



Dresdner Seniorenakademie Wissen- schaft und Kunst

Dresden, Germany



Erasmus+

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SURVEY on TELEMEDIZIN

The Dresden project group is working on topics of digitalisation in medicine. There are a variety of procedures that are now or will be of importance in the near future. Older people in particular are confronted with these procedures.

A prerequisite for participation in digital medicine is the technical equipment of the elderly and the ability to handle it properly. They need to know which options are available and which are necessary and useful for their personal needs. The sources of information on this are often vague, even when coming from health insurance companies. Targeted training is therefore necessary and helpful. Given the technical prerequisites, the seniors' attitude towards digital medicine is important.

In order to optimise the further education of seniors according to their knowledge and needs, we conducted a survey among seniors. For this purpose, we developed the questionnaire "Telemedicine". The period of the survey was October 2021 to April 2022, i.e. during the Corona-related lockdown. Many questionnaires were therefore answered digitally.

1. Respondent Profile 91 Respondents

1. Gender

Men	45
Woman	30
No answer	16

2. Residential area

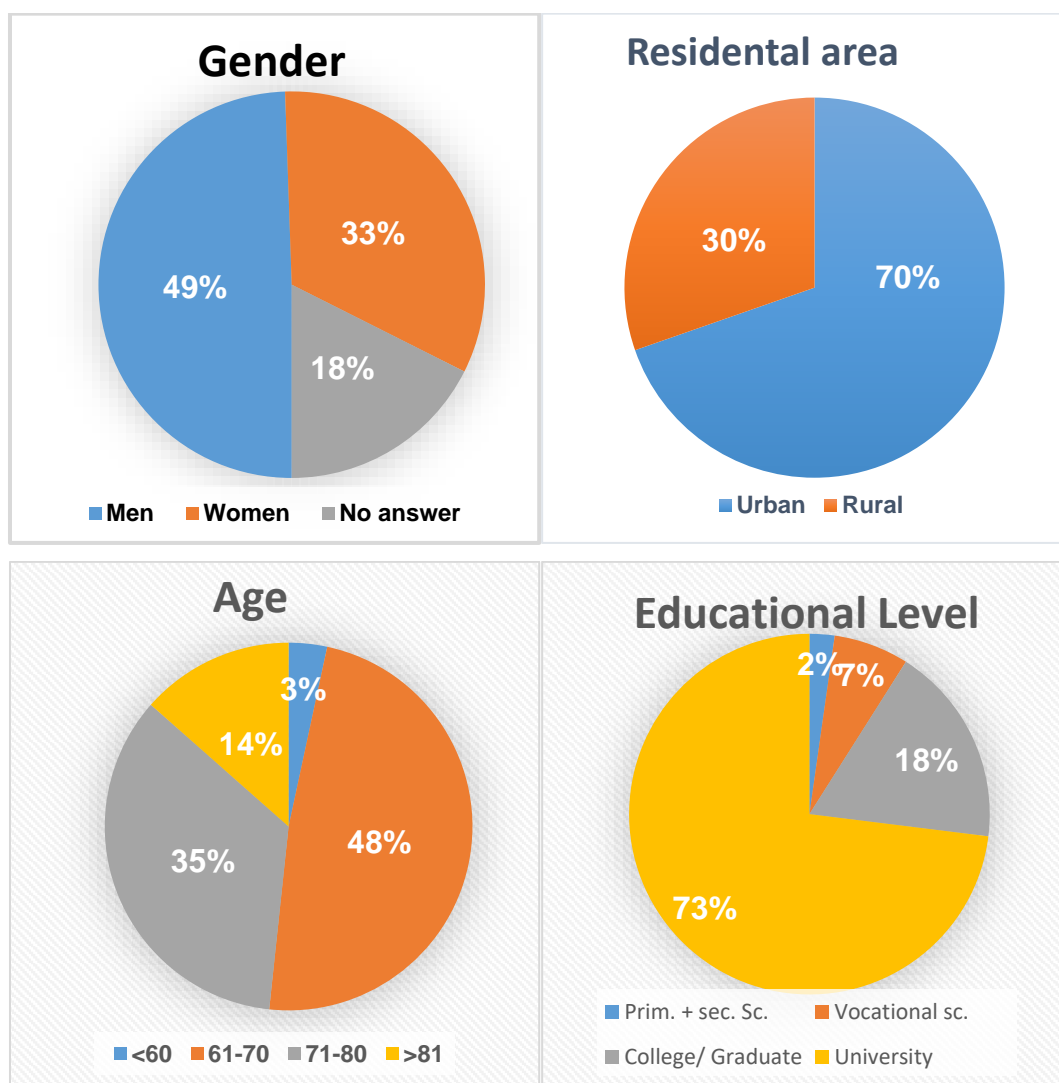
Urban	62
Rural	27

3. Age

<60	3
61-70	43
71-80	31
>80	12

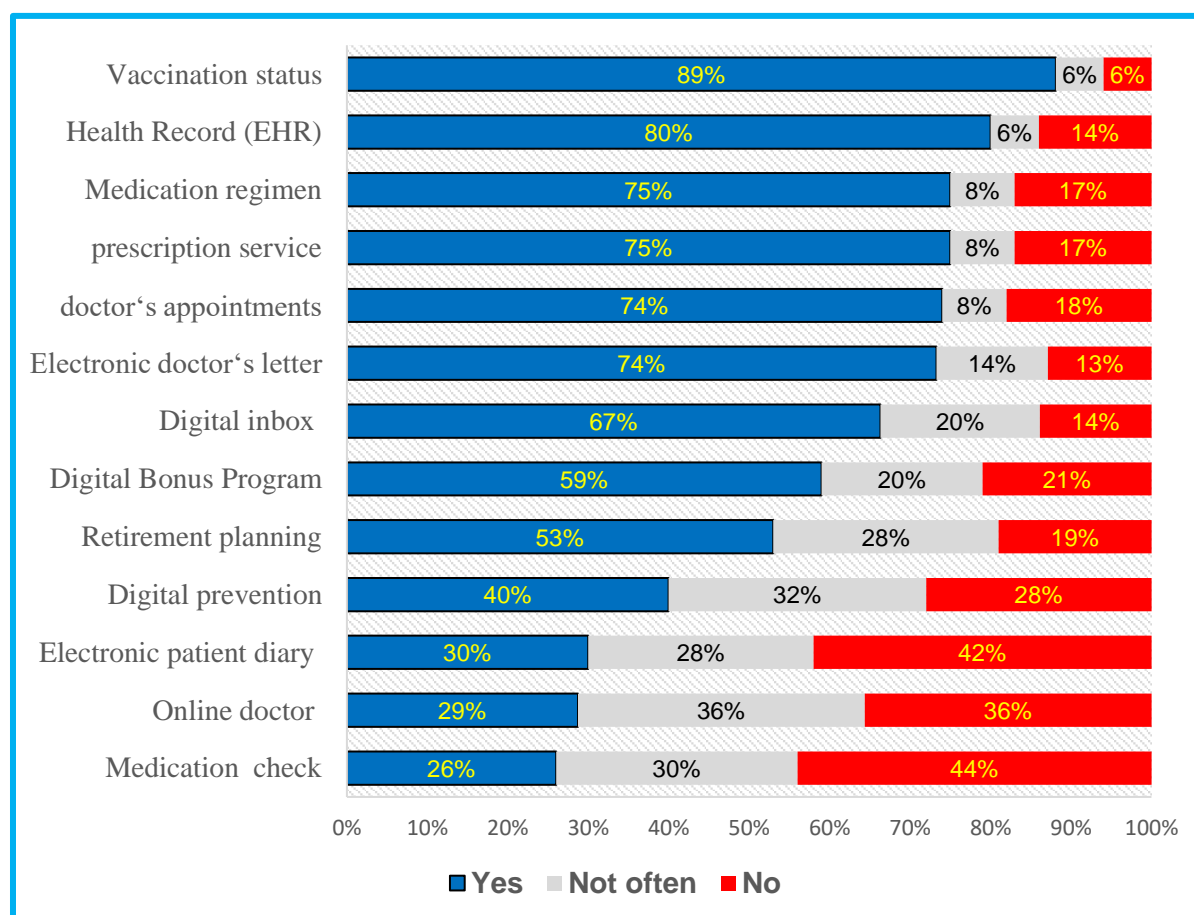
4. Educational Level

Primary and secondary school	2
Vocational school	6
College / Graduate Higher school	16
University Graduate	65



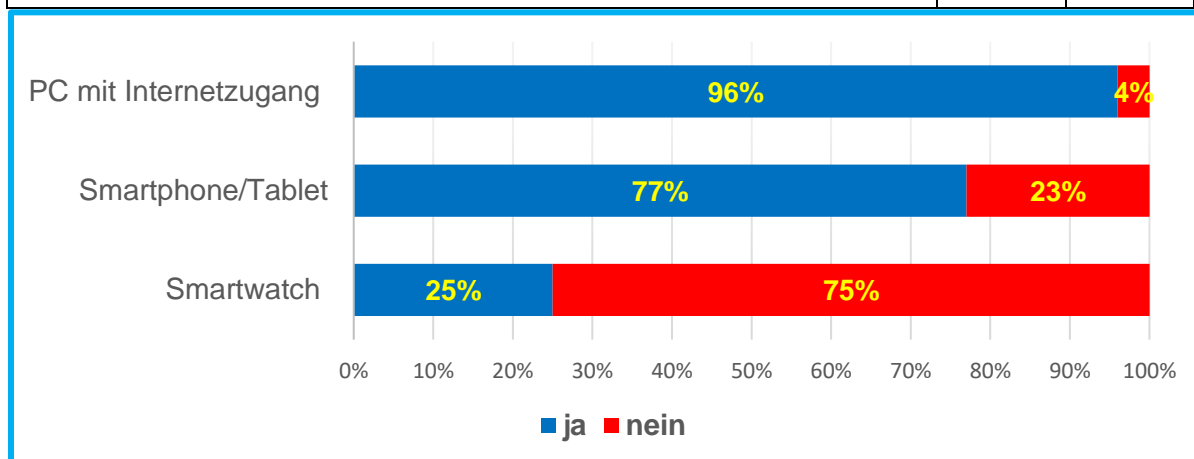
2. Which of the following telemedicine services would you use?

	Yes	Not often	No
Vaccination status	78	5	5
Electronic Health Record (EHR)	72	5	13
Online scheduling of doctor's appointments	67	16	7
Electronic prescription service	66	7	16
Medication regimen	65	7	15
Electronic doctor's letter	64	12	11
Digital inbox at your health care provider	58	17	12
Digital Bonus Program	50	17	18
Retirement planning	44	23	16
Digital prevention and treatment	34	27	24
Online doctor (per telephone or video conference)	25	31	31
Electronic patient diary (such as pain diary)	24	23	34
Medication adherence check	22	25	37



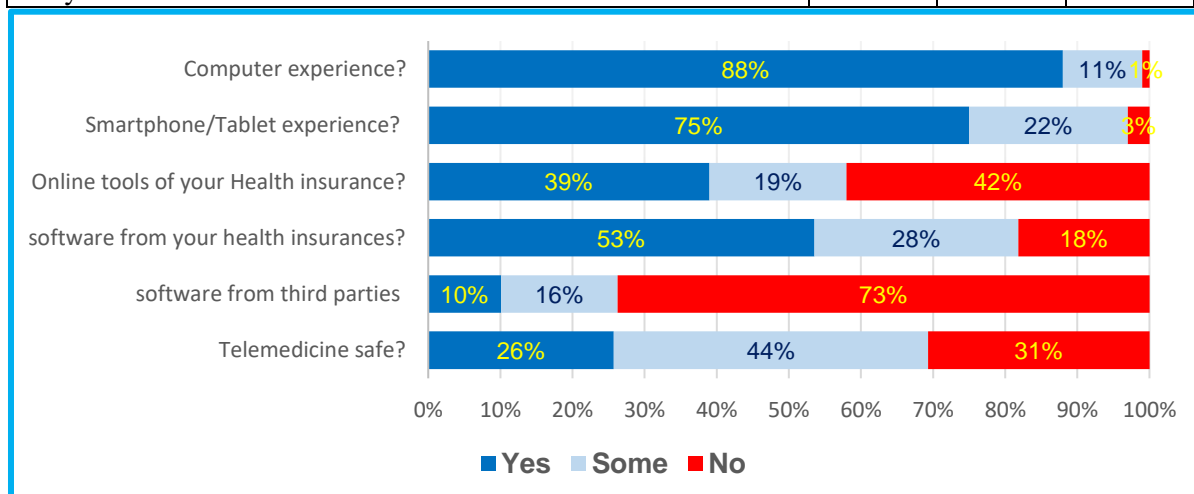
3. Which of the following technical devices do you have available to you?

	Yes	No
Personal computer with Internet access and printer	86	4
Smartphone / Tablet	67	20
Small portable computer (such as a smart watch, etc.) to collect health data	21	62



4. How do you currently use technical devices?

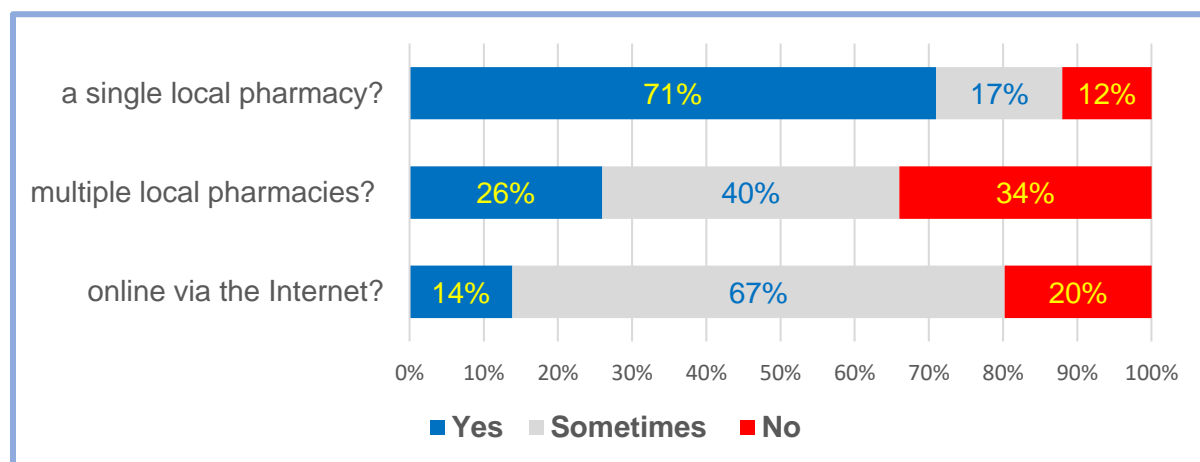
	Yes	Some	No
Do you have any previous computer experience?	79	10	1
Do you have any previous Smartphone/Tablet experience?	66	19	3
Do you know the online tools (software programs) offered by your Health insurance?	34	17	37
Do you know the online tools (software programs) offered by your Health insurance?	47	25	16
Would you use software programs from third parties (other than your Health insurance)?	9	14	63
Do you consider telemedicine as safe?	22	37	26





5. Buying prescription medication

	Yes	Sometimes	No
Do you usually buy your prescription medication in a <u>single</u> local pharmacy?	61	10	15
Do you usually buy your prescription medication in <u>multiple</u> local pharmacies?	23	30	35
Do you usually buy your prescription medication online via the Internet?	12	17	58



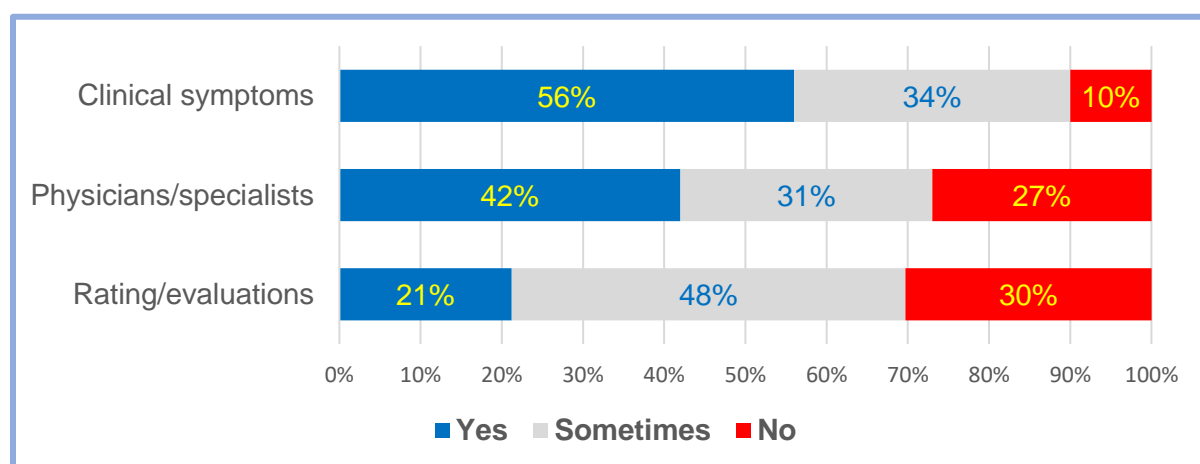
Which reasons are important for the decision of your medication supply?

- Distance to home / accessibility 27 of 63 43%
Walking distance, distance between doctor, home and pharmacy and parking facilities are important for the decision to go to the pharmacy.
- For the specific pharmacy the following reasons are listed: 29 of 63 46 %
trustworthy contact person,
Advice on how to use the medication,
Offer to bring the medication to the place of residence,
Keeping a customer file, which allows comparison with all the patient's medicines for compatibility, and at the end of the year an overview of all medicines, which then facilitates the tax return.
- Price 15 of 63 24 %
A trade-off between the price demanded by the regular pharmacy and online pharmacies is not only made for non-prescription medicines.
- Other: 3 of 63 5 %
Convenience, depending on the route in the big city and so far only little need for medicine



6. Do you use the Internet to search for the following information:

	Yes	Sometimes	No
Clinical symptoms, treatment options, medication/remedies	50	30	9
Physicians/specialists, hospitals, nursing homes	37	28	24
Rating/evaluations for physicians/specialists, hospitals, nursing homes	19	43	27

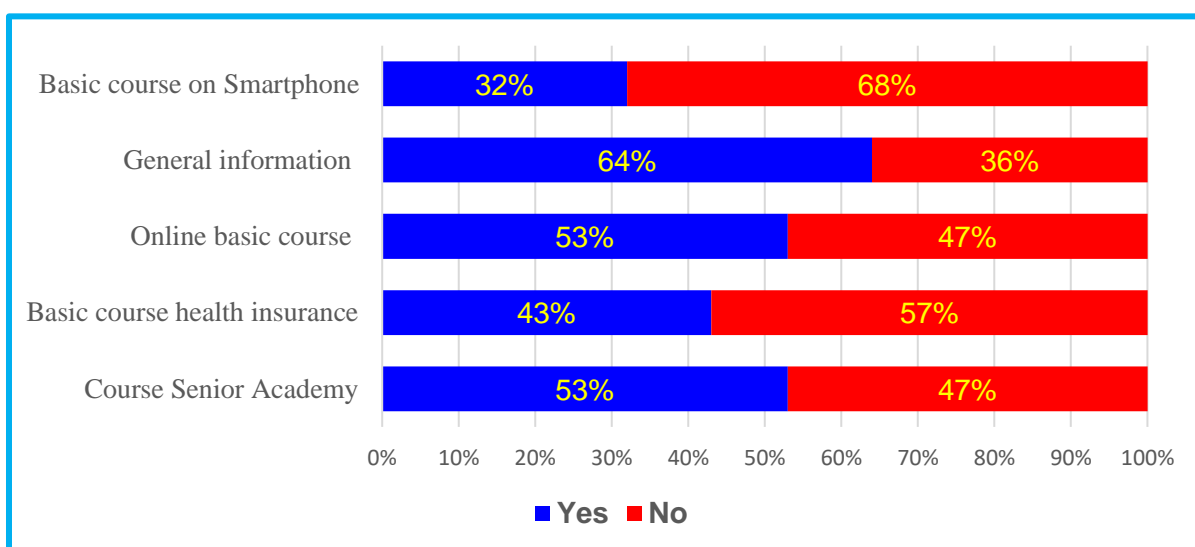


What problems do you see with information on the net?

- First and foremost is the credibility of the information on the net. Much information is anonymous and cannot be verified. This means that bought false information with commercial backgrounds, e.g. from the pharmaceutical industry, can also be included. Sources are often missing. It is recommended to search for scientifically proven data and to compare different results. As a non-medical person, it is difficult to assess the truth of the information.
- There are many concerns about data protection. Hacker attacks and misuse of personal data are feared.
- No holistic view is possible on the internet. One can only ever select one clinical picture. That is why a doctor should always be consulted in case of problems.
- Some respondents criticise the inserted advertising and the influence of sponsors. Therefore, the information cannot be trusted objectively.
- When evaluating doctors, many are suspicious and think that the information is manipulated or bought.
- A very small part of the respondents generally reject information on health issues from the internet.
- It is difficult to determine the number of answers, because often several arguments were mentioned by one person.
- The respondents are very critical of information from the internet and always choose to go to the doctor in case of emergency.

7. Which support would you find helpful when setting up a telemedicine system?

	Yes	No
Basic course on Smartphone/Tablet use	23	49
General information about telemedicine (for instance documentation and flyers from your Health insurance)	52	29
Online basic course (including demonstration on how to use the system)	40	36
Basic course/seminar provided by your health insurance	31	41
Basic course/seminar provided by the Senior Academy	39	35



8. Your further comments

- Medical care could be stabilised through digital applications - especially in rural areas. The advantages of telemedicine are emphasised several times,
- However, the majority of comments point out that direct contact with the doctor must not be neglected.
- Data protection is another important point. Electronically available patient data arouses suspicion; the minimisation of data collection is therefore urged. There is also a warning against medicine being made more expensive due to the availability of digital methods.
- Especially for older and less experienced users, there should be clear explanations of the software in written form and in German.

Results

Most participants come from the environment of the Senior Citizens' Academy and have a correspondingly high level of education, 91% have a university or technical college education. The age range is between 61 and 80 years old, 14% are older than 81.

Of the many future possibilities of digital medicine, the vaccination status, electronic patient files, prescriptions and doctor's letters would be particularly used. Other procedures such as teledoctor or control of tablet intake are obviously less popular.

Those with access to a PC or smartphone is very high, as is the previous knowledge for these devices. Smartwatches or similar devices for recording health data, on the other hand, are only used by 25% of the participants.

The online offers of their own health insurance companies are unknown to 42%, but would be used by about 80%. The question about the security of telemedicine was answered with yes by 26% of the respondents and with no by 31%.

The majority of participants use **one** pharmacy. 14% buy their medicines from an internet pharmacy regularly, about two thirds sometimes.

About 90% use information about diseases and therapies on the internet. Three quarters use the internet to search for specialists etc. and almost as many read the ratings of medical facilities on the internet.

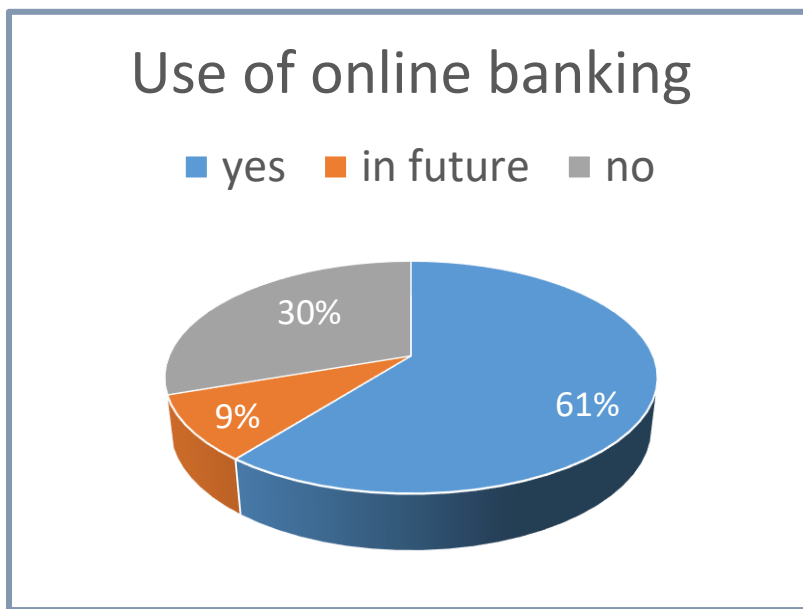
Introductory courses in smartphone use are desired by relatively few. Written information about telemedicine from the health insurance companies is desired by over 60% of the participants. More than half can imagine support in the use of telemedicine through courses offered by the senior citizens' academy or other educational institutions.

In addition to the answers to the tabular questions, well over 100 personal comments were made. In addition to positive comments on digital medicine, the importance of personal contact with doctors and pharmacists was emphasised. The impersonality of digital methods as well as the concern about manipulated information and data security are of great importance.



Zusammenfassung und Schlussfolgerungen

In der oben zitierten Studie der Deutschen Bank wurden Personen ab 18 Jahren befragt, Onlinebanking wird von 79 % genutzt und von 21 % nicht. Die niedrigere Zahl der Nutzer und die entsprechend höhere Zahl der Nichtnutzer liegt wahrscheinlich am Alter der Probanden in der vorliegenden Studie.



61 % nutzen Onlinebanking

30 % nutzen Onlinebanking nicht

9 % wollen in Zukunft Onlinebanking nutzen

Die technischen Voraussetzungen für das Internetbanking (Internetzugang oder Computer) fehlen etwa 15 % der Befragten. Im Gegensatz zur PC-Nutzung geben lediglich 70 % der Smartphone Nutzer ausreichende Vorkenntnisse an. Wichtige Kriterien für die Nutzung von Onlinebanking sind Sicherheit, Schutz vor Hackerangriffen, einfacher und verständliche Bedienung, aber vielen Bankkunden fehlt auch der persönliche Kontakt zu Bankmitarbeitern.

Die Mehrheit der Befragten, auch ein Teil derjenigen, die bereits Onlinebanking nutzen, erwartet beim Onlinebanking Unterstützung durch die Geldinstitute, auch wegen der unterschiedlichen Verfahren. Hilfe von neutralen Bildungsträgern wie der Seniorenakademie wird von ca. 20% gewünscht. In diesen Schulungen sollten vor allem die verschiedenen Möglichkeiten von Onlinebanking vermittelt werden, die Sicherheit der Verfahren erläutert und Bedenken entkräftet werden.