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The mobility for the elderly population encompasses different dimensions of urban life including housing, transportation, work-related activities and social interactions. The initiatives for the elderly are mainly undertaken in the areas of health while in reality, this is only a part of the overall picture that might be considered while planning urban accessibility strategies.

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GROWING OLD AND KEEPING MOBILE IN ITALY

ACTIVE AGEING AND THE IMPORTANCE OF
URBAN MOBILITY PLANNING STRATEGIES

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ABSTRACT

The world is facing a series of changes that will modify the way we envisage urban transport planning. Demographic switch coupling higher life expectancy and lower fertility rates is occurring all around the world. While ageing is indeed a triumph of development and increased longevity is perceived as one of humanity's greatest achievements, the phenomenon and its transition in society need to be managed.

The rapid increase of the elderly group means profound changes which require solutions at various levels. The World Health Organization has established a path towards Active ageing, and it is within this strategy that this paper aims at analyzing the role of mobility as an enabler of active ageing. While mobility in general is very important, it was decided to concentrate on urban mobility, as cities are, by definition, the place where people benefit from urbanization economies and where transport plans are put in place. An increase of age, health and economic conditions determine the possibility to enjoy urbanization economics more and for longer time. Yet such fruition is determined by the accessibility to such places or services. It is for this reason, among others, that urban mobility planning is such a relevant tool that could lead towards a switch of paradigm towards more friendly and inclusive (for seniors and not only) urban environments.

KEYWORDS

Active Ageing; Urban Mobility; Italian Scenario

1 INTRODUCTION

Ageing is a triumph of progress and the increasing longevity is perceived as one of humanity's greatest achievements. Life expectancy has reached 80 years in more than 30 countries. While at present only Japan has an older population of more than 30%, by 2050 other 64 countries will join that group (UN, 2013).

Today's elderly people are significantly different from previous generations; today's elderly are wealthier, healthier and more mobile.

The opportunities that this demographic shift present are as endless as the contributions that a socially and economically active, secure and healthy ageing population can bring to society (Keister & Deeb-Sossa, 2001; UNFPA, 2012).

A distinctive trend in ageing has been taking shape in very recent years in Europe, and active ageing has finally become a political priority (Walker & Maltby, 2012). Demographic change shows different speeds in different countries and, Italy is at the top of the list for its share of elders. According to the Italian Institute of Statistics (ISTAT) since 2015 Italy is undergoing zero growth in terms of population, a phenomenon that has not been registered since the First World War.

With this demographic shift impacting urban transport systems it is necessary to re-think about options to keep up with the mobility needs of a growing population segment maintaining their wellbeing and quality of life. Evidence shows that studies of this kind are hardly ever carried out and urban mobility plans tend to ignore the demand characteristics of senior users (Burlando & Cusano, 2014).

This work's focus is Italy that represents an interesting scenario because high shares of elders coupled with a sharp decrease of births are sentencing a country of old people for years to come.

If the goal is that of keeping the growing elderly population active, then their mobility should be included in the equation. Urban mobility planning strategies are fundamental but to be successful they need to take into account the real needs of the often-neglected elderly group.

2 THE ROLE OF MOBILITY IN ACTIVE AGEING STRATEGIES

According to the World Health Organization (WHO), the state of health is determined by the coexistence of three conditions: the physical-biological health, the social-environmental wellbeing and the psychological-emotional wellbeing and thus healthy ageing is more than just the absence of disease (WHO, 2015).

Among the elderly, the idea of physical self-care is becoming stronger and unlike the past, today's elderly know who they are and are perfectly aware of their role in society, their needs and aspirations (Giustini et al., 2009).

According to the EU Commission (Ageing Report, 2012), the key challenge for policymakers in the EU will be to transform the social models in such a way that the implications arising from an ageing population will become manageable (EU, 2012).

Sustainable and inclusive growth, fostered by the EU needs to work to prevent the city from becoming a place for goods and services with "restricted access" just for youngsters, coordinating urban mobility and city planning as much as possible.

This is more evident with the growing application of ICT in the transport field that, if properly managed, has the capacity to contribute to more efficient transport services.

The growing digitalization of urban transport systems poses the challenge of user acceptance and requires bridging the digital divide between age groups. Managing this transition towards a higher use of technology

for daily urban displacements requires analyzing the needs of those less familiar with technology to boost inclusion instead of marginalization.

Transport enables social participation and a denied mobility has an impact in accessing key areas such as employment, healthcare or education. Increasingly, though, it is not just mobility itself, which is seen as an enabling factor, but the potential accessibility of locations, services and facilities that people need to reach or engage with to avoid exclusion (Shergold & Parkhurst, 2012).

Accessibility can be defined as the ease with which people can reach destinations for different purposes (Metz, 2000) and it is inextricably linked to the quality of life and general wellbeing (Zali et al., 2016).

In general terms, higher levels of mobility and participation in social and physical activities are normally associated with greater life satisfaction (Banister & Bowling, 2004). Different studies show that there has been a growth in the travel activities of the elderly and an increase in leisure trips, car trips and licensing rate in the last decade (Arentze et al., 2008; Newbold et al., 2005). They are more "mobile", but how, when and why the move are questions that need to be addressed.

The centrality of car use is undeniable, yet, elder's personal perceptions of safety, security and comfortableness of driving under certain circumstances or conditions (such as congested roads, poor lighting, signaling, etc.) influence their mobility behavior (Rimmö & Hakamies-Blomqvist, 2002).

Even if the link between active ageing and mobility is recognized, the complexity of maintaining wellbeing through mobility is poorly reflected in today's planning or transportation supply for seniors (Siren et al., 2015). Mobility is also associated with the freedom to travel when desired and not just when needed (Stjernborg et al., 2014) and access to reliable, affordable and safe transport is important to help avoid loneliness and isolation.

In general, mobility has a wide range of possible options such as cars, motorbikes, bicycles, public transport, other solutions that require technological knowledge or information (car sharing, carpooling, Uber), and any possible mix of the above. For the elderly the number of options shrinks, due to their actual ability to make use of all available options.

This "denied accessibility" is a greater problem if it is the consequence of ignoring not providing sufficient information and education and deepening the digital divide.

If the characteristics of mobility supply do not match the needs of such a broad and mobile segment of the population, reducing the options to (a) costly private individual transport or (b) traditional local public transport (cheap but growingly uncomfortable), then there will be an increasing accessibility problem failing in the quest for inclusive urban settings.

And while it is somewhat true that "keeping older people driving as long and safely as possible may well be the most feasible and cost-effective mobility option for an ageing society" (Rosenbloom, 2009), it is necessary to establish other options that will be available once using the car will not be a feasible option. All these considerations seem much more relevant considering that life after pension represents a considerable period worth living a good life (OECD, 2011).

3 AN INSIGHT INTO THE ITALIAN SCENARIO

Why is Italy such an interesting case to investigate the connection between ageing and urban mobility planning? Statistics are a good starting point to answer this question.

Across the EU Member States, Italy (21.7%), Germany (21.0%) and Greece (20.9%) had the highest shares of people aged 65 or older in the total population (Eurostat, 2016).

With 12% of the almost 500 million inhabitants of the European Union, Italy is the fourth country for its dimension and has 144.5 elderly for every 100 youngsters representing the “oldest” country in the Union, closely followed by Germany.

The average life of Italians is of around 84 years of age for women and around 79 years of age for men, both on top of the European Union ranking (ISTAT, 2016). Moreover, Italy ranks very low in fertility rates (1,41 child per woman), and the average childbearing age is still on the raise (31.5 years vs. 29.2 in Germany, 29.8 in Spain and 28.1 in the UK¹).

Life after retirement is an important factor: a 65-year-old man can expect to live circa 18.4 years while women up to 22 years (ISTAT, 2016).

Lastly, Italy is among the EU27 countries with the highest age-dependency ratio (almost 56% according to the World Bank statistics², 2014) showing a strong generational imbalance.

A study carried out by ANIASA – CENSIS (2015) on the main demographic and socio-economic trends that Italy will be facing until 2030, show that:

- There is a growing trend of elders taking care of their own psycho-physical health, with 54% practising outdoor activities compared to 21% in 2005;
- The share of elders that have familiarity with technology is growing fast, with only 5% in 2006 using internet to 21% in 2015;
- The share of seniors with “active driving licenses” is also growing, reaching 50% in 2015, while the rate of license possession has grown from 38.5% to 53% in the last 10 years.

Consulting the sites of the Ministry of Infrastructures and Transport and Italian Automobile Association, among others, the lack of studies on mobility patterns is quite alarming in the face of the studied trends.

Regarding strictly mobility patterns an interesting source of information, and one of the very few existing ones, is ISFORT 's (Higher Institute of Transport Education and Research) focus on mobility of the elderly in its October 2016 release.

The study shows that the mobility rate of Italians, i.e., the percentage of people getting out of their houses and making trips, is 80% for the general population, while the percentage is almost 75% for the 60-69 group, and around 64% for those over 70 years. It shows that when elders do go out they tend to be in line with the general population and the reason behind not going out can be highly heterogeneous: raging from precarious health to lack of transport alternatives or mainly lack of motives to do so.

The average daily trips of seniors are in line with that of the general population since 2012, with 2.7 trips per day (Fig. 1), showing how the mobile part of seniors tend to be as mobile as the general population. The trip duration is quite similar between the general population, with 59 minutes, the 60-69 group with 57 minutes (possibly a considerable number of the interviewees is still working as the retirement age in Italy is 66 years since 2015) and the 70-80 group registers almost 50 minutes.

Analogously, the number of daily trips and duration shows how senior citizens' behaviours are quite similar to those of the general population.

¹ Data for 2012 by the Central Intelligence Agency World Factbook.

² <http://data.worldbank.org/indicator/SP.POP.DPND>.

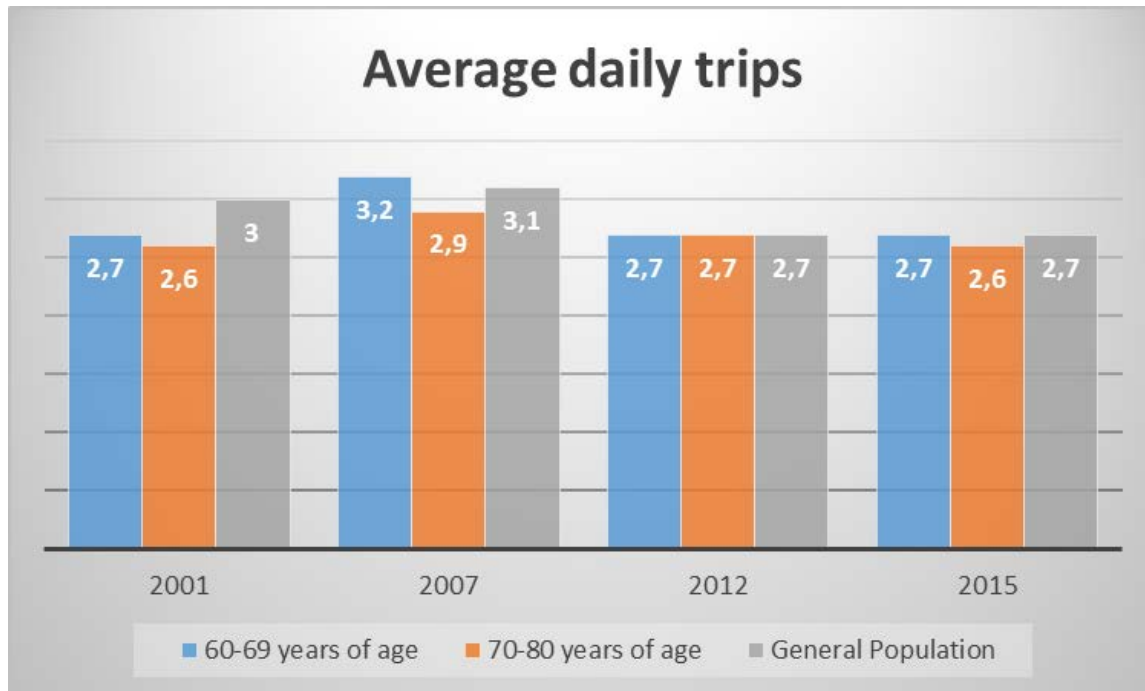


Fig. 1 Average daily trips per age groups for 2001, 2007, 2012 and 2015 in Italy - Source: ISFORT, 2016

Fig. 2 A and B show a comparison between 2007 and 2015 in terms of the transport means used for trips, highlighting there has been an increase in car use as driver for all age categories. This is alarming considering that Italy is among the European countries with higher car use with 38 million vehicles in 2017 in comparison to 15 million in 1980 (data from the Italian Automobile Club - ACI³). There has also been a decrease in Public Transport use and walking/bike use for the elderly groups with a slight increase in trips as car passenger. Older adults over 65 years are at a higher risk of injury compared with younger adults due to frailty and associated increased injury susceptibility, placing them at a double disadvantage when walking or cycling, compared to when travelling in a vehicle (O'Hern & Oxley, 2015).

When it comes to the reasons behind trips, data show that more than 50% of the trips are made for family management activities for the 60-70 group and 33% for leisure. In addition, the majority of the trips for the 70-80, 58%, are done for family management, with leisure activities at 40%. Most trips for all categories are carried in proximity of the destination (1-2 km). For the 70-80 group this share is quite relevant with 42%, while short distance trips (3-5 km) represent 26%, thus showing that 68% of all trips take place between 1 and 5 km.

Two things can be taken out from this first attempt to assess the urban mobility choices and patterns in Italy: the need to assess the short distance travel options and to provide ways to discourage the use of private vehicles by developing other valid options (public transport and flexible services) feasible and attractive. The usual diatribe private transport versus traditional local public transport needs to be re-dimensioned in the light of this first set of information and of some of the characteristics of the elder category in Italy.

³ <http://www.aci.it/laci/studi-e-ricerche/dati-e-statistiche/veicoli-e-mobilita.html>

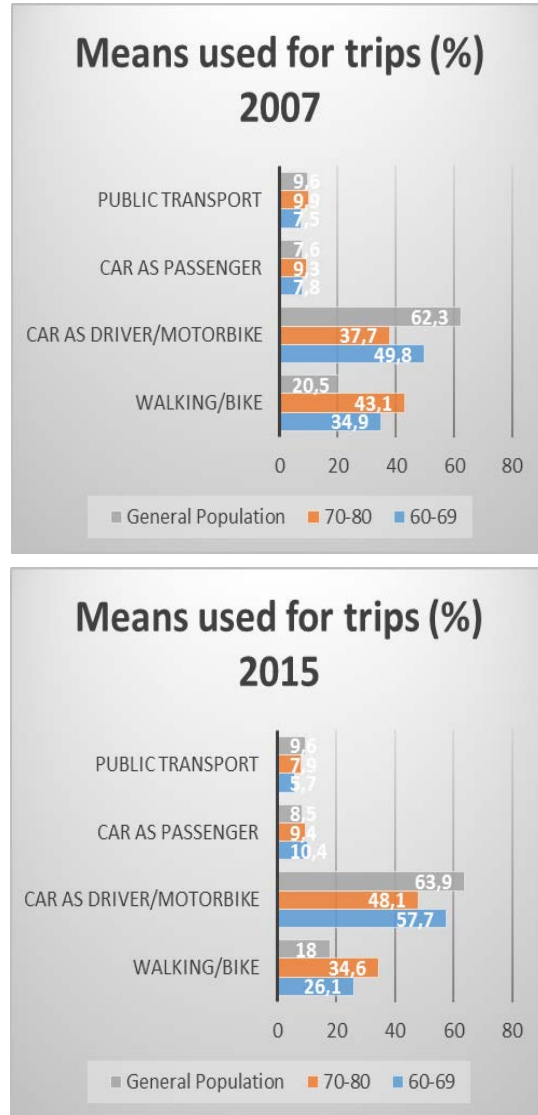


Fig. 2 Means used for trips per age groups in 2007 (A-above) and 2015 (B-under) in Italy - Source: ISFORT, 2016

4 FINAL REMARKS

A typical Italian elderly person makes an average of 2.7 daily trips, a figure in line with other age groups. Around half of these trips are made by car and as the population continues to age and reassess their usual driving patterns, they will need access to adequate transportation alternatives that will allow them to continue living actively in their neighborhoods.

Considering that most of the displacements are between 1 and 5 km, walking could be the link that connects senior Italians to their destination. An interesting study carried out by Metro Vancouver Canada found that living in neighborhoods with a greater prevalence of destinations was associated with more trips on foot, suggesting that given the opportunity, older adults are willing to walk instead of drive to reach nearby locations (Chudyk et al., 2015).

Older adults over 65 years are at a higher risk of injury compared with younger adults due to frailty and associated increased injury susceptibility, placing them at a double disadvantage when walking or cycling, compared to when travelling in a vehicle (O'Hern & Oxley, 2015).

While these assumptions are perfectly rational and sensible, car use trends show how even in the close-proximity range, Italians (young and old) rely on the car. In this sense, higher parking tariffs in city centers has been a policy often used by local governments to discourage car use.

Walking has numerous incentives: it is healthy, cheap and “green”, yet crumbling or absent sidewalks, inadequate signaling and lack of time to cross-large intersections are obstacles to boosting walking as a mobility option.

The use of public transport should be more appealing, essentially by understanding what factors discourage senior citizens from using it. For example, wider use of live departure boards and audio-visual announcements on buses could increase older people’s confidence in using public transport (Holley-Moore & Creighton, 2015).

In a country of drivers, the absence of a comprehensive scheme for older drivers who have to stop driving for functional reasons is alarming. It is surprising that even countries that have introduced age-related screening for older drivers, a comprehensive framework to help seniors remain mobile after having stopped cessation is missing (Marin-Lamellet & Haustein, 2015).

If properly informed, today’s seniors are willing to accept innovation, which may enlarge their mobility options with limited costs for the public administrations thanks to technology compensating for diminished capacity (Katsavounidou, 2017; Coughlin, 2009). However, this willingness seems to be completely ignored by public administrators responsible for developing urban mobility plans.

Mobility planning in Italy should be an integral part of city planning rather one of two separate entities that speak different languages. Even though car use is a consolidated lifestyle, it is likely that seniors will use public transport where it is accessible and safe.

Importantly, investments in new and accessible services should be made once knowledge on this age group’s habits and preferences has been assessed. Some interviews and focus groups that have been carried out with seniors in the city of Genoa during 2017 show that what is perceived as vehicle comfort for those over 65 (ease of getting on and off, lower seats, wider corridors) is in stark contrast with the criteria adopted by the local Public operator in its acquisition of new vehicles.

The mobility needs of the elderly have a strong local connotation which fail to be recognized by treating the elderly as a monolithic category. The need for a proper age segmentation is confirmed by several studies that have disaggregated the “elderly” category into different sub categories with very specific needs (Currie & Delbosc, 2010; Mandl et al., 2013; Coughlin, 2009; Haustein, 2012; Kim & Ulfarsson., 2004; Siren & Haustein, 2013).

The starting point to bring urban mobility planning closer to an active ageing of the population is a sound knowledge of mobility demands that greatly differ from those of the past and that tend to vary between geographical contexts (Nordbakke & Schwanen, 2014).

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