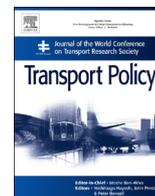




ELSEVIER

Contents lists available at ScienceDirect

# Transport Policy

journal homepage: [www.elsevier.com/locate/tranpol](http://www.elsevier.com/locate/tranpol)

## Mobility characteristics of the elderly and their associated level of satisfaction with transport services in Osogbo, Southwestern Nigeria

Moses Olaniran Olawole\*, Oluwole Aloba<sup>1</sup>

Department of Geography, Obafemi Awolowo University, Ile-Ife, Nigeria

### ARTICLE INFO

Available online 2 June 2014

#### Keywords:

Elderly  
Commuting  
Satisfaction  
Transport services  
Mobility constraints

### ABSTRACT

Older people are perceived to face different problems while commuting. Studies on mobility of the elderly and associated constraints are, in Nigeria, recent but scanty. Hence, this paper explores elderly mobility characteristics, commuting patterns, quality of transport services and problems associated with the use of public transport services. Questionnaires were administered to 250 elderly aged 60 years and above using a purposive sampling technique. Findings showed that 58.4% of the sampled elderly lack personal means of transportation. The study revealed that an elderly generates about 2.88 trips per day. Trip destinations within a distance of 2 km of respondents' residence accounted for 65.60% trips generated. Daily frequency accounted for 38.56% of the visits to four trip destinations (work, social, religion and market). Walking accounts for 36.89% of travel mode of the elderly. Transport constraints identified include high transport fare, lack of bus stops, poor nature of roads, traffic congestion, poor attitude of commercial transport operators and the absence of state owned transport services. There is also a low level of satisfaction with transport services with significant variation in satisfaction with transport service among the different age groups. The paper suggests that government should include issues of elderly mobility and safety in the nation's transport policy in addition to the provision of affordable public transport services for the elderly.

© 2014 Elsevier Ltd. All rights reserved.

### 1. Introduction

Population in most countries of the world is ageing. World-wide, the proportion of persons of 60 years and over is growing faster than any other age group and by the year 2050 there will be 2 billion persons 60 years and over, with 80% of them living in developing countries (WHO, 2002). For instance, in 2005, Nigeria was ranked among the top 30 countries in the world on the basis of the size of its population aged 60 years and over, and had the largest older population in sub-Saharan Africa, with over 6 million people, 60 years and over. By 2030, the country will still have the largest older population, with over 12 million people, 60 years and over (NPC, 2003; Velkoff and Kowal, 2006).

Population ageing is of interest mainly for several reasons. First, the fast rate at which the number of older persons is increasing presents a great challenge to unprepared nations. Second, older people widely lack access to public social and health care support structures especially in developing countries. Enhancing older people's mobility capacity, therefore, needs to be seen as an

integral part of efforts to promote overall societal development especially in the transportation sector. Ashford and Bell (1979) identified two areas associated with the need to understand the problems of providing transport for elderly persons. First, the lifestyle of the elderly, which initiates different demand, patterns from those, which are produced by the adult population of working age. The second reason is associated with the frailty of the elderly persons which reduces their ability to cope with the physical attributes of the system or which by reason of age increases the risk of a serious injury that would be unlikely to occur in a younger person (e.g. bone fractures from falls).

The expected increase in the number of the elderly in the world and in Nigeria in particular connotes among others, the need for transportation stakeholders to make mobility and travel behaviour of the elderly an issue of priority, as mobility is critical for social integration of the elderly in the society. The implications of mobility needs of the elderly, their accessibility to essential facilities and their demand for transportation services consequently became a subject of examination, as their mobility and spatial interaction are crucial to the effective social, political and economic development of the societies and the fulfillment of their physical needs.

In Nigeria, the support and caring for older people is primarily a family responsibility, either in the context of extended families or co-residence of parents with adult children

\* Corresponding author. Tel.: +234 803 578 4825.

E-mail addresses: [moolawole@gmail.com](mailto:moolawole@gmail.com), [molawole@oauife.edu.ng](mailto:molawole@oauife.edu.ng) (M.O. Olawole), [oaloba2004@yahoo.com](mailto:oaloba2004@yahoo.com) (O. Aloba).

<sup>1</sup> Tel.: +234 803 722 0616.

(NPC, 2003). Thus, there is the need for a study of this nature because of relatively sparse literature on the mobility situations of older persons in Nigeria (Ipingbemi, 2010). In addition, the study on the travel behaviour and mobility characteristics of urban dwellers in the country are not new. Over the last 40 years, these have contributed mostly to our understanding of the trip patterns, modal choice and challenges that people face in commuting in the urban centres. To this end, the research and policy emphasis in this area has been based primarily upon the relationship between transportation and access to socio-economic facilities. Much less attention has been placed upon the full array of activities and travel needs of the elderly population and their perception of the quality of transport infrastructure and services.

Moreover, ageing-related issues have a low priority in the policies and programmes in Nigeria. This is reflected in the lack of National Policy on the care and welfare of older persons and total absence of transport policy on travel and mobility of the elderly (Adebowale et al., 2012; Ipingbemi, 2010; Ajomale, 2007).

## 2. Literature review

### 2.1. Mobility behaviour of the elderly

The literature on mobility behaviour of the elderly is numerous and comprehensive especially in developed countries. For instance, the implications of the travel patterns of older people and their demand for transportation services have been the subject of extensive discussion and speculation in the developed countries (Hess, 2009; Rosenbloom, 2004; Banister and Bowling, 2004).

Noble and Mitchell (2001) analyzed data collected from the British National Travel Survey (NTS) of 1996/1998. Their work showed the change in modal choice towards private car in recent decades in the UK. It is further shown that older women use more of buses and travel as car passengers compared to males. Hjorthol et al. (2010) examined the activity and travel patterns of different groups of older people in Denmark, Norway and Sweden. Using data from the National Travel Surveys of the three countries across a period of 20 years, their study showed a significant period effect in car ownership and use among older people in Denmark, Norway and Sweden with a clear increase during the past 20 years. Furthermore, in terms of travel, older people of today were found to travel more than the comparable age groups 20–25 years ago: everyday trip rates are higher and activities outside home are more common. However, commuting and work-related trips was found to decline after retirement.

Studies analyzing the mode choice of older people abound. For example, the study by Schwanen et al. (2001) analyzed leisure trips of seniors in the Netherlands. They concluded that older people in urban areas use public transport about eight times more than in rural areas. Studies have also shown that the elderly and their mobility characteristics do not constitute a homogeneous group. For instance, Hildebrand (2003) showed how older people can be classified into different groups with consequences for both the activities they engage in and how they make trips. Consequently, the study identified six lifestyle groups among elderly people 65 years and over in Poland. In the same vein, Collija et al. (2003) conducted a monographic study on travel characteristics of the American elders. They analyzed the differences between the population of 19–64 years old and the population of 65 years old and above from every angle related to travel and found that 89% of the American elders travel by private cars, which is nearly the same as the population of 19–64 years old. Also, Alsnih and Hensher (2003) observed, in a comparative study of the flexibility of the elders at different age levels, that the more old people own

driver license, the stronger their dependence on private cars for travel

A number of recent studies have attempted to examine mobility of the elderly in developing countries. In Nigeria, for instance, Ipingbemi (2010), using data from a survey of 264 elderly, examined travel characteristics and mobility crisis of the elderly in Ibadan Metropolis. The study showed that work and health related trips accounted for 31.8% and 27.1% of the journey purpose, while the use of bus and walking respectively accounted for 30% and 29.6% of the modal split. The study identified vehicle design, long access and waiting time as well as poor facilities at the terminals as constraints to the effective mobility of the elderly. In an earlier study, Odufuwa (2006) analyzed mobility of the elderly from the provision of public transport perspective and observed that inadequacy of public transportation has resultant impacts on the mobility of the elderly as more than 80% of the elderly depended on various means of urban public transport for intra and intercity travels.

These studies of Ipingbemi (2010) and Odufuwa (2006) have helped to break new ground in understanding elderly mobility. However, from research and policy advocacy perspective, they are insufficient to make much impact on the formulation of national transport policy for the older population in the country or to support any contentions about the possible transportation impacts of demographic ageing. Consequently, the exigencies of growing old and an inadequate knowledge base in the country strengthen the need to further our understanding of the travel patterns and perception of the elderly on transport issues concerning them. Therefore, studies such as this become necessary because of the increasing number of the elderly; and the fact that the elderly travel patterns are different from those produced by the generality of the population. This study aims to provide insight into the mobility characteristic and commuting patterns of the elderly in Osogbo, Southwestern Nigeria. Specific objectives of this study are to examine the socio-economic characteristics of the elderly; their perception of the quality of transport services and problems associated with the use of public transport services.

### 2.2. Satisfaction and transport services

Satisfaction with quality of transport service provision can be conceptualized as the degree of harmony between a commuter's expectation of services and his perception of the services received. Satisfaction is based on an individual's reaction to the perceived difference between performance appraisal and expectations. Disconfirmed expectation leads an individual to a state of dissatisfaction, while the confirmation of expectation yields satisfaction.

Studies have shown that satisfaction assessments and service quality perceptions are closely connected (Abiodun, 2010). Satisfaction, like quality, is a multidimensional construct. Thus, satisfaction with a service provider is based on satisfaction with all aspects of the services provided. For a transport service to be evaluated positively on quality terms, it must perform well, whereas to be judged otherwise, poor performance on one or few dimensions is sufficient indicator.

During commuting, captive-riders are exposed to service attributes that are cognitively processed and help to affect an individual's perception of quality service delivery, hence satisfaction. These attributes comprise the condition of vehicle, passenger carrying capacity, neatness etc. In addition, satisfaction derived from their perception of quality of service may be derived from their assessment of the intangible elements associated with the interaction between the commuters and the transport service provider. These intangible elements include such aspects as courtesy, competence, access and availability of services as at when needed. Indeed, research efforts have documented the importance of efficient

Download English Version:

<https://daneshyari.com/en/article/1064864>

Download Persian Version:

<https://daneshyari.com/article/1064864>

[Daneshyari.com](https://daneshyari.com)