

Access to health care: a problem for the elderly in rural areas in Germany?

Erreichbarkeit von medizinischer Versorgung im ländlichen Raum in Deutschland: Ein Problem für die ältere Bevölkerung?

Eva Maria NOACK and Holger BERGMANN

Summary

With demographic change, Germany's rural regions face the challenge to develop new strategies to ensure supply with appropriate public infrastructure while becoming less densely populated and experiencing an increasing share of immobile population groups. Even though, in general health care in Germany is very good, in some rural areas its provision tends to be problematic. Demographic change aggravates this situation: Natural demographic shrinkage and out-migration lead to changes in the rural spatial structure and have impacts on the provision of health care. Simultaneously the growing proportion of older people increases the demand for medical care. This paper presents findings of an empirical study on older people's mobility options and obstacles that frequently constrain the access to health care.

Keywords: rural health care, demographic change, accessibility

Zusammenfassung

Aufgrund des demographischen Wandels stehen ländliche Gebiete in Deutschland vor der Herausforderung, neue Strategien zu entwickeln, um eine adäquate Versorgung mit ländlicher Infrastruktur zu gewährleisten, während die Bevölkerungsdichte ab- und der Anteil immobiler Bevölkerungsgruppen zunimmt. Trotz der allgemein sehr guten ärztlichen Versorgung in Deutschland ist die Bereitstellung in einigen ländlichen Gebieten problematisch. Der demographische Wandel verschärft diese Situation: Natürlicher Bevölkerungsrückgang und Abwanderung

Erschienen 2011 im *Jahrbuch der Österreichischen Gesellschaft für Agrarökonomie*, Band 20(1): 107-116. On-line verfügbar: <http://oega.boku.ac.at>.

verändern die ländliche Raumstruktur und üben so Einfluss auf die medizinische Versorgung. Gleichzeitig erhöht der steigende Anteil älterer Menschen die Nachfrage nach Gesundheitsdienstleistungen. Dieser Artikel stellt die Ergebnisse einer empirischen Untersuchung vor, die die Mobilitätsmöglichkeiten älterer Menschen und Hindernisse, die deren Zugang zu medizinischer Versorgung einschränken, analysiert.

Schlagnworte: ländliche Gesundheitsversorgung, demographischer Wandel, Erreichbarkeit

1. Demographic change, a challenge for health care

Demographic developments, especially low fertility rates, rising life expectancy and the aging of the baby boomer generation, are leading to an increasing proportion of elderly in Germany's population. Already today, Germany is one of the countries worldwide with the largest share of older people and the trend will be upward in the near future: Today, 20% of the population is aged 65 or older. In 2060, this will apply to more than a third of the population and every seventh person will be 80 years or older (cp. Fig. 1) (BiB 2009; RKI 2006; StBA 2009).

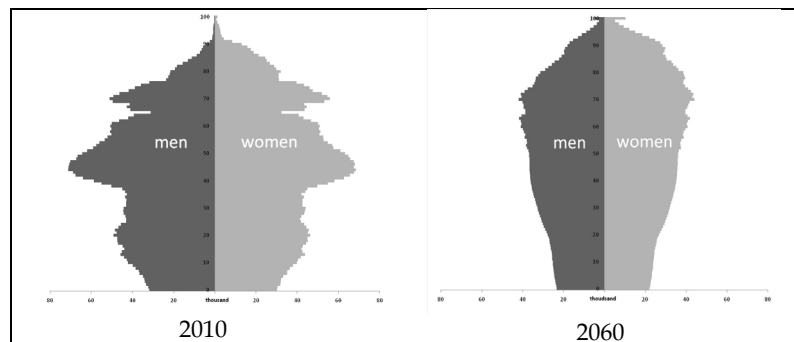


Figure 1: Age pyramids for Lower Saxony (study area) for 2010 and 2060.¹

Source: Own design, according to data from LSKN, 2011c

¹ Data for 2060 according to the 12th coordinated Populations projection, medium model. Assumptions: nearly constant birth rate at 1.4 children per woman; annual net migration + 100,000 persons starting from 2014.

At the same time, the total population size will decrease: Germany has reported low fertility rates for years now² leading to accelerated irreversible aging and creeping demographic shrinkage.

In many rural, structurally backward regions, this trend is intensified by emigration.³ Rural depopulation and ageing entail massive changes in the rural spatial structure.

For decades German regional development policy has been based on the goal of "equivalence" of living conditions. Today, the adjustment of urban and rural living conditions is mainly fulfilled. Yet, ageing and shrinking of the population result in a dismantling of infrastructures in sparsely populated regions giving rise to a new disadvantage of rural residences. Above all, the greatest issue at stake is to maintain educational and medical infrastructure at the necessary level (KOPETSCH, 2005; SCHWEIKART, 2008).

The latter presents a particular problem seeing the growing demand for medical care. Although the medical care provided under the German system is still good in international comparison, Germany's federal states (Länder) and regions have to meet the challenge to adapt the (primary) medical care system to demographic and structural changes. Even so, there is little knowledge of the elderly's mobility opportunities, obstacles constraining their access to health care and their respective needs. In spite of rising political awareness of the problematic nature of the provision of health care in rural areas, very few studies deal with these topics in Germany and little work has been done on the elderly in rural areas.

Identifying ways to meet the health care needs of the elderly is central not only because their number and share of the population are increasing but also because they tend to have more and age-specific health care issues. Moreover, they are more likely to experience limited mobility opportunities. Against this background, the aim of this study was to gain a basic understanding of older people's needs and problems in accessing rural health care.

² well below 2.1, the level needed to maintain population stability in the long term

³ Impacts of demographic changes will differ within the country. In general, economically weaker regions face further shrinkage while strong regions are likely to experience stable population or even population growth (BBR, 2004; 2005).

2. Study design and conduct: Methodology and study area

Seeing that health has an important psychological component (BÖHM et al., 2009; MIELCK, 2003), a qualitative research design was chosen in order to comprehend the individual's perceptions and experience of the subject (cp. e.g. GARZ and KRAIMER, 1991; GLASER and STRAUSS, 2005; SCHNELL et al., 2008). In-depth interviews were carried out with 25 men and women aged over 60 years of different life circumstances in various rural locations in the district of Holzminden in 2010.

Holzminden, situated in southern Lower Saxony in Germany, has a high share of people aged over 65 years which is going to increase in the near future (cp. Fig. 2). The district is 15 to 20 years ahead regarding demographic change compared with other parishes in Germany. Processes that are still to come in other regions have already begun.

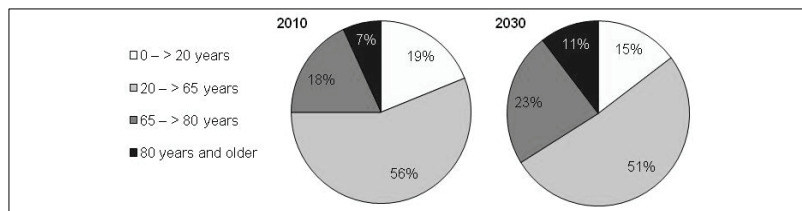


Figure 2: Population: Age groups the district of Holzminden in 2010 and 2030

Source: Own design, according to data from LSKN, 2011a, b

Population density is quite low: 108 inhabitants per km², which amounts to about half of the German average (229). In the last 35 years, population has declined by about 10%. From now until 2021, population is projected to decrease by about one sixth. By then, there will only be 67,000 inhabitants (19,000 older than 65 years), compared to 76,100 in 2007 and 89,000 at the beginning of the 1970s.

This development is due to a natural deficit of births on the one hand, and net outward migration, mainly of the young and active generation, on the other. There are intraregional differences: between 1968 and 2003 the Samtgemeinde (joint community) Bodenwerder has recorded the lowest shrinkage (-0.7%), while the Samtgemeinde Eschershausen has lost 21% of its population. These unfavourable demographic developments have an impact on all fields of communal action, ranging from an even more financially limited room for manoeuvre to changing

needs for local services and infrastructure. Among others, there will be sinking demand for schooling and childcare but substantial increase in the need for senior-friendly housing, for domiciliary and medical care and for public transport designed according to the requirements of elderly persons (LANDKREIS HOLZMINDEN, 2006; 2010; NLS, 2007).

3. Results

Of the 25 interviewees, 16 are women, nine men. Eleven interviewees are aged between 60 and 69 years, ten between 70 and 79 years and four are 80 years or older. Five women are widows; the other 20 interviewees are married. Except for one, all have children, most two or three. Six of the interviewees live with one of their children in the same house (albeit in a different flat). Five report that their children live in the same or neighbouring district and come to see them at least once a week. The others' children live further away, visiting primarily on holidays. Except for one, all interviewees live in a household with at least one car but six women do not drive because they do not hold a driving license.

Overall, the level of supply highly depends on the location. In some villages the provision of health care and other services is quite good, in some places there are deficits in outpatient medical care and there are basically no leisure or shopping facilities left. In most villages, clubs have lost members and formerly existing small shops closed some years ago. Since then, in some places mobile bakeries and butcheries pass once or twice a week. Thus for reaching other goods and services, including everyday commodities, being mobile is essential. Mostly, getting around by public transport is not possible or too complicated. Hence, in places with insufficient local provision private means of transport are virtually the only way to access goods and services of everyday importance. Those who cannot drive have to be given a ride on a private basis. One of these women (aged over 80 years) states proudly that she gets everywhere by bicycle within a radius of 5 km.

The large majority of 'young elderly' (60 to 70 years old) are quite mobile and experience little obstacles in reaching health care and other facilities. Many driving license holders drive until an advanced age even if they are not in good health because of necessity. Those who cannot drive (anymore) are dependent on relatives (mainly their

spouse or children) to be driven to all kinds of activities. In two cases, neighborly help guarantees access to medical care and other important activities. Both interviewees cannot drive, are widows, and their children have moved away. In one village in the study area, several women founded a group offering honorary transport to medical appointments to those whom relatives cannot drive.

When asked for the provision of medical care in particular, most interviewees differentiated between general practitioners (family doctors), medical specialists and emergency care. This distinction was maintained in the analysis. Nearly all interviewees report that they have been to see a doctor recently and say that they need to do so quite regularly. Many primarily consult a close-by family doctor but a large number also need to see medical specialists on a regular basis. Several state that have needed to call an emergency doctor in the past either for themselves or for a family member.

Apart from long waiting times, the large majority are quite satisfied with their family doctor, feeling that they are in good hands. Except for one interviewee who has a severe walking disability, all say that the surgery is accessible for them, referring both to the distance and the surgeries' premises. Some family doctors still make house calls but only if needs must. This is considered to be of high importance by all interviewees.

Age structure of general practitioners shows a similar trend to that of the overall population in the district of Holzminden. According to the interviewees', some doctors would not be allowed to practice anymore if legislation had not relaxed retirement age. All the same, many physicians will retire in the coming years but have problems with finding a successor, mainly because the region is not attractive for the young.

Those who need to consult a medical specialist (mentioned most frequently are ophthalmologists, dermatologists, urologists, diabetologists, and cardiologist) complain about long travel times (20-50 km). It requires much time to keep an appointment with a specialist, also for those who still drive themselves. They report that they usually link the trip to the specialist with other activities, e.g. shopping, getting a hair cut or to going to a swimming pool, partly because the journey is tiring for them, partly to save money. None declares to resign from treatment or to resort to self-medication in order to avoid the journey.

However, three interviewees relate that once they needed treatment at night for a non-life-threatening injury they refrained from driving to the emergency unit at hospital because it was too far away but they preferred to wait until consultation hours of their family doctor.

Closely connected to hospitals' accessibility is the provision of emergency medical service which turns out to be especially problematic; in some peripheral municipalities of the district it seems to fail totally. Some interviewees report that they have been waiting for the emergency doctor for more than half an hour, journey times depending on where the ambulance is positioned.

With regard to overall accessibility of supply and services, opinions and personal attitudes towards living and ageing in the countryside differ. For some interviewees, in spite of the difficult transport situation rural home is the most agreeable place to live out one's life. Some find it quite hard to experience low accessibility and limited mobility at an old age which they did not feel when they were younger. Many think that therefore, the countryside is not the place of choice to spend ones evening of life, so once not able to drive anymore, it would be better to live in a city, especially if one needs regular medical treatment.

Even so, in general, nearly all also appreciate the advantages of rural living, pointing out quietness, being close to nature and nice companionship. Nearly none of the interviewees wants to leave the village, mainly because that is where they have their social contacts (most interviewees are active members in at least one local club or society), where they have lived (and often farmed) for a long time and where they have property.

Many are aware that they might have to move, once not mobile anymore. Many also admit that they try to push these thoughts to the back of their minds. Some consider living in an old-people's home close-by. Apparently, they do not belong to a minority, seeing that in several small towns in the district new old people's homes are built the existing retirement homes being all crowded.

4. Discussion and conclusion

About 90% of the German population see a doctor at least once a year. Regularity and frequency of consultations increase substantially with age (BERGMANN and KAMTSIURIS, 1999; GBE, 2010). With advancing age

though, maintaining mobility may become jeopardized due to higher risk of physical and sensory impairments (MOLLENKOPF and FLASCHENTRÄGER, 2001). Overall, the elderly are getting more mobile but still the share of people driving a car decreases with age. In rural areas, daily mobility highly depends on the availability of a car and, as this study confirms, those who cannot drive are dependent on relatives or neighbours to be given a ride to all kinds of activities, including medical appointments (BRÖG et al., 2000; NOLL and WEICK, 2008).

The change of the population's age structure, increasing age-related chronic diseases and (multi)morbidity will increase the number of patients and thus doctor-patient contacts that have to be considered in health care policy. Moreover, the above combined with the elderly's declining mobility will very likely create a growing demand for house calls (FENDRICH and HOFFMANN, 2007; VAN DEN AKKER et al., 2001). These are problematic in combination with a diminishing doctor-patient ratio and long travel times in rural areas. Therefore, in both, ageing and rural areas, doctor-population ratio has to be higher to assure sufficient provision with primary health care and emergency service, which are already patchy in some place of the study area.

Even though already the majority of patients are of age, older people's specific needs have long been neglected in health care issues. Political awareness has increased substantially within the last year. Among others, it is considered to include a demographic factor in requirement planning. In the study area as well as in other parts of Germany a large share of family doctors will retire in the up-coming years and their positions need to be refilled to provide sufficient primary care but many country doctors experience problems with finding a successor. The rural space is lacking attractiveness and so is the working environment of country doctors: High workloads due to house calls and on-duty medical service combined with declining profit rates (SCHWEIKART, 2008). So, Germany additionally faces the challenge to encourage (young) doctors to live and work in rural, undersupplied regions. For this purpose pilot projects have been launched setting appropriate incentives. Whether in the end sufficient supply with country doctors can be attained by higher remuneration in rural areas, by bonuses for house calls or by extra pay for elderly patients is an open question. Improving quality of life also for young people in rural areas is the greatest and possibly only effective incentive.

References

- BBR (Bundesamt für Bauwesen und Raumordnung) (ed.) (2004): Bevölkerungsprognose 2020. Bonn.
- BBR (Bundesamt für Bauwesen und Raumordnung) (2005): Raumordnungsbericht 2005. Bonn.
- BERGMANN, E. and KAMTSIURIS, P. (1999): Inanspruchnahme medizinischer Leistungen. *Das Gesundheitswesen*, 61, Sonderheft, pp. 138-144.
- BIB (Bundesinstitut für Bevölkerungsforschung) (2009): Verlauf der demographischen Alterung. http://www.bib-demografie.de/cdn_099/nm_750730/DE/DatenundBefunde/Alterung/verlauf_der_alterung.html (12.12.2009)
- BÖHM, K., TESCH-RÖMER, C. and ZIESE, T. (2009): *Gesundheit und Krankheit im Alter*. Berlin: RKI, StBA, Deutsches Zentrum für Altersfragen.
- BRÖG, W., ERL, E. and GLORIUS, B. (2000): Elderly people's travel choices in Germany. In: *European Conference of Ministers of Transport (ed.): Transport and ageing of the population*. 112th Round Table of Transport Economics. Paris: OECD, pp. 43-142.
- FENDRICH, K. and HOFFMANN, W. (2007): More than just aging societies: the demographic change has an impact on actual numbers of patients. *Journal of Public Health*, 15, pp. 345-351.
- GARZ, D. and KRAIMER, K. (1991): *Qualitativ-empirische Sozialforschung: Konzepte, Methoden, Analysen*. Opladen: Westdeutscher Verlag.
- GBE (Gesundheitsberichterstattung des Bundes) (2010): *Ambulante ärztliche Versorgung in Prozent nach Alter, Geschlecht und sozialer Schicht, 2002/2003*. URL: [http://www.gbe-bund.de/gbe10/ergebnisse.prc_fid_anzeige?p_fid=9775&p_fund_typ=TAB&p_sprachkz=D&p_uid=gast&p_aid=84656145&p_\(02.02.2010](http://www.gbe-bund.de/gbe10/ergebnisse.prc_fid_anzeige?p_fid=9775&p_fund_typ=TAB&p_sprachkz=D&p_uid=gast&p_aid=84656145&p_(02.02.2010)
- GLASER, B. G. and STRAUSS, A. L. (2005): *Grounded theory: Strategien qualitativer Forschung*. Bern: Huber.
- KOPETSCH, T. (2005): *Bedarfsplanung: Geregelt wird nur die Verteilung*. *Deutsches Ärzteblatt online*, 06.05.2005, pp. 1-6.
- LSKN (Landesbetrieb für Statistik und Kommunikationstechnologie Niedersachsen) (2011a): 100 Bevölkerungsfortschreibung (K1000014). URL: <http://www1.nls.niedersachsen.de/statistik/html/parameteringabe.asp?DT=K1000014&CM=Bev%F6lkerungsfortschreibung> (22.03.2011)
- LSKN (Landesbetrieb für Statistik und Kommunikationstechnologie Niedersachsen) (2011b): *Bevölkerungsvorausberechnung -Basisjahr 2009- (K1000014)*. URL: <http://www1.nls.niedersachsen.de/statistik/html/parameteringabe.asp?DT=K1000014&CM=Bev%F6lkerungsfortschreibung> (22.03.2011)
- LSKN (Landesbetrieb für Statistik und Kommunikationstechnologie Niedersachsen) (2011c): *Bevölkerungsvorausberechnung: Vorausschätzung der Bevölkerung bis 2060 - Einzeljahre*. URL: http://www.nls.niedersachsen.de/file/12Koord_Bevolkerungsvorausberechnung_W1_NBB.xls (22.03.2011)

- LANDKREIS HOLZMINDEN (2006): Demographie-Bericht für den Landkreis Holzminden. Aktion Demographischer Wandel. Bertelsmann Stiftung. URL: http://www.landkreis-holzminden.de/pics/medien/1_1156761888/Demographie-Bericht_Stand_22-03-2006.pdf (30.01.2010)
- LANDKREIS HOLZMINDEN (2010): Demografischer Wandel im Blickpunkt. Der demografische Wandel als Chance für den ländlichen Raum – Gestaltung einer Modellregion Landkreis Holzminden. URL: <http://www.landkreis-holzminden.de/staticsite/staticsite.php?menuid=391&topmenu=44> (30.01.2010)
- MIELCK, A. (2003): Sozial bedingte Ungleichheit von Gesundheitschancen. Zeitschrift für Sozialreform, 49, 3, pp. 370-375.
- MOLLENKOPF, H. and FLASCHENTRÄGER, P. (2001): Erhaltung von Mobilität im Alter. Stuttgart: Kohlhammer.
- NLS (Niedersächsisches Landesamt für Statistik) (2007): Kleinräumige Bevölkerungsvorausberechnung für die Jahre 2012 und 2017. URL: <http://www.nls.niedersachsen.de/Applet/Prognose/P1000001.HTM> (12.09.2010)
- NOLL, H.-H. and WEICK, S. (2008): Lebenssituation von Älteren. In: StBA, Noll, H.-H. and Habich, R.: Auszug aus dem Datenreport 2008. Ein Sozialbericht für die Bundesrepublik Deutschland. Bonn: BPB, pp. 193-199.
- RKI (Robert Koch-Institut) (2006): Gesundheit in Deutschland. Berlin: RKI.
- SCHNELLE, R., HILL, P. B. and ESSER, E. (2008): Methoden der empirischen Sozialforschung. München: Oldenbourg.
- SCHWEIKART, J. (2008): Die große Herausforderung. LandInForm, 4, pp. 12-13.
- STBA (STATISTISCHES BUNDESAMT) (2009): Bevölkerung Deutschlands bis 2060. 12. koordinierte Bevölkerungsvorausberechnung. Begleitmaterial zur Pressekonferenz am 18.11.2009 in Berlin. URL: http://www.destatis.de/jet-speed/portal/cms/Sites/destatis/Internet/DE/Presse/pk/2009/Bevoelkerung/pressebroschuere_bevoelkerungsentwicklung2009.property=file.pdf (07.12.2009)
- VAN DEN AKKER, M., BUNTINX, F., ROOS, S. and KNOTTNERUS, J. A. (2001): Problems in determining occurrence rates of multimorbidity. Journal of Clinical Epidemiology, 54, pp. 675-679.

Affiliation

*Dipl.-Geogr. Eva Maria Noack and Dr. Holger Bergmann
 Department of Agricultural Economics and Rural Development
 Georg-August-Universität Göttingen
 Platz der Göttinger Sieben 5, 37073 Göttingen, Germany
 Tel.: +49 551 39 20128
 eMail: enoack@uni-goettingen.de*