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ORIGINAL RESEARCH

What Are the Determinants of Specialized Outpatient and Dental Care Use in Adults With Disabilities Living in Institutions: Findings From a National Survey in France

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Abstract

Objective: To explore the determinants of specialized outpatient care use (general practitioners excluded) in people with disabilities living in institutions.

Design: Cross-sectional study.

Setting: National health and disability survey.

Participants: People (N=2528) living in institutions for adults with cognitive, sensory, and mobility disabilities.

Interventions: Not applicable.

Main Outcome Measures: We used different measures of disability severity available in the survey: (1) the continuous score of limitations based on a measure we constructed according to self-reported level of difficulty performing 18 tasks without aid; (2) the Katz Index; and (3) the respondent's self-reported perception of functional limitations. Logistic regressions were performed to examine the determinants of the likelihood of having consulted a specialized outpatient care physician or a dentist at least once in the previous year.

Results: Of the 2528 individuals, 45% (1141) and 28% (697) had respectively consulted a specialized outpatient care physician or a dentist at least once in the previous year. After adjusting for health care needs, higher functional limitation scores, dependency in all 6 activities of daily living, and self-reported perceptions of severe functional limitations were significantly associated with a lower likelihood of having consulted a specialized outpatient care physician (adjusted odds ratio [AOR], .95 [95% confidence interval {CI}, .94−.96]; AOR, .29 [95% CI, .23−.38]; and AOR, .51 [95% CI, .42−.62], respectively) or a dentist (AOR, .95 [95% CI, .94−.96]; AOR, .29 [95% CI, .21−.39]; AOR, .55 [95% CI, .44−.67], respectively) at least once in the previous year. Being a man, reporting a lack of family support, and having a low socioeconomic status also significantly affected specialized outpatient care use.

Conclusions: Regardless of the method used to define and measure disability, a high degree of disability negatively affects specialized outpatient care use after adjusting for health care need. Further studies are needed to better understand the reasons why this association between the degree of functional limitation and unmet medical needs is also a reality for people with disabilities living in institutions.

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Disability, as defined by the World Health Organization, refers to 3 levels of human functioning—the body (organs), individual (whole person), and societal (whole person in its environment) levels—reflecting that disability is a complex phenomenon resulting from interactions between persons and their environments. These levels contain 3 domains of human functioning: body functions and structures, activities, and participation. The International Classification of Functioning, Disability and Health measures disability as a decrement at each level, that is, impairments, functional limitations, and participation restrictions (http://www.who.int/classifications/icf/en/). Approximately 15% of the world's population lives with some form of disability.[1] The French National Institute of Statistics and

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Economic Studies estimates that ~25% of the adult population has disabilities, when disability is defined in a broad sense.[2]

People with disabilities are more likely to report poor health status than do those without disabilities.[3-11] Disability appears to be associated with a higher risk of poverty and financial difficulties in accessing health care, including dental care.[1,12-14] The French National Authority for Health also reports other barriers to health care use for people with disabilities, such as lack of accessibility, lack of jurisdiction, availability of caregivers, and living conditions (at home or in an institution).[13]

An association has been established between the degree of functional limitation and unmet medical and prescription medication needs.[15] Other studies have reported lower likelihoods of cancer screening in people with disabilities living at home[10,16-19] as well as unmet dental care needs.[20-22] These difficulties in access to care may partly explain the increased morbidity, especially for dental care.[13] However, until now, health care use has not been extensively studied in people with disabilities who are living in institutions.[23] Yet, it concerns >600,000 persons in France whose health status is known to be worse than that of those living at home,[24] but this remains poorly documented. It seemed appropriate to focus on access to specialized outpatient care for this population of people living in institutions, especially because the organization of care in these institutions is based on a coordinating physician, most often a general practitioner (GP) or a psychiatrist. Whether the degree of disability remains a determinant of health care use in this context remains unknown.

The aim of this article was to explore the determinants of specialized outpatient care use (GPs excluded) in adults with disabilities living in institutions.

Methods

Data sources

The data were obtained from (1) the Health and Disability Survey – Institutions Section (HSI) (available at http://www.insee.fr/en/methodes/default.asp?page=sources/ope-enq-handicap-sante-institutions-hsi.htm), which was conducted in 2009 by the French National Institute of Statistics and Economic Studies and the French Head Office of Research, Studies, Evaluation and Statistics of the Social Affairs Ministry and (2) the French national health insurance (SNIIRAM).

The HSI is a national cross-sectional survey that aims to measure the prevalence of various forms of disabling situations by applying the International Classification of Functioning, Disability and Health concept of disability. In the HSI, individuals were asked about their impairments, their functional limitations, and their social participation restrictions. They were also asked about their diseases and the forms of aid they received or needed. Information on their sociodemographic characteristics was also collected. Data were collected from a sample of people living in different types of institutions across French territories. The response rate was 97% for the institutions and 91% for the individuals. In total, the HSI database contained 9104 completed questionnaires from people residing in 1519 institutions. When the individuals were unable to respond to the questionnaire by themselves, a proxy was asked to provide help.[23]

The SNIIRAM database contains all data on care reimbursed by the French national health insurance scheme, that is, consultations, tests, and medicines. For each patient, data from the HSI and SNIIRAM were matched to explore the links among the health status, disability, and health care use for these people. With regard to care reimbursement data, we considered only a 1-year window of contacts, that is, within the year before the survey.

This national survey was approved by the Commission Nationale de l'Informatique et des Libertés, French Law No. 78-17.

List of abbreviations:

ADL	**activities of daily living**
AOR	**adjusted odds ratio**
CCI	**Charlson comorbidity index**
CI	**confidence interval**
CMU-c	**universal health coverage**
GP	**general practitioner**
HSI	**Health and Disability Survey – Institutions Section**
SNIIRAM	**French national health insurance**

Study participants

From the 1519 institutions included in the HSI database, we selected institutions for adults with cognitive, sensory, and mobility disabilities, which corresponded to 456 institutions and 2926 individuals. Institutions for adults with disabilities accept residents with various degrees of dependence, ranging from people who cannot perform basic activities of daily living (ADL) alone, are unable to acquire meaningful occupation, or whose condition requires constant medical supervision and care to people who maintain certain levels of autonomy in ADL and, in some cases, participate in a professional activity. We excluded persons younger than 18 years and people for whom SNIIRAM data were not available.

Outcome of interest

The French health care system is a universal health care largely financed by the national health insurance. GPs are expected to act as "gate keepers" who refer patients to a specialist when necessary. Specialized care represents an important supply of outpatient services in France. Most specialized physicians work in private practice, that is, provide care outside the hospital. In case of emergency, scheduled care, or surgery, specialized care is provided in the hospital.

Specialized outpatient care (collected in the SNIIRAM database) considered in this study was care provided by specialized physicians other than GPs (ie, cardiologists, pneumologists, neurologists, hepatogastroenterologists, otolaryngologists, ophthalmologists, endocrinologists, gynecologists, rheumatologists, dermatologists, and radiologists). We also considered dental care. Hospital care was excluded. The dependent variables analyzed were (1) whether the person had consulted a specialized outpatient care physician at least once in the previous year and (2) whether the person had consulted a dentist at least once in the previous year.

Explanatory variables

Degree of disability

Four different measures were used to assess the degree of disability. First, we constructed a continuous severity score of functional limitation, ranging from 0 to 46, by summing