

## HEALTH SERVICES UTILIZATION AMONG THE PUERTO RICAN ELDERLY



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## INTRODUCTION

The population of Puerto Rico<sup>1</sup> has undergone dramatic changes in regard to its age structure during the last decades. Between 1960 and 1987 the proportion of those under 15 years of age was drastically reduced from 43 to 28 percent, while for those 65 years of age and older it rose from 5 to 10 percent. The median age for the population hardly suffered any changes from 1860 to 1960 staying at 18 years. However, it increased to 22 years in 1970 and to 28 in 1987 (Junta de Planificación de Puerto Rico, 1988).

This rapid aging process of the population of Puerto Rico in a few decades has been the result of a reduction in the birth rate,<sup>2</sup> the emigration of young adults (20-34 years) to the United States<sup>3</sup> and the return migration of old aged Puerto Ricans from that country. This trend is expected to continue in the years to come since the mortality rate is likely to remain almost stationary while the birth rate will continue to decrease. Furthermore, the emigration of young adults is anticipated to continue as well as the return migration of elderly cohorts.

The actual and potential increase in the number and proportion of the aged population presents a challenge for the delivery of health and social services. This paper is concerned with a preliminary analysis of an investigation of the health practices and characteristics of aged Puerto Rican adults and their utilization of health services. Specifically, we will present an analysis of the sociodemographic

characteristics of the aged, their health status as measured by Shanas' Index of Illness (Stahl, 1984), as well as their health practices, utilization of health services, and satisfaction with the latter. Data concerning a younger age group ( 35-44 years) will be presented only when differences with the elderly are relevant for public policy.

## **METHODS**

Data for this analysis was gathered from a random sample survey of 300 outpatients of the ambulatory clinics of the Medical Center of San Juan. These ambulatory clinics provide general and specialized health services to the total population of Puerto Rico and for purposes of this study were divided into 9 principal areas: (1) ophthalmology, (2) urology and gynecology, (3) speech therapy and ENT, (4) dental, (5) dermatology, (6) orthopedics, (7) general medicine, (8) neurology, and (9) blood pressure and diet follow-ups. The health services at the Medical Center average 15,000 visits per month. Two hundred and one (201) of the respondents were 65 years of age and over ( the target population ) and 99 were between the ages 35 to 44. This latter age group served as a control group.

The questionnaire consisted of 50 items divided into five areas: sociodemographic characteristics of the respondents, health practices and utilization of the clinics, health status, transportation and mobility and, lastly, social support and recreation. Shanas' Index of Illness (1962) was used to determine the subjects' perceived illness

status. An assessment of the respondents' satisfaction with the services provided was also made.

### **SOCIODEMOGRAPHIC CHARACTERISTICS**

Fifty-six percent of the older respondents were females. This is similar to the sex distribution of aged population in the island. The median age was 73 years old for the older group and 39 for the younger group. Sixty percent of those 65 years and over were between the ages 65 to 74, and 40 percent were 75 and older.

Eighty-two percent of the sample resided in the statistical metropolitan areas defined by the U.S. Bureau of the Census in 1983. Six times as many elderly were more likely to live in high rise buildings than younger middle-aged adults. Sixty-nine percent of the aged were heads of households; 29 percent of the sample indicated that the husband was the head of the household.

Nineteen percent lived alone compared to only one percent of the younger group. The mean number of persons in the elderly's household was 2.5 in comparison to 4.2 in the young middle-aged households. Also, ninety-two percent of the aged stated that the head of the household was the owner of the house.

Regarding marital status, the distribution of the older group was similar to that of the total old age population of Puerto Rico: fifty four percent were married, 30 percent were widows or widowers, and the remaining 16 percent were either divorced, separated, or had never been married.

Sixty-five percent of the older adults had finished at least elementary school, while 20 percent indicated they had never attended school or finished the first grade. Only fifteen percent had finished grades higher than elementary school level. The median number of years of school completed for this group was 3. This is in marked contrast with the younger group in which 75 percent had completed school studies beyond the sixth grade and had a median of 10 years of school completed.

Ninety-nine percent of the old age group reported that they were not working. When asked about their work experience, 69 percent stated that they had been involved in blue collar and agricultural occupations in their last job. Social Security was mentioned as the principal source of income. Fifty-three percent of this group informed that they were receiving a check from the Nutritional Assistance Program while thirteen percent indicated that they were receiving financial assistance from their relatives.

Only eight percent of the aged adults mentioned that their income, regardless of the source, was sufficient to cover all their basic needs: food, personal care, and medical expenses. Seventy-two percent stated that their income was enough to cover their basic needs excluding medical expenses, while twenty percent stated that their income was insufficient to cover their nutritional and personal needs. The most relevant difference between the older and younger group was that 16 percent of the latter expressed that their income was enough to cover

their total basic needs; a proportion twice as that of the older group (8%).

### **HEALTH PRACTICES AND UTILIZATION OF HEALTH SERVICES**

Only one percent of the older respondents (65+) rated their health as excellent, 11 percent as good, 54 percent as average, and 34 percent as poor.

The five health problems most frequently mentioned by the aged group were: hypertension (50%), arthritis (47%), diabetes (37%), heart ailments (30%), and cataract (21%) (multiple response item). On the other hand, in the younger group the most frequently mentioned health problems were hypertension, arthritis, and diabetes, each with 15 percent. When the elders were asked to indicate the health condition that they considered as their most serious illness, heart diseases ranked first followed by arthritis and diabetes.

With respect to the medical care services most often used, the older adults stated that they utilized those offered by the Department of Health of Puerto Rico, the government agency responsible for the delivery of public health services in Puerto Rico. The settings most often visited were municipal and area hospitals, and the Centers for Diagnosis and Treatment (secondary and primary levels, respectively).

Ninety percent of the older group had been taking prescribed medications for their health problems during the last month. More than half of them expressed having financial difficulties in obtaining their medications. Fifty-three percent had to buy their medicines while, 39

percent informed that these were provided free of charge at the medical facilities they usually attended. The other 8 percent stated that they partially paid for the medicines.

All the elderly respondents indicated that they had a health plan.

Eighty-two percent stated that they were recipients of Medicare benefits while 90 percent indicated receiving Medicaid. Only four percent of the aged had a private health plan. The results showed that most of the older adults were receiving benefits from more than one medical insurance plan, with Medicare/Medicaid being the most frequent combination (82%).

With regard to the use of medical services during the six months prior to the interview, it was found that 95 percent of the aged indicated being assisted by a nurse and 86 percent stated they had used general physician services. The medical services most often used were, in descending order: ophthalmology (42%) urology or gynecology (21%), dentistry (19%), ENT (18%), and gastroenterology (14%). The older group visited a physician more often than the young middle aged adults in all medical categories with the exception of dentistry and gynecology or urology.

Ninety-six percent of the older adults, in comparison to 73 percent of the younger respondents, had visited a physician at least once in the five months previous to the interview. Half of the aged subjects stated that they were visiting the physician once a month. Thirty-seven percent of the elderly and 30 percent of their younger counterparts had

been hospitalized at least one night during the year that preceded the survey.

A large majority of the older persons (82%) mentioned that they had experienced no difficulty in explaining their health problem to their physicians. Similarly, a little over three-fourths (77%) indicated not facing difficulties in understanding their physicians' explanation of their health problems and prescribed treatments. There were similar proportions in terms of these responses among the younger group in the study.

Seventy-two percent of the aged stated that a person generally accompanied them to the medical clinics. The two reasons most often mentioned for this fact were that the escort facilitated the bureaucratic process of admission to the services and offered security and protection regarding the health condition. Those who most frequently served as escorts were, in descending order: their children (43%), spouses (17%), and other relatives, friends or neighbors (12%). The fact that a little over one fourth (28%) of the aged subjects went unaccompanied to the health facilities cannot be overlooked by service providers. This group must be specially attended, particularly when one fifth of them reported difficulties in understanding their physicians' explanations regarding their health condition and the prescribed treatment.

Over two thirds (71%) of the older adults evaluated the health services offered to them as adequate, and 29 percent as in need improvement. Twice as many elder compared to their younger



counterparts considered that the medical services received by them were inadequate (70% vs. 40%). The elders mentioned that among those aspects needing to be improved were, in descending order: more medical personnel and availability of prescribed medications (44%), a more cordial and respectful treatment from the health services personnel (20%), better quality of health services (15%), and a reduction in the waiting period to receive the medical services (18%).

Ninety-two percent of the aged expressed that they were satisfied with the services and treatment that they were receiving at the Medical Center. Only 8 percent expressed dissatisfaction. Among the reasons most often cited for not being satisfied were, in descending order: not in accordance with the examination procedures and prescribed treatment, lack of a clear explanation of their condition, and a long waiting period at the physician's office at the health service agency.

#### HEALTH STATUS

As mentioned earlier, Shanas' Index of Illness (1962)<sup>4</sup> was used in this investigation as an indicator of the respondents' health status. The index consists of quantifying and adding a series of questions about illnesses that the subject had experienced during the four weeks prior to the interview, health problems, and amount of restricted activities over the past year. The lower the resulting index score, the better the health of the individual<sup>5</sup>. Shanas dichotomized the indicator as the "very sick" (persons with a score of 9 or more) and all others

(score under 9). This index was developed to measure the overall level of health of elderly adults.

The resulting Shanas' index of the responses given by the older group fluctuated between 0 and 21. The mean average was 9 for the older individuals and 8 for the younger ones. Forty-six percent of the the elderly obtained an index of 9 or more in comparison to 33 percent for the 35 to 44 age category. Unlike Shanas, who by dichotomizing the index into "very sick" and all others partially obscured any clear test of the predictive validity of the index, the authors grouped those with scores 0-4 as in good health, those between 5-8 as having average health, and those of 9 and more as having poor health. According to this grouping twenty-five percent of the older cohort were classified as in good health, 29 as average, and 46 percent as having poor health. The middle-aged individuals were evenly distributed for the three health status categories, with 33 percent in each one.

When the index of health was dichotomized into "the very sick" (9 or more) and other (under 9) following Shanas' classification, the results by the above mentioned characteristics showed that more elderly women than men had poor health (61% in comparison to 41%). Fewer married and widowed elderly individuals scored high in the health index than their single and separated counterparts (49% vs. 80%). Divorced individuals were evenly divided among the "very sick" and the "other" category (50% each). More elders in the "very sick" category visited a physician every month than those with scores of 8 and lower (50% vs.

38%). A proportion of almost four times as much of the elderly "very sick" individuals than their "less sick" counterparts indicated having difficulty understanding their physicians' explanations (39% vs. 10%). Of the 8 percent of the aged group who expressed dissatisfaction with the services rendered at the Medical Center, 87 percent fell in the "very sick" category.

When Shanas' Index of Illness was examined by level of education, an inverse relationship between level of education of the older sample and the index of illness was found. As education increased, the proportion of those in the "very sick" group diminished. For instance, 51 percent of those that had never attended school or finished the first grade fell in this category, while for those with 7 years or more of schooling, the proportion was 27 percent.

Results also indicated that more aged patients with a poor health status were accompanied by someone when seeking formal health assistance (52%). However, 43 percent of those older persons classified as "very sick" went alone. On the other hand, fifty-two percent of the aged out-patients who used public transportation to get to the Medical Center had index scores of 9 and more. Among those who used their own car or a relative's car 42 percent scored 9 and more.

When the index of illness was analyzed by the five most often reported health problems in the older sample, 82 percent those with heart ailments fell in the "very sick" category. Differences were not as extreme for the other health problems most frequently mentioned by the

aged (hypertension, arthritis, diabetes, and cataract). Likewise, the older respondents' perception of their health was closely interlinked to their scores in the index of illness. For instance, among those with an index under 5, only 10 percent rated their health as poor while, among those with an index of 9 or more ("very sick"), 56 percent perceived their health as poor.

### **SUMMARY**

The population of Puerto Rico has aged considerably in three decades. The median age increased from 18 years in 1960 to 28 in 1987 and the proportion of the population 65 years old and over has augmented from 5 to 10 percent, respectively. These changes exert pressure on the health delivery sector, particularly as it applies to the elderly. Health services in Puerto Rico are not yet adequately oriented to satisfy the needs of this segment of the population.

This investigation, like others on the Puerto Ricans elders, indicated that most of our elderly are poor and that their meager economic resources do not permit them to use the private health delivery sector. Although family and friends still provide a reliable support network in terms of transportation and escort to the health services, a considerable portion of the aged go unescorted to seek the services they need. It is among this group where the largest proportion of difficulties in understanding the physician's explanations were found. It is vital to stress the importance of good communication

between health services providers and patients, much more so for an old low-educated and poor population.

The fact that more elderly women than men have poor health must also be highlighted in the planning of health services. Future analysis of this survey data will delve into the health and medical care use and satisfaction of the population of this study. The authors plan to study if gender is a predisposing factor for illness and self-assessed health, as well as how it affects patterns of visits to physicians, hospitalization, and satisfaction with the services received.

**NOTES**

1. In 1987 the total population of Puerto Rico was approximately 3.3 million inhabitants.
2. The birth rate decreased from 32 per 1,000 inhabitants in 1960 to 18 in 1986. This represents a reduction of 44 percent in 26 years and over.
3. More young adults between 20-34 years of age leave the island. The largest proportion of return migrants are in the age group 55 years.
4. Shanas, E. *The Health of Older People: A Social Survey*. Cambridge, Mass.: Harvard University Press, 1962.
5. The maximum score obtained by Shanas was 22; however, the index score can be higher. A score of 2 is applied to each neoplasm, cardiovascular accident or heart disease. All other conditions score 1 per condition.

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