealthy days in the last 30	Number of days \geq 14	7.0% (5.2- 9.4)	8.6% (7.7- 9.6)
Mental unhealthy days in the last 30	Number of days \geq 14	14.0% (10.5- 18.4)	8.2% (7.2- 9.3)
General life satisfaction	Very Satisfied/Satisfied	96.2% (94.2- 97.5)	96.4% (95.6- 97.0)
Emotional support	Always or usually receive support needed	77.5% (72.8- 81.5)	74.9% (73.2- 76.6)
General health	Excellent, very good, or good	84.5% (80.8- 87.6)	85.6% (84.3- 86.9)
Physical activity	Meet physical activity recommendations	57.2% (52.0- 62.2)	50.6% (48.8- 52.5)
	Insufficient physical activity	34.6% (30.0- 39.6)	36.8% (35.0- 38.6)
	No physical activity	8.2% (5.7- 11.6)	12.6% (11.3- 13.9)
Fruit and vegetable consumption	5 or more servings per day	33.4% (28.9- 38.2)	28.1% (26.5- 29.7)
Body Mass Index (BMI)	Neither overweight nor obese	42.2% (37.2- 47.3)	43.4% (41.6- 45.3)
	Overweight	33.6% (28.8- 38.7)	35.2% (33.5- 37.0)
	Obese	24.3% (20.0- 29.1)	21.3% (19.8- 22.9)
Smoking status	Current Smoker	21.0% (16.9- 25.8)	16.5% (15.1- 18.0)
	Former Smoker	23.5% (19.7- 27.8)	26.6% (25.0- 28.1)
	Never Smoked	55.5% (50.3- 60.5)	56.9% (55.1- 58.8)

Table 1: Continued

Alcohol consumption	Heavy drinkers (adult men having more than two drinks per day and adult women having more than one drink per day)	9.0% (6.1-13.2)	7.5% (6.5- 8.6)
Binge drinking	Binge drinkers (Men having five or more drinks on one occasion, women having four or more drinks on one occasion) (In the last 30 days)	18.6% (14.4- 23.6)	18.4% (16.9- 20.1)
Flu shot	Adults age 65+ who have had flu shot within the past year	77.8% (67.9- 85.3)	78.9% (76.0- 81.5)
Pneumonia vaccine	Adults age 65+ who have ever had a pneumonia vaccination	73.6% (63.2- 81.9)	68.2% (64.7- 71.5)
Living Will	Respondent has a living will	39.4% (34.6- 44.4)	36.0% (34.3- 37.7)
Health care Power of Attorney	Respondent has health care power of attorney	40.8% (35.9- 45.8)	33.4% (31.8- 35.1)
Long-term care insurance	Respondent has long-term care insurance	35.7% (30.9- 40.7)	35.2% (33.4- 37.0)

Table 2

Table 2: Weighted caregiving experience characteristics, Hawaii Behavioral Risk Factor Surveillance System (BRFSS), 2007.

Variable	Category	Prevalence (95% CI)
Care recipient gender	Female	61.2% (56.1- 66.1)
Care recipient age	0-5	0.8% (0.3- 2.1)
	6-17	2.9% (1.7- 5.0)
	18-34	6.4% (4.0- 9.9)
	35-44	3.8% (2.5- 5.7)
	45-54	5.9% (4.1- 8.4)
	55-64	10.3% (7.3- 14.3)
	65-74	16.5% (13.1- 20.5)
	75-84	24.1% (20.2- 28.6)
	85+	29.4% (24.8- 34.5)
Care recipient's relationship to caregiver	Parent or Parent-in-law	43.9% (38.8- 49.0)
	Friend	10.7% (7.9- 14.3)
	Spouse or Partner	10.1% (7.7- 13.2)
	Child or Child-in-law	5.9% (4.1- 8.2)
	Sibling or Sibling-in-law	4.9% (3.4- 7.1)
	Grandparent	12.5% (8.7- 17.6)
	Neighbor	0.8% (0.4- 1.6)
	Client or patient	0.4% (0.1- 1.6)
	Other family member	9.3% (6.6- 12.8)
	Other, non-family	1.6% (0.6- 4.2)
Care recipient's major health problem	Alzheimer's disease or dementia	14.5% (10.8- 19.0)
	Diabetes	8.3% (6.1- 11.4)
	Stroke	7.3% (5.3- 9.9)
	Cancer	6.9% (5.0- 9.4)
	Heart disease	6.1% (4.4- 8.4)
*Areas in which care recipient needs most help (respondent could choose up to 2)	Mental Health Issues	18.6% (15.2- 22.5)
	Activities of Daily Living (ADL's)	85.3% (81.3- 88.5)
	Instrumental Activities of Daily Living (IADL's)	14.8% (11.5- 19.0)
Greatest difficulty faced by caregiver (respondent could choose up to 2)	Financial burden	10.2% (7.5- 13.6)
	Not enough time for him/herself	18.8% (15.1- 23.1)
	Not enough time for family	12.7% (9.6- 16.7)
	Interferes with work	11.9% (8.1- 17.0)
	Creates or aggravates health problems	5.0% (3.4- 7.4)
	Affects family relationships	5.3% (3.7- 7.7)
	Creates stress	36.7% (31.8- 41.9)
	Other	1.2% (0.5- 2.8)
	No difficulty	38.9% (34.0- 44.1)
Care recipient's distance from caregiver	Same house	42.1% (36.9- 47.4)
	Less than 20 minutes away	31.7% (27.2- 36.5)
	20-60 minutes away	19.4% (15.5- 24.0)
	1-2 hours away	1.0% (0.5- 1.9)
	More than 2 hours away	5.8% (4.2- 8.0)

Care recipient lives with	Caregiver	42.1% (36.9- 47.4)
	Another friend or relative	31.1% (26.6- 35.9)
	By themselves (lives alone)	13.9% (11.2- 17.2)
	Institution or professional care (i.e. nursing home, hospice care, or home health aide)	9.0% (6.7- 12.0)
	Other	3.9% (1.9- 8.0)
Respondent is primary caregiver	Yes	37.9% (33.2- 42.8)
Number of care recipients age 60+ for whom respondent provides care	0	18.3% (14.8- 22.4)
	1	70.4% (65.6- 74.9)
	2	9.8% (7.2- 13.3)
	3+	1.4% (0.5- 3.8)
Hours of care provided per week	0-8	50.0% (44.7- 55.2)
	9-19	16.0% (12.2- 20.8)
	20-39	16.8% (13.3- 21.0)
	40+	17.2% (13.8- 21.3)
Length of care	0-3 months	17.0% (13.5- 21.2)
	4-12 months	22.4% (18.0- 27.6)
	13-24 months	16.1% (12.5- 20.5)
	25-60 months	11.5% (8.9- 14.9)
	More than 5 years	33.0% (28.4- 37.9)

*The category "Mental Health Issues" includes these options listed on the questionnaire: Feeling anxious or depressed, getting along with people, emotional support, and mental health.

The category "Activities of Daily Living" (ADL's) includes these options listed on the questionnaire: Learning, remembering, & confusion, seeing or hearing, taking care of oneself- such as eating, dressing, bathing, or toileting, and moving around

The category "Instrumental Activities of Daily Living (IADL's) include these options listed on the questionnaire: Communicating with others, finances, place to live, and other areas of help needed.

Appendix A Caregiver Module

1. People may provide regular care or assistance to a friend or family member who has a health problem or disability. During the past month, did you provide any such care or assistance to a family member or friend?
- 1 Yes
 - 2 No go to the closing
 - 7 Don't know / Not sure go to the closing
 - 9 Refused go to the closing

2. What age is the person to whom you are giving care?
(Probe for age – If more than one, ask, “What is the age of the person to whom you are giving the most care?”)

____ Code age in years [0-115]
777 Don't know / Not sure
999 Refused

3. What is the gender of the person you are caring for?

- 1 Male
- 2 Female
- 7 Don't know / Not sure
- 9 Refused

4. What is his/her relationship to you? For example is he/she your (mother/daughter or father/son)? DO NOT READ. (Program for gender)
(PROBE for relationship – If more than one, ask “Which is the person you take care of the most often?”)
(OPTIONAL PROBE – If more than one relationship applies, say “I can only record ONE answer choice,” or something similar to ensure respondent chooses only one option)

1 Aunt	9 Grandfather	17 Nephew	25 Uncle
2 Brother	10 Grandmother	18 Niece	26 Wife
3 Daughter	11 Grandparent-in-law	19 Other Relative	27 Other
4 Daughter-in-law	12 Grandson	20 Client or Patient	
5 Father	13 Husband	21 Partner	77 Don't know/ Not sure
6 Father-in-law	14 Mother	22 Sister	99 Refused
7 Friend	15 Mother-in-law	23 Son	
8 Granddaughter	16 Neighbor	24 Son-in-law	

Optional transition statement: “The following ____ questions will relate to your ____ (code relationship reported above).”

5. Are you the primary caregiver for your _____; that is the one most involved in providing care for this person?

- 1 Yes
- 2 No
- 7 Don't know / Not sure
- 9 Refused

6. What do you think or what has a doctor said is the major health problem that your _____ (Q4 code) has? CHECK ONE CONDITION ONLY. DO NOT READ.

1 (ADD/ADHD)	16 Heart disease
2 AIDS/HIV	17 Hypertension/high blood pressure
3 Arthritis/rheumatism	18 Lung disease/emphysema
4 Asthma	19 Multiple Sclerosis
5 Cancer	20 Muscular Dystrophy
6 Cerebral Palsy	21 Osteoporosis
7 Chromosomal anomaly	22 Parkinson's
8 Dementia	23 Spinal Cord Injury (SCI)
9 Depression	24 Stroke
10 Down's syndrome	25 Traumatic Brain Injury (TBI)
11 Anxiety other emotional	26 Other (_____)
12 Developmental delays	27 Alzheimer's
13 Diabetes	77 Don't know / Not sure
14 Eye/vision problem (blindness)	99 Refused
15 Hearing problems (deafness)	

7. Which TWO of the following areas does your (Q4 code) most need your help? CHECK UP TO TWO
- | | | | |
|---|--|----|----------------------|
| 1 | Learning, remembering, & confusion; | 9 | Emotional support |
| 2 | Seeing or hearing; | 10 | Medicine |
| 3 | Taking care of oneself, such as eating, dressing, bathing, toileting | 11 | Financial |
| 4 | Communicating with others; | 12 | Place to live |
| 5 | Moving around; | 13 | Mental health; |
| 6 | Getting along with people; | 14 | None |
| 7 | Feeling anxious or depressed | 77 | Don't know/ Not sure |
| 8 | Other | 99 | Refused |
8. For how long have you provided care for your _____(Q4 code)? DO NOT READ. Code using respondent's unit of time.
- | | |
|-----|-----------------------|
| -- | Days |
| -- | Weeks |
| -- | Months |
| -- | Years |
| 777 | Don't know / Not sure |
| 999 | Refused |
9. In an average week, how many hours do you provide care for your ____ (Q4 code) because of his/her long-term illness or disability? DO NOT READ
- | | |
|------|-----------------------|
| ____ | Hours per week |
| 555 | None |
| 777 | Don't know / Not sure |
| 999 | Refused |
10. I am going to read a list of difficulties you may have faced as a caregiver. Please indicate which TWO of the following is the greatest difficulty you have faced in your caregiving: CHECK UP TO TWO
- | | |
|----|---|
| 1 | Caregiving creates a financial burden; |
| 2 | Caregiving doesn't leave enough time for yourself; |
| 3 | Caregiving doesn't leave enough time for your family; |
| 4 | Caregiving interferes with your work; |
| 5 | Caregiving creates or aggravates health problems; |
| 6 | Caregiving affects your family relationships; |
| 7 | Caregiving creates stress; |
| 8 | Another difficulty (TEXT FIELD) |
| 9 | No difficulty |
| 77 | Don't know / Not sure |
| 99 | Refused |
11. How far away do you live from your _____ (Q4 code)? Do you live
- | | |
|---|------------------------------|
| 1 | In the same house |
| 2 | Less than 20 minutes away |
| 3 | Between 20 & 60 minutes away |
| 4 | Between 1 & 2 hours away, or |
| 5 | More than 2 hours away? |
| 7 | Don't know / Not sure |
| 9 | Refused |
12. Whom does your _____ live with?
- | | |
|---|--|
| 1 | With another relative/friend of theirs |
| 2 | By themselves (lives alone) |
| 3 | Care home, nursing home, hospice |
| 4 | Other (text) |
| 7 | Don't know / Not sure |
| 9 | Refused |
13. How many persons 60 years old or older are you caring for?
- | | | | |
|---|-----------|---|-----------------------|
| 0 | None | 5 | 5 persons |
| 1 | 1 person | 6 | 6 persons |
| 2 | 2 persons | 7 | Don't know / Not sure |
| 3 | 3 persons | 9 | Refused |
| 4 | 4 persons | | |

Appendix B: Figures Hawaii BRFSS, 2007

Figure 1: Gender of Caregivers and Non-caregivers, Hawaii BRFSS, 2007

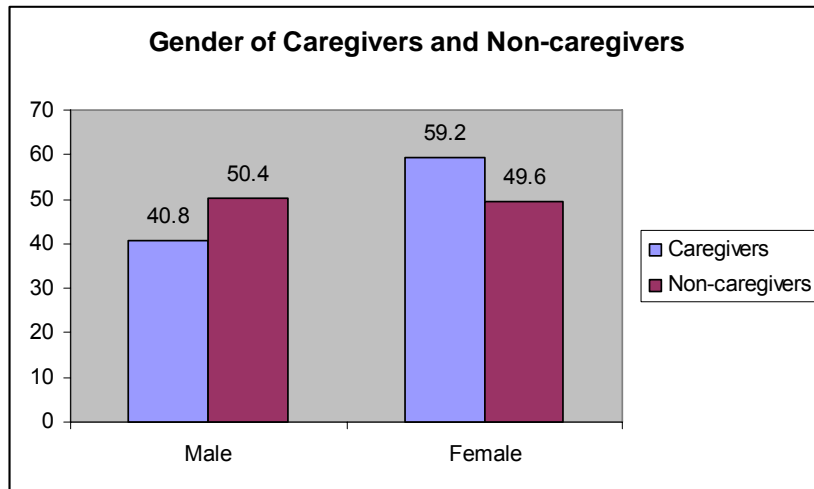


Figure 2: Age Distribution of Caregivers and Non-caregivers, Hawaii BRFSS, 2007

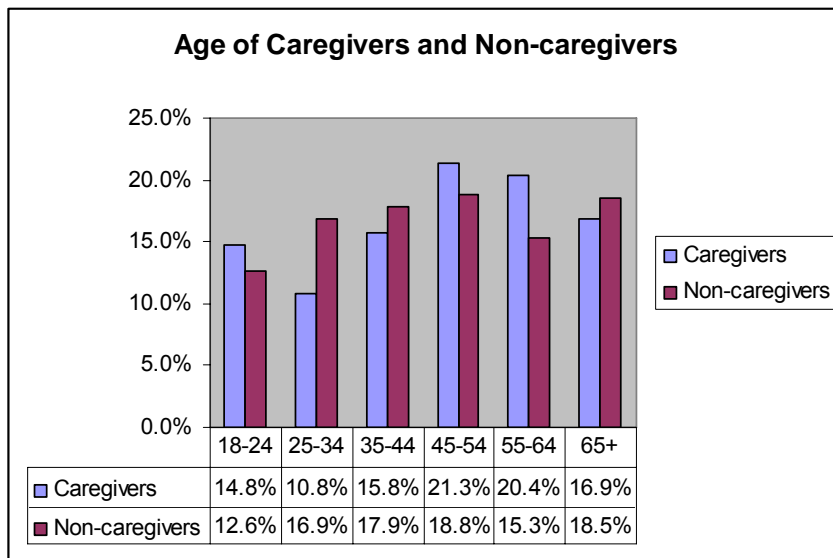


Figure 3: Race/Ethnicity of Caregivers and Non-caregivers, Hawaii BRFSS, 2007

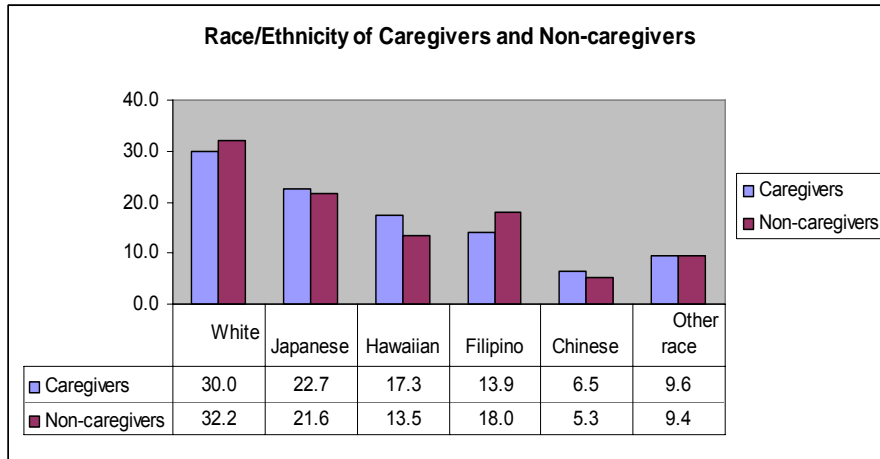


Figure 4: Top 6 Islands on which Caregivers and Non-caregivers Reside, Hawaii BRFSS, 2007

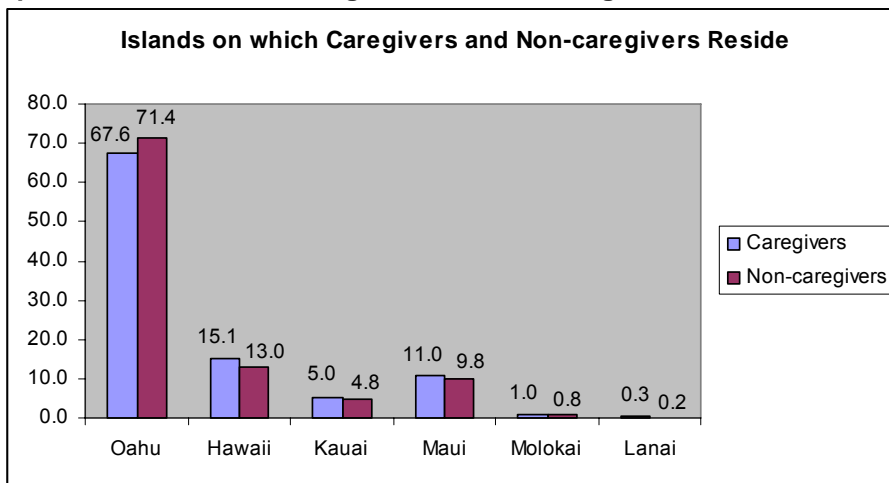


Figure 5: Education Status among Caregivers and Non-caregivers, Hawaii BRFSS, 2007

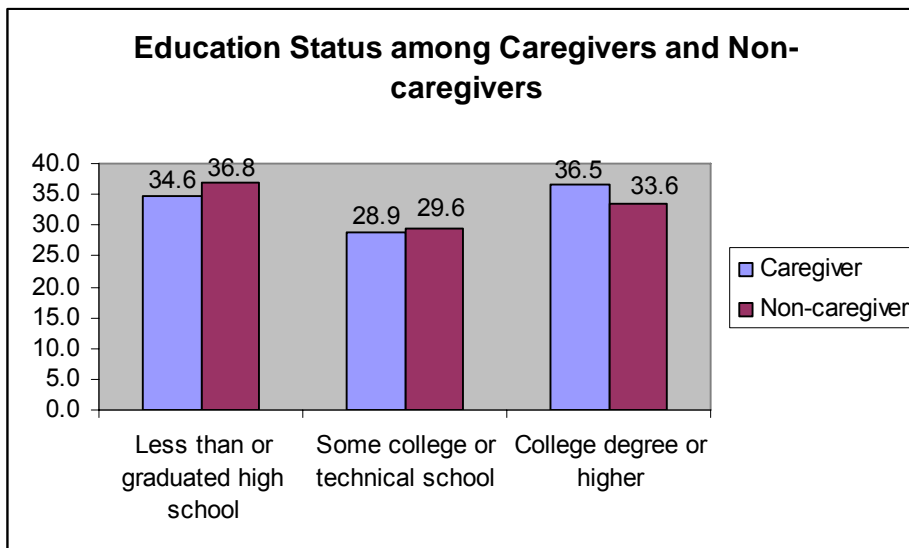


Figure 6: Marital Status of Caregivers and Non-caregivers, Hawaii BRFSS, 2007

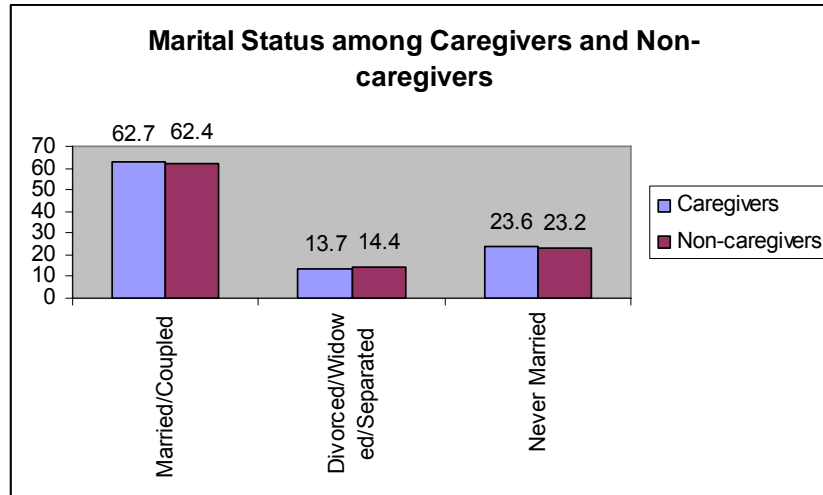


Figure 7: Employment Status of Caregivers and Non-caregivers, Hawaii BRFSS, 2007

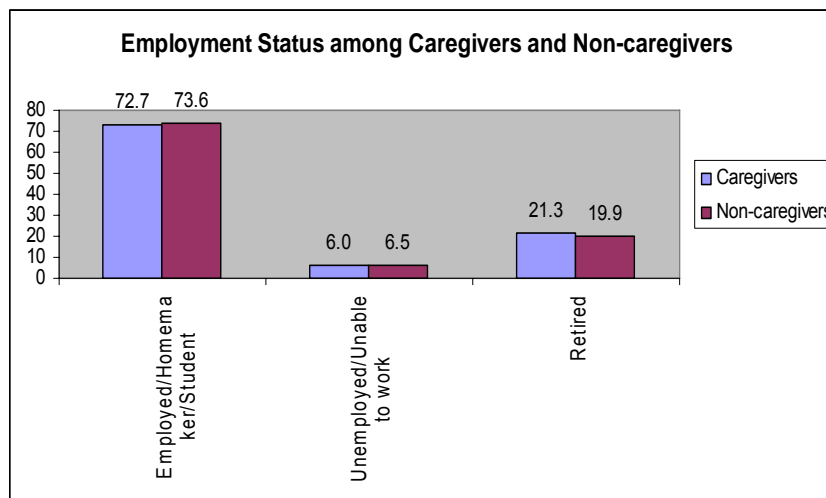


Figure 8: Disability Status of Caregivers and Non-caregivers, Hawaii BRFSS, 2007

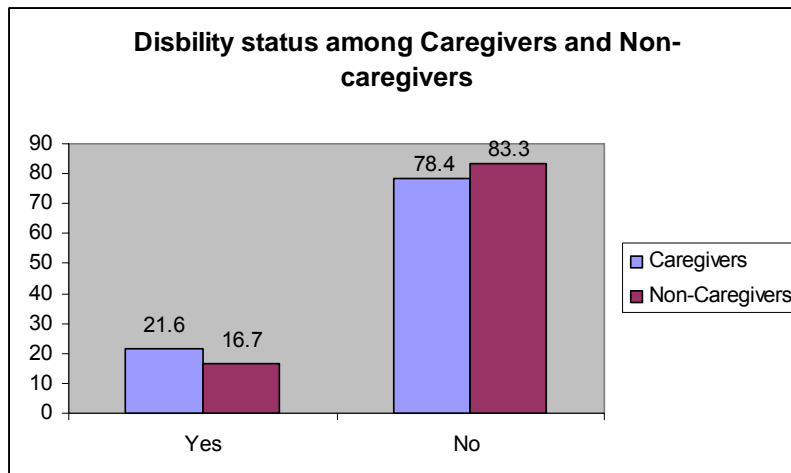


Figure 9: Life Satisfaction Levels of Caregivers and Non-caregivers, Hawaii BRFSS, 2007

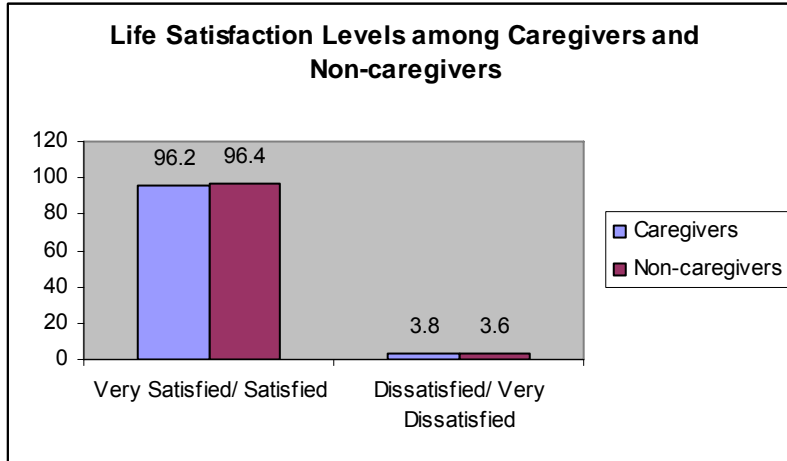


Figure 10: How Often Caregivers and Non-caregivers Receive Emotional Support, Hawaii BRFSS, 2007

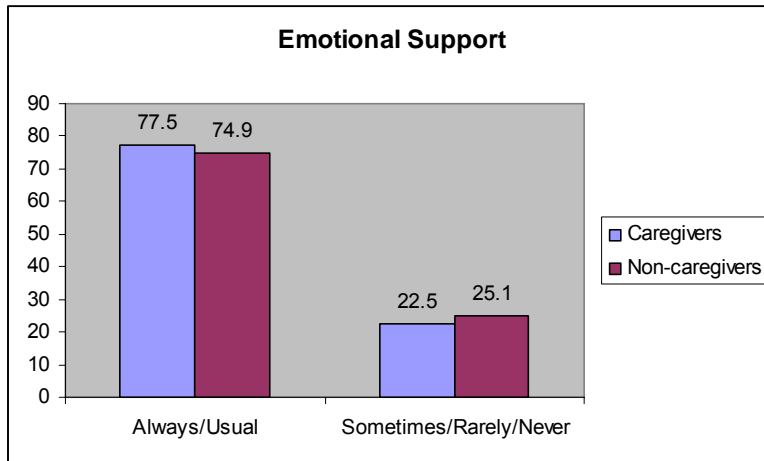


Figure 11: General Health among Caregivers and Non-caregivers, Hawaii BRFSS, 2007

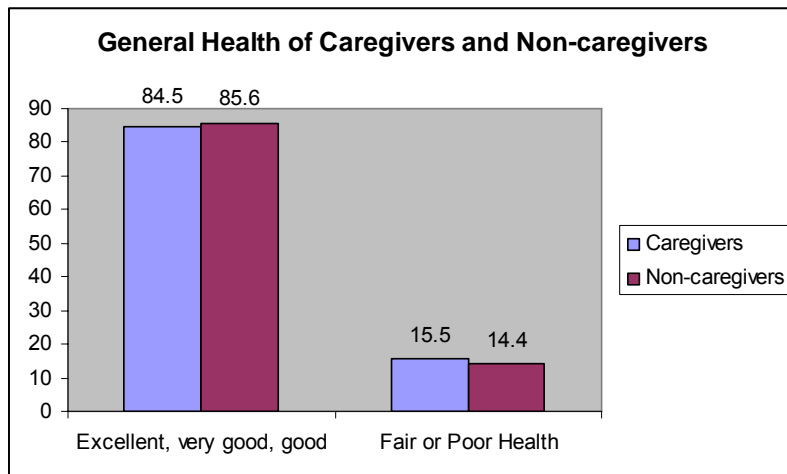


Figure 12: Physical Activity among Caregivers and Non-caregivers, Hawaii BRFSS, 2007

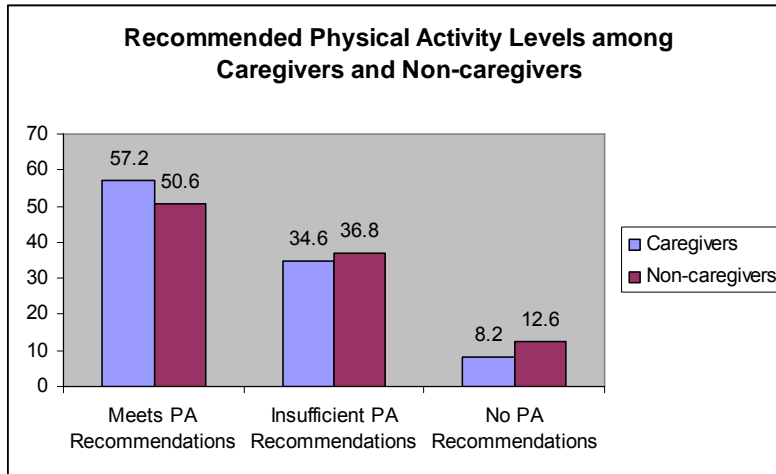


Figure 13: Fruit and Vegetable Consumption among Caregivers and Non-caregivers, Hawaii BRFSS, 2007

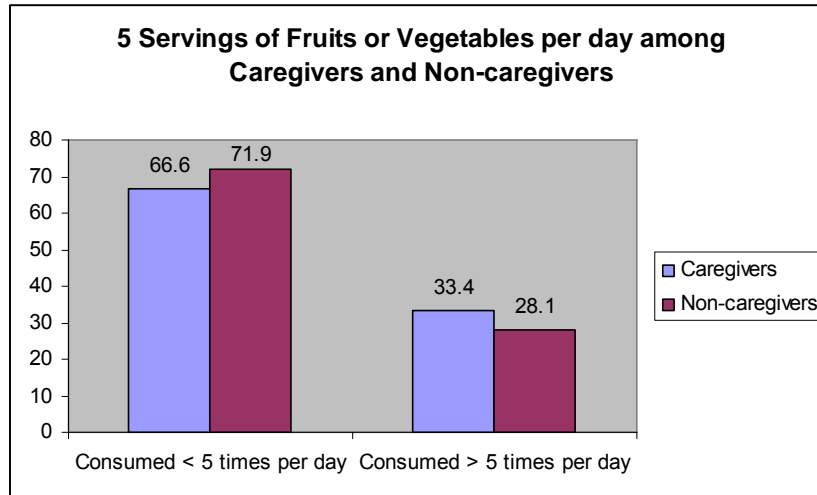


Figure 14: Body Mass Index (BMI) of Caregivers and Non-caregivers, Hawaii BRFSS, 2007

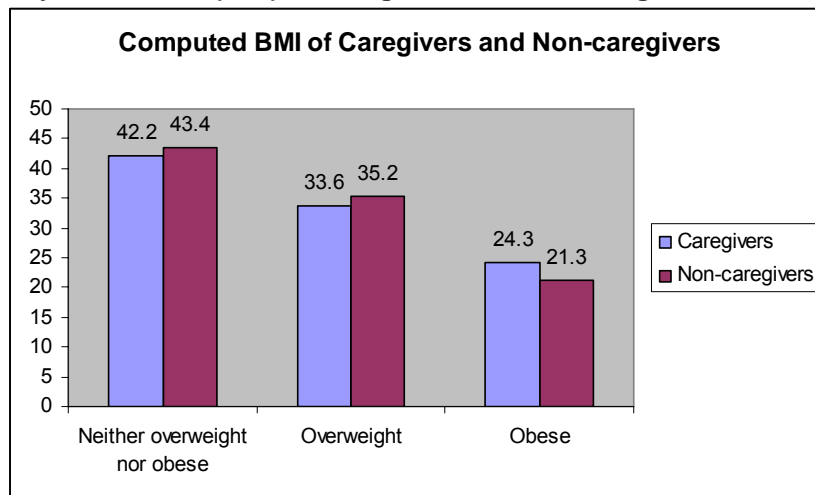


Figure 15: Alcohol Consumption among Caregivers and Non-caregivers, Hawaii BRFSS, 2007

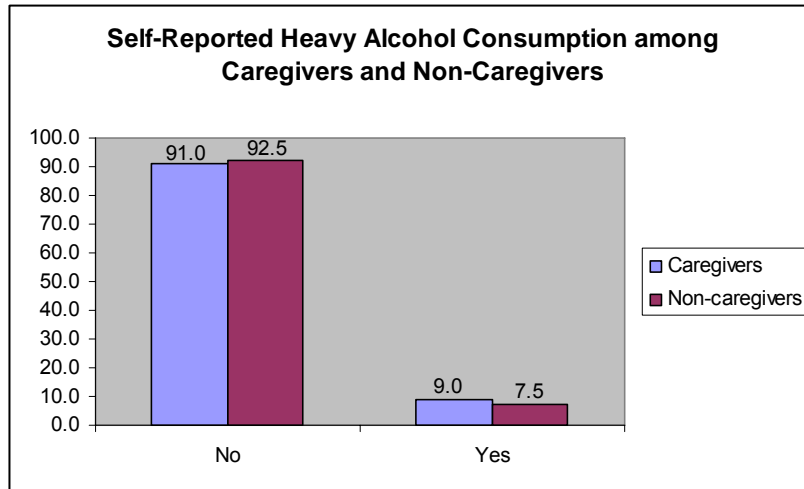


Figure 16: Smoking Status among Caregivers and Non-caregivers, Hawaii BRFSS, 2007

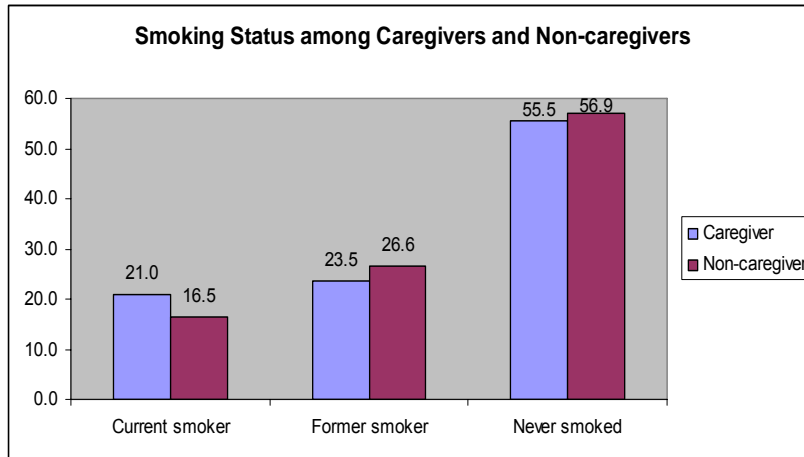


Figure 17: Binge Drinking among Caregivers and Non-caregivers, Hawaii BRFSS, 2007

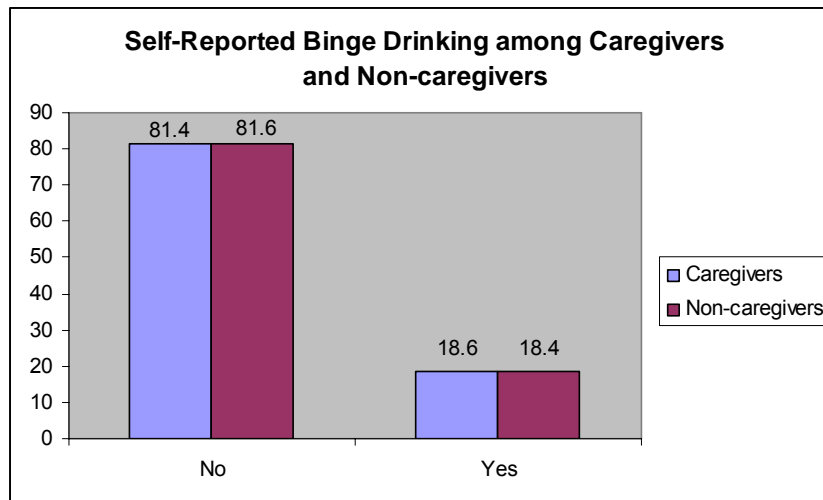


Figure 18: Flu Shot within the Past Year among Caregivers and Non-caregivers Age 65 and Older, Hawaii BRFSS, 2007

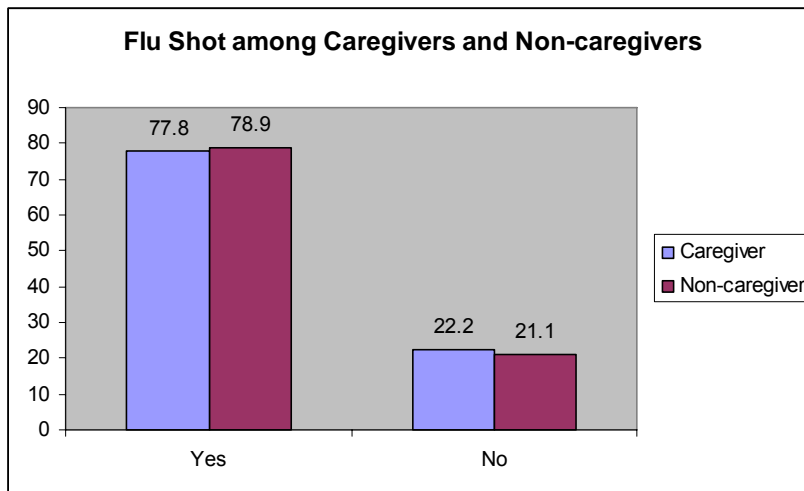


Figure 19: Pneumonia Vaccine among Caregivers and Non-caregivers Age 65 and Older, Hawaii BRFSS, 2007

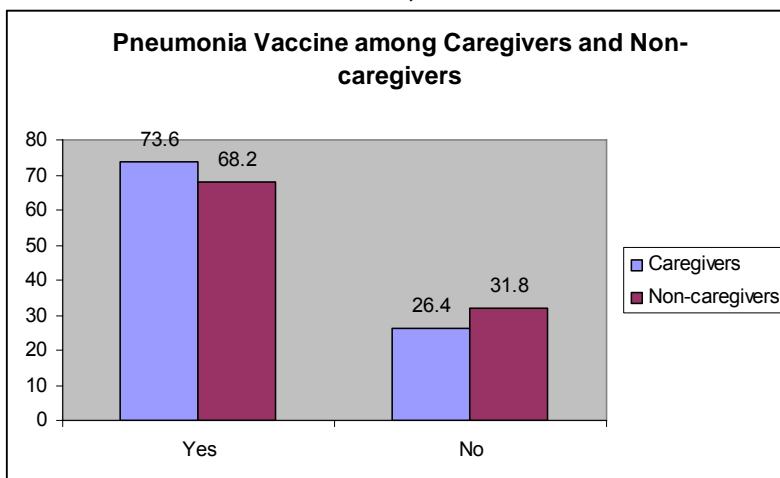


Figure 20: Caregivers and Non-caregivers Who Report Having a Living Will, Hawaii BRFSS, 2007

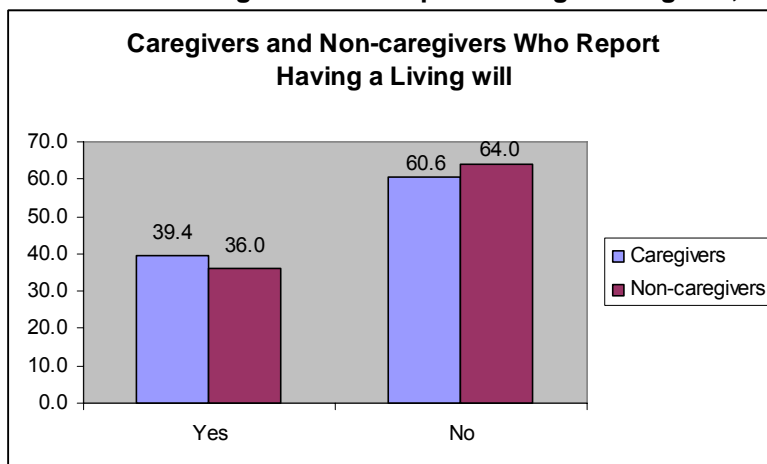


Figure 21: Health Care Power of Attorney, Hawaii BRFSS, 2007

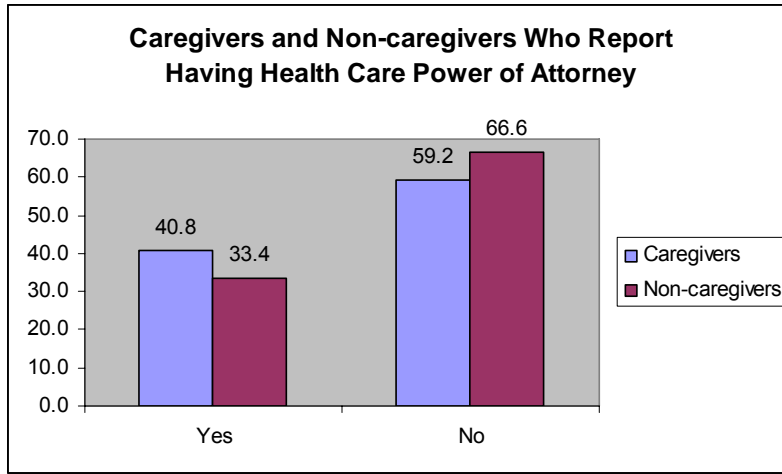
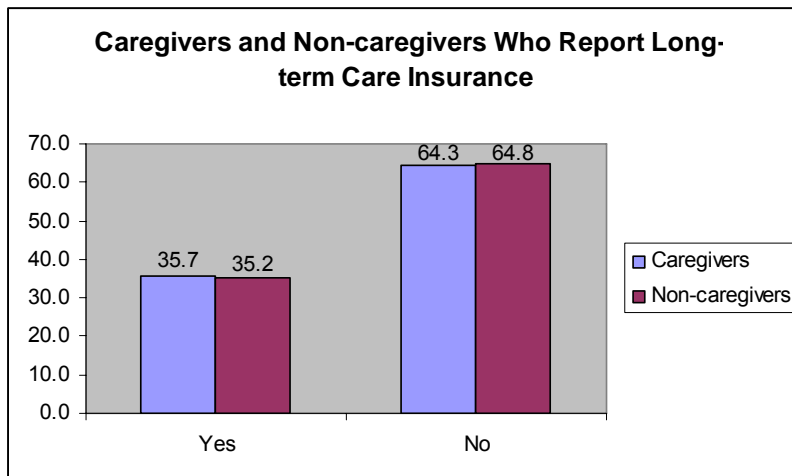


Figure 22: Long-term Care Insurance, Hawaii BRFSS, 2007



Profile of Care Recipients:

Figure 23: Care Recipient Gender, Hawaii BRFSS, 2007

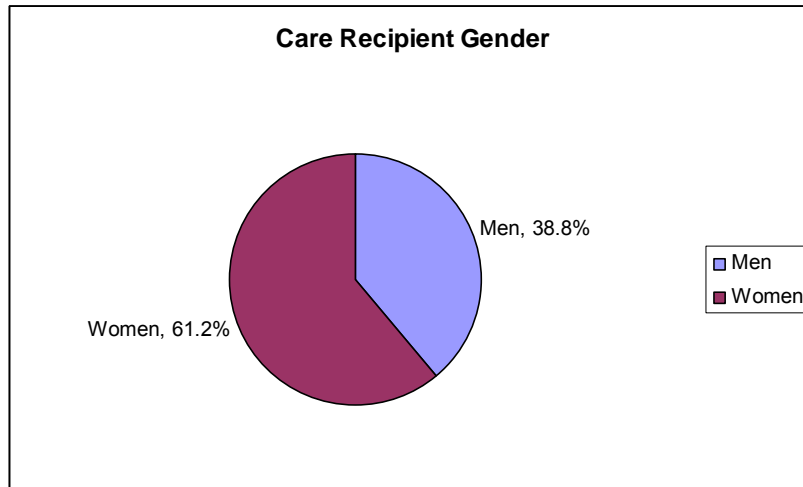


Figure 24 : Age of Care Recipient, Hawaii BRFSS, 2007

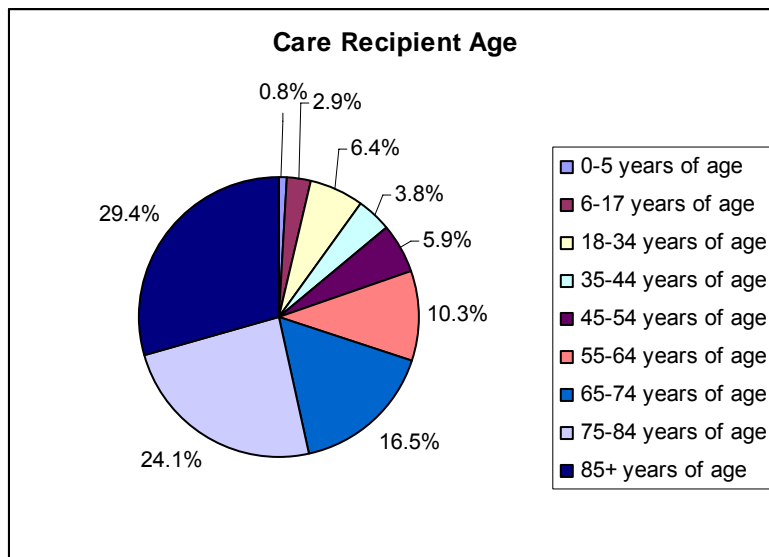


Figure 25: Relationship between Caregiver and Care Recipient, Hawaii BRFSS, 2007

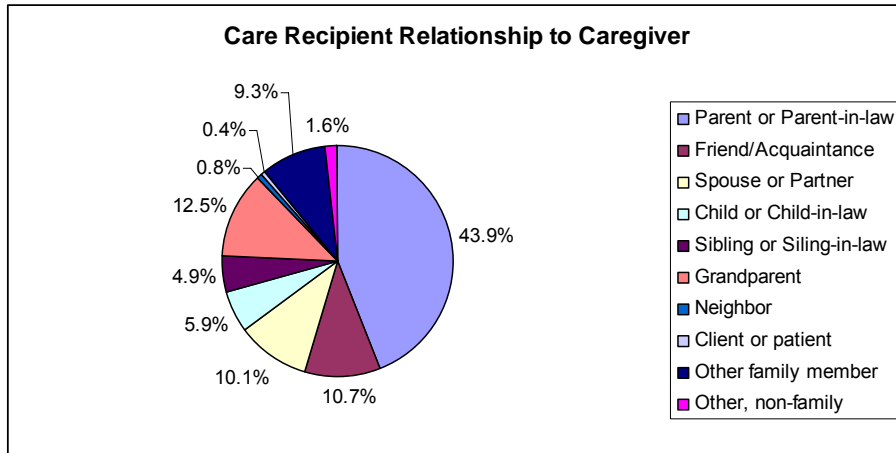


Figure 26: Main Problems or Illnesses Identified by Caregiver, Hawaii BRFSS, 2007

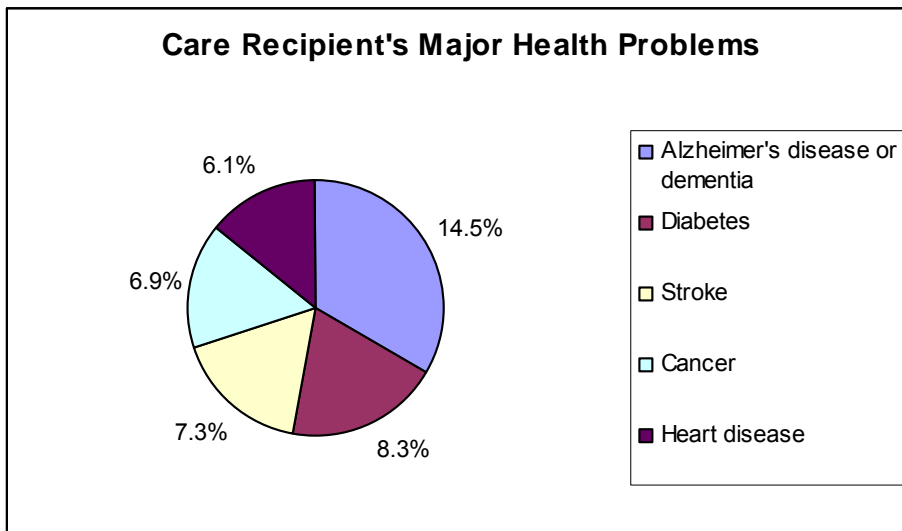


Figure 27: Areas in which Care Recipient Requires the Most Assistance, Hawaii BRFSS, 2007

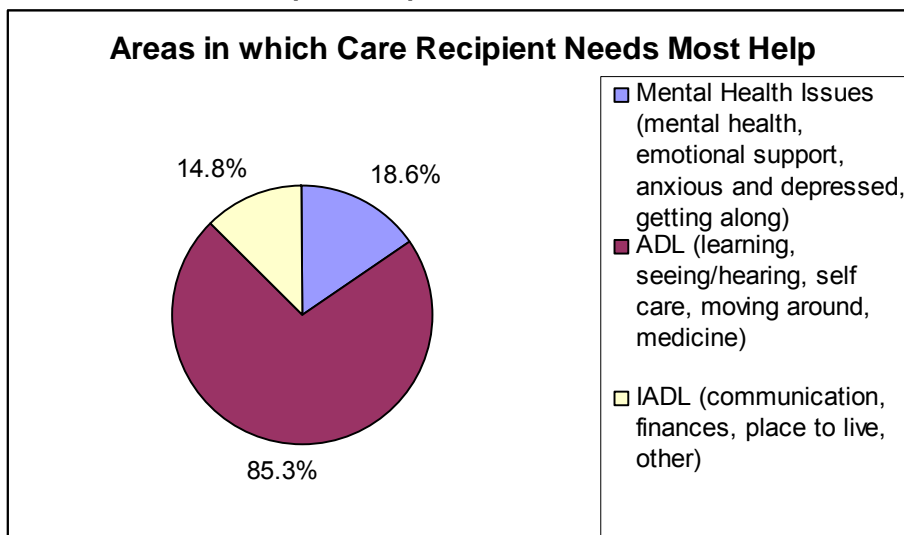


Figure 28: Caregivers Greatest Difficulty in Providing Care, Hawaii BRFSS, 2007

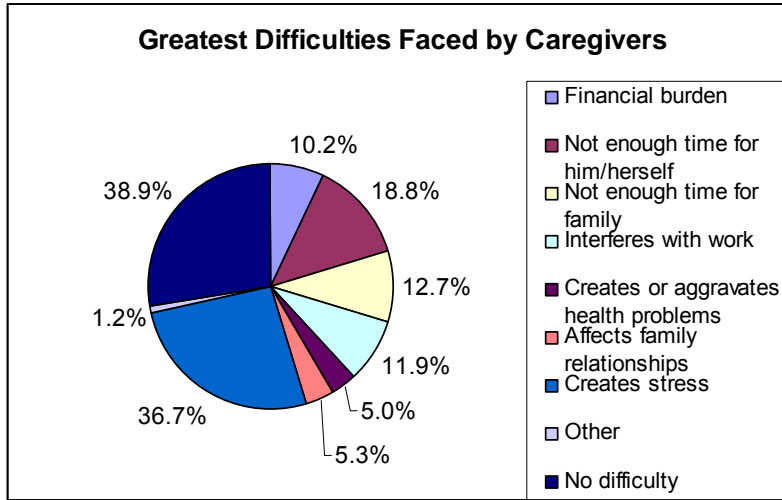


Figure 29: Hours per Week Caregiver Provides for Care Recipient, Hawaii BRFSS, 2007



Figure 30: Duration of Care for Care Recipient, Hawaii BRFSS, 2007

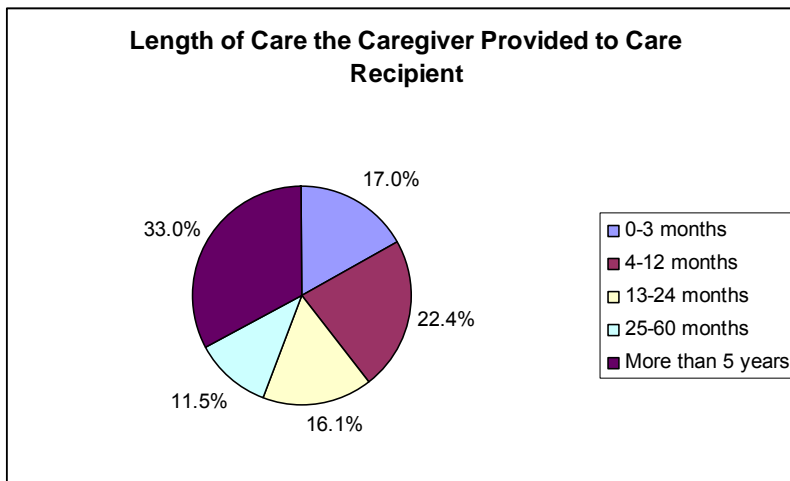


Figure 31: Distance of Caregiver to Care Recipient, Hawaii BRFSS, 2007

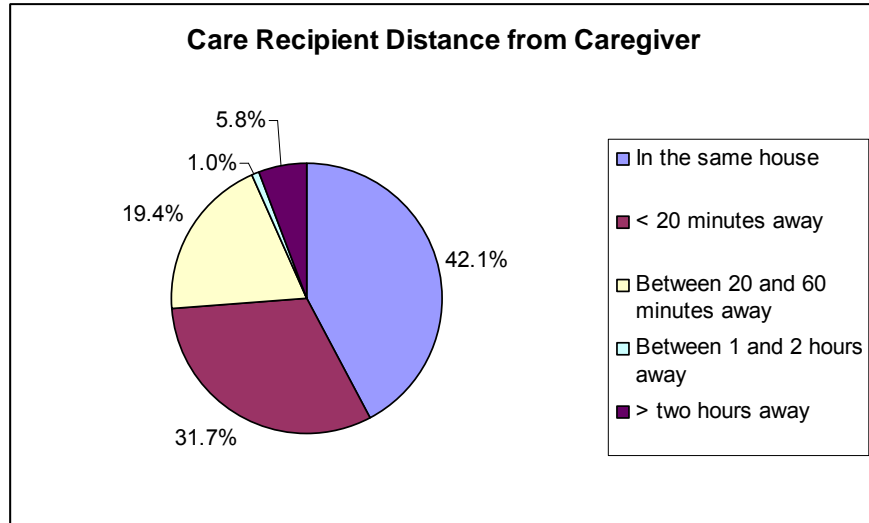


Figure 32: Where the Care Recipient Resides, Hawaii BRFSS, 2007

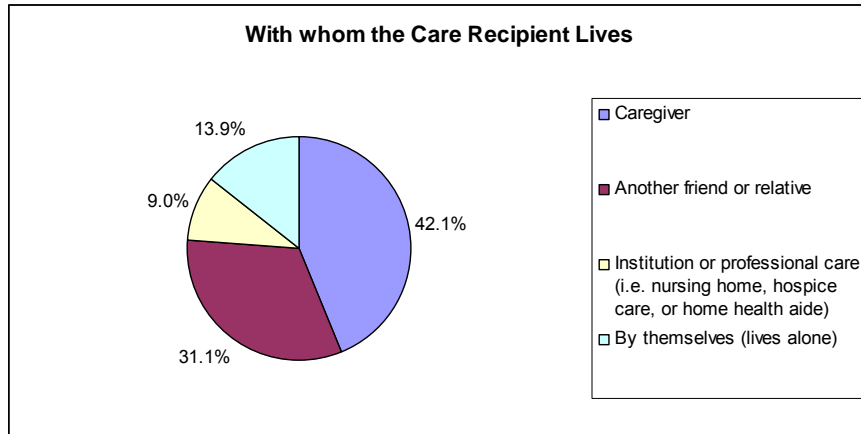


Figure 33: Caregiver is the Primary Caregiver for Care Recipient, Hawaii BRFSS, 2007

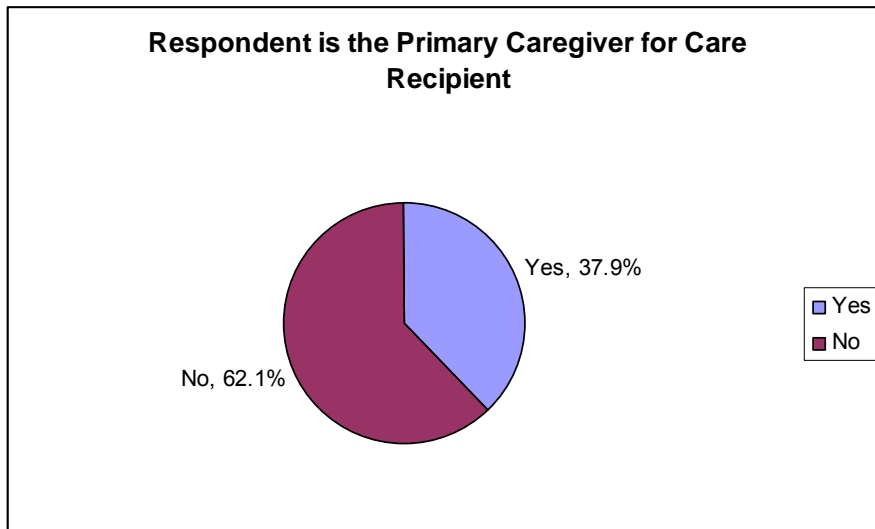


Figure 34: Number of Care Recipients Age 60 and Older, Hawaii BRFSS, 2007

