Access and utilization of public and private Primary Health Care among adults and elderly people with chronic condition(s) in Albania

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Dean

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Executive Summary

Introduction

All around the world, non-communicable diseases (NCDs) are a growing burden. There is evidence that well-coordinated NCD care of good quality, while reducing barriers and alleviating the household's high expenditures on NCD treatment, can be achieved through more integrated primary healthcare (PHC) service delivery, instilling proper health-seeking behaviors among the population, and updating the role of nurses and rolling out new models of care. Although a substantial part of NCDs can appropriately be handled by PHC services and outpatient settings, the elderly adults are highly and disproportionately burdened by them. Evidence reveals that over 400 million people have limited access to quality health care services, many of whom are living in low and middle-income countries (LMICs) and are being pushed to poverty as a result of high Out of Pocket Payments (OOPs) after NCD treatments. While the importance of PHC services in LMICs is generally recognized, the documentation of effective access and use of PHC services and mobilization is not sufficiently documented or studied amongst this population.

This holds true for countries in the Western Balkans, including Albania. Although these countries have demonstrated a commitment to strengthening their PHC systems and implement Universal Health Coverage (UHC) principles, they lack the research on use and/or bypass of PHC services, have high OOPs, and have poor information on patients' rights to access and quality of care. What guides a patient's decision to use private outpatient services that are also offered by the public sector is poorly understood. Information on demand is limited in the literature; specifically, there is limited knowledge of the dynamics and patterns of care-seeking behaviours among adults and the elderly utilizing NCD services and their associated OOPs.

This Ph.D. research is aligned to the Swiss Agency for Cooperation and Development (SDC) "Health for All Project HAP" implemented by the Swiss Tropical Public Health Institute, aimed at generating new scientific evidence which in turn contributes to improve access to good quality PHC services in Albania.

Aim and objectives

The aim of this thesis is to analyse access, quality and utilization patterns (health -seeking behaviours and OOPs) of PHC services in Albania as well as the use of private and governmental services. The specific objectives are to (1) analyse users' perspective of public and private PHC services pertaining to non-clinical quality of care, (2) investigate factors and motivators that influence the choice made by adults and the elderly to either utilize public or private outpatient facilities (3) assess the care seeking behaviours of adults (aged 18-59) who suffer from NCDs and compare them to the patterns of the elderly (aged >=60) and establish a possible relationship between sociodemographic variables and care-seeking behaviours, and (4) assess the financial barriers and OOPs related to consultations, tests and medicine prescription patterns as self-reported by people suffering from NCDs.

This dissertation seeks to provide insights into patient access and the perceived quality of public and private healthcare. Additionally, it seeks to better understand care seeking behaviours, OOP patterns, and other characteristics of the population suffering from NCDs in Albania and other countries in a similar PHC development phase.

Methods

A household survey among 1,116 households in two regions of Albania was conducted in 2018 along a facility-based survey among 954 patients from 23 public healthcare facilities and 5 private outpatient clinics. These surveys were used to assess points of access to NCD care and the perceptions of quality of care amongst households using public or private providers. An adapted framework on access to care was first elaborated by Penchansky and Thomas (1981), who summarised a set of dimensions that described the fit between the patient and the healthcare system. This framework was used as a guide for this thesis to define, namely, access, availability, affordability, adequacy, and acceptability.

First, the health facility-based-survey included exit interviews to determine information from patients' experiences and expectations on non-clinical quality of care and factors motivating them to choose and utilize a certain type of provider (Objective 1 & 2). Then, the household survey

was conducted to capture information on the healthcare seeking behaviours of adults and the elderly while managing their NCDs and associated OOPs (Objective 3 & 4).

To assess data collected, descriptive statistics were used to measure perceived non-clinical quality at outpatient clinics in the public and private sector. The World Health Organization health system responsiveness questionnaire was applied, which is based on a 4-point scale, along with 8 non-clinical domains of quality of care (dignity, communication, coordination of care, confidentiality, choice, autonomy, prompt attention and quality of amenities). Additionally, linear mixed models were used to investigate the association between the utilization of the type of health facility (public or private), and the perceived non-clinical quality of care, adjusting for patients' sociodemographic characteristics (Objective 1).

In order to scrutinize the factors, motivators, and rank of importance when choosing to consult public or private facilities, descriptive statistics were employed, first using a 4-point Likert scale questionnaire (Objective 2). Then, mixed logistic regression models were used to reflect the association between sociodemographic characteristics and patients' decision to select a given provider (public vs. private).

Using the information gathered from the household surveys (Objective 3), descriptive statistics were used to compare the care-seeking behaviours of adults and the elderly. We then employed binary and multinomial logistic regression to assess factors associated with the type of service provider used by adults and the elderly over the last 8 weeks (PHC vs. hospital). Lastly, mixed logistic regression models were employed to assess the association between OOPs and the following: age; gender; residency; health insurance; marital status; type of chronic condition(s); and other barriers they encounter (Objective 4).

Results and Discussion

Objective 1: Non-Clinical Quality perceptions among public and private PHC users

The results showed that urban PHC services and private outpatient clinics do perform similarly in respect to attributes of non-clinical quality of care (coefficient = 0.12, P = 0.27). However, patients in rural areas who attended PHCs were consistently less critical, corresponding

to a higher level of agreement with quality of care domains (coefficient = 0.2, P=0.01). Overall, the highest mean score reported was for the domain "communication" (3.75), followed by "dignity" (3.65). The lowest mean scores were given to "choice" (2.89) and "prompt attention" (3.00). In terms of importance of domains (the theoretical point of view of what constitutes good quality of care), patients pointed to dignity, communication, and prompt attention as the most important attributes of the quality of non-clinical care (irrespective to the type of clinic attended). Contrastingly, "autonomy" was reported to be the least important attribute of quality, implying a paternalistic behaviour of providers. Though the patients' ratings were high, there is need for caution in interpreting them, as they may not be truly reflective of the value of patients' satisfaction. This is because the rating may be subject to limited awareness, cultural beliefs, and lack of knowledge on the non-clinical quality aspects of healthcare services.

Objective 2: Drivers and motivators to use public and private PHC services

The prevailing determinants for choosing a provider for all patients were 'quality of care' and 'the attitudes of healthcare professionals'. By looking solely at patients who used a public provider, 'geographical proximity' was the most important factor guiding their decision (85% vs 11%, p<0.001). For the patients who used a private provider, 'availability of diagnostic devices' was the most important factor (69% vs 9%, p<0.001). The odds of using public facilities were significantly higher among the patients who perceived their health as poor (OR 5.59; 95% CI 2.62 to 11.92), patients who suffered from chronic conditions (OR 3.13; 95% CI 1.36 to 7.24) or patients who were benefiting from a socioeconomic aid scheme (OR 3.52; 95% CI 1.64 to 7.56). In summary, utilization of public providers was strongly influenced by geographical and financial access, while availability of equipment is the driving force for patients who used private providers. This study found that aspects of acceptability and adequacy of services are equally valued be tween patients who used public and private providers.

Objective 3: Care-seeking behaviours among adults and the elderly

The household survey showed that public facilities, namely PHC facilities and hospitals, were the main providers for those who initiated and sought regular NCD care (over 90% of the population sampled). While the elderly were more likely to attend a PHC facility to initiate

treatment of their chronic conditions, or to have them followed up (OR 1.56; 95% CI: 1.04; 2.35), a substantial proportion of adults (aged 18-59 years) initiated or sought regular NCD care at a hospital (adults 46% vs. elderly 32%, p < 0.01).

Moreover, individuals who suffered from hypertension used PHC services more frequently than hospitals (OR 1.94; 95% CI: 1.32; 2.85). A positive association was found between living in an urban area and seeking care for NCDs at polyclinics (OR 10.1; 95% CI: 2.1; 50.1). The most frequently reported reason for not consulting a PHC provider was that patients received a referral to have laboratory tests conducted that are not available at the PHC level. In conclusion, these findings indicate that elderly patients are more likely to attend PHC facilities, while adult patients prefer to go directly to the public hospitals. The choice to consult public hospitals over PHC facilities could be attributed to factors such as availability of services, required tests availability, and instant referrals.

Objective 4: Out-of-Pocket Payments and Access to NCD medication

Out-of-pocket payments occurred throughout the NCD treatment process: for consultation (36%), diagnostic tests (33%), and for drugs purchased (88%). Within the previous 8 weeks of the interview, 95% of those who consulted a provider also received a drug prescription. Among them, 94% were able to obtain all the drugs prescribed. Regardless of the plausible accessibility and availability of medicines, medication is the highest component of household health expenditures (62%). Respondents with health insurance had a decreased likelihood of making OOPs throughout the health-seeking process. These findings align with other study results and policy reports/briefs in that health insurance is an optimal strategy for overcoming the phenomenon of OOPs. Further, the results indicate a lower likelihood of the elderly population making any OOPs. The implications of these results are that the elderly should receive PHC level support, correctly adhere to the PHC referral system, and adhere to the general family doctor rules related to drug prescriptions and referrals.

Patients who encountered any form of barrier while seeking care had increased odds of OOP payments for consultations (OR; 2.25 95% -CI; 1.56; 3.24) and tests (OR; 1.64 95% -CI; 1.14; 2.36). Patients attending a PHC facility were less likely to make OOPs compared to those attending a hospital.

Conclusion

This study was undertaken to contribute to the limited knowledge and evidence related to access and quality of PHC healthcare in Albania and other Western Balkan countries. It provides new and additional insights into the drivers and motivators of the utilization of public and private services, care seeking patterns among adults and the elderly, and associated OOPs.

This thesis provides a number of findings and alongside several policy options that may be taken into consideration. The findings of this research suggest that public and private providers have high and similar views on the quality of non-clinical care. However, prompt attention and coordination of care need additional improvement to meet patients' expectations of good quality of care.

We found that patients do not evaluate aspects of autonomy as important in the process of care. Hence, it is necessary to institutionalize strategies to ensure patient centred care and active involvement of patients and caregivers such as providing regular and short-term meetings or sessions dedicated only to open conversations related to patients' autonomy and self-management of the illness. An extension of programs/schools should be introduced in order to improve patients' self-management of disease and active involvement in the decision-making process.

Additionally, prescribing regulations that require frequent referrals to specialists for treatment plan decisions leave out the of the decision-making process the PHC doctor. Here it is imperative to make the PHC physician and nurses a part of the NCD treatment plan. In order to deliver holistic, patient-centred, integrated PHC services requires redefining the roles of doctors and nurses and strengthening their clinical and attitudinal competencies, including training in the social dimensions of care.

The findings suggest that patients are less satisfied with promptness of attention, especially in the rural areas. Given the aging population and concomitant rise of chronic health conditions, home care models should take more time from the current time-motion to reach out to communities and increase promptness of response of services.

The use of PHC by participants in this study was strongly influenced by geographical and financial access to public facilities and availability of equipment at the level of private providers.

Hence, aspects of acceptability and adequacy of services are equally valued, regardless of the type of provider attended (public or private). This enforces the necessity to additionally improve physical infrastructure of PHCs and provide the centres with proper medical equipment.

The research findings suggest public facilities were reported as the main providers for initiating care and obtain treatment for the chronic condition(s) over the last 8 weeks. While a majority of elderly people visited a PHC to initiate treatment (and follow up) on their chronic conditions, a substantial proportion of adults (aged 18–59) initiated and sought regular NCD care at a hospital level through self-referral, bypassing PHC services. In order to foster and scale management of chronically ill patients in primary care settings in Albania, there is a need to effectively tackle the patients 'self-referral behaviour or potentially instant referral by the doctors, thereby increasing the potential for PHC to better contribute to NCD follow-up. Such goal can be achieved through: (i) instilling appropriate health -seeking behaviours and acknowledge the long-term benefits of PHC among population and (ii) increase referral support (i.e. appoint in each PHC facility a 'coordinator for NCDs' who provides care coordination for people with chronic conditions, such as through education, assistance in navigating the health system, and addressing the social determinants of health. Another option for Albania could be the (iii) 'one-stop' shop centres, where clinical and community-based professionals are brought together at one site (colocation), organized around the needs of local populations (Shahzad et al., 2019).

The research findings suggest that the out-of-pocket payments largely concern the purchase of prescribed drug and they are the most important cost driver for the NCD patients. The high OOPs on medicines might be linked to inappropriate prescribing patterns or influenced by the pharmaceutical industry. Here, it is of importance to raise the population's awareness on patients' rights, and knowledge on their entitlements from health insurance and on the current health reforms. In line with several other studies results and policy notes, we found that respondents with health insurance were less likely to make OOP across the health seeking process.

In summary, to improve access and quality of PHC care in Albania, there are system level and patient level recommendations.

At the system level, there is need to redefine the role of doctors and nurses, improve PHC infrastructure and medical equipment, reduce access barriers and tackling further the high costs of

drugs, and implement a new PHC service model by integrating health and social services to accommodate the specific needs of vulnerable groups of the population. Defining and expanding an explicit package of benefits for people suffering from NCDs, including here preventive (educational), diagnostic, and palliative services, would improve access and coordination of care and possibly alleviate health expenditures. At the patient level, there is a need to instil appropriate health-seeking behaviours, acknowledge the long-term benefits of PHC and increase referral support. Local authorities and decision-makers should be engaged in the assessment of healthcare needs, policy decisions, and health services through new/more competent departments at the municipality level.

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List of abbreviations

PHC Primary healthcare

UHC Universal Health Coverage

SDG Sustainable Development Goals

NCDs Non-communicable diseases

ADHS Demographic and Health Surveys

MoHSP Ministry of Health and Social Protection

MHIF Mandatory Health Insurance Fund

WHO World Health Organization

ODK Open Data Kit

HC Health centers

LIMC Low- and Middle- Income Countries

EU European Union

SEE South-Eastern European countries.

FSDKSH Compulsory Health Insurance Fund

PPP Public Private Partnership

IHD Ischemic heart diseases

PEN Package of Essential Noncommunicable Disease Interventions

IHME Institute for Health Metrics and Evaluation

NCQSAHI National Centre for Quality, Safety and Accreditation of Health Institutions

ANHS Albanian National Health Strategy

HAP Health for All Project

Swiss TPH Swiss Tropical and Public Health Institute

List of publications and working papers

Manuscript I

Gabrani J, Schindler C, Wyss K. Perspectives of public and private primary healthcare users in two regions of Albania on non-clinical quality of care. *J Prim Care Community Health*. 2020;11:2150132720970350. DOI: 10.1177/2150132720970350

Manuscript II

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2020;10(12):e040398. DOI: <u>10.1136/bmjopen-2020-040398</u>

Manuscript III

Gabrani J, Schindler C, Wyss K. Health seeking behavior among adults and elderly with chronic health condition(s) in Albania. *Front Public Health*. 2021;9:616014.

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Manuscript IV

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Editorial V

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1 Introduction

1.1 Accessible and quality Primary health care services to tackle the global burden of NCDs and achieve UHC

1.1.1 NCD burden as a contemporaneous challenge

Over the last decades, the shift from infectious diseases to non-communicable diseases as major cause of premature mortality and disability is world-widely observed. NCD are nowadays major contributors to the burden of disease. At a global level, 7 of the 10 leading causes of deaths in 2019 were noncommunicable diseases. Thus, according to a report released by World Health Organization (WHO), in 2019, NCD contributed to 74% of deaths worldwide (WHO 2021) NCD is classified into key groups that include cardiovascular diseases such as brain disease and ischemic heart disease, chronic respiratory diseases, for instance, bronchial asthma and chronic obstructive pulmonary disease (COPD) as well as Type 2 diabetes and cancers.

Initially, NCD was viewed as a public health problem that affected wealthy countries, however, this has changed significantly as their prevalence has increased across rural populations comprising of low- and middle-income countries (LMICs).

Each year NCD contributes to the death of over 41 million people globally which sums up to 71% with an average of 15 million people dying prematurely at the age of 30 and 69 years. Based on the WHO report 77% of the total NCD deaths occur in LMICs. The key four diseases that contribute to the high number of NCD deaths include cardiovascular diseases that result in over 17.9 million NCD deaths per year, cancer which accounts for 9.3 million deaths followed by respiratory diseases that contribute to 4.1 million deaths, and diabetes resulting in an average of 1.5 million deaths. The four diseases are responsible for 80% of the existing premature NCD-related deaths. (PAHO/WHO 2021) Despite the significant decline in mortality of these diseases, there is a continuous increase in the number of people affected by the diseases calling for the integration of effective strategies to promote prevention as well as control their prevalence. For

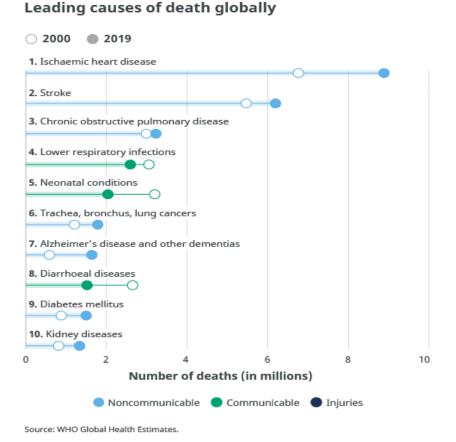
instance, regarding diabetes, it is emphasized that the number of adults suffering from diabetes will increase by 69% in developing countries while a significant rise of 20% will occur in developed countries by 2030. (Shaw, Sicree, and Zimmet 2010)

Population aging is highlighted as a key contributor to the heavy burden of managing chronic diseases resulting in a relative increase in cost incurred by the national health care systems. Projections of 2025 to 2030 reveal that the population aged 60 years and above will increase at 4 times higher than the total population securing a 2.8% annual growth rate while the total population will be growing at a rate of 0.7%. Research studies suggest that over 80% of the older population across the world will be living in relatively less developed countries by 2050 (United Nations 2015b) following a rise in chronic health-related problems such as hypertension, cancer, and diabetes. The older population living in LMICs are at a higher risk of suffering from NCD (Kämpfen, Wijemunige, and Evangelista 2018). On the contrarily, the key diseases causing chronic disability in high-income countries include mental illness such as anxiety disorder and depression, musculoskeletal disorders like lower back pain, asthma, chronic obstructive pulmonary disease as well as diabetes. The period between the year 2000 and 2019 reported an increase in the number of deaths from diabetes by 70% globally. The report indicated a significant increase in males deaths by 80% (PAHO 2020) with the figure possibly to continuously increase over the next twenty years following a rise in obesity and overweight cases (Janssen, Bardoutsos, and Vidra 2020). (Figure 1)

In Europe stroke and Ischemic heart diseases (IHD) are categorized as key triggers of premature mortality. Alzheimer's disease also falls among major causes of death as it was ranked third in both Europe and America in 2019. According to (PAHO 2020), women are the most affected as they account for 65% of the total number of Alzheimer's deaths globally. Overall Central and Eastern European countries experience high cases of stroke and IHDs unlike their counterparts in the Western countries. Among the key risk factors contributing to an increased number of NCDs is an adaptation of poor lifestyle behavior such as consumption of highly saturated fats, alcohol intake, and smoking as well as non-engagement in physical activities. Both traditional risk factors such as consumption of food components with low nutritional value, tobacco smoking, and high blood pressure as well as non-traditional risk factors including air pollution contribute to increased prevalence of NCDs (Benziger, Roth, and Moran 2016).

In a motive to combat the impacts of NCDs in population, the WHO has designed an effective strategy and action plan applicable worldwide promoting overall prevention of NCDs. The Sustainable Development 2030 Agenda highlights NCD as a key health challenge that limits the achievement of sustainable development (Sustainable Development Goals (SDG) target 3.4). The Agenda calls for the involvement of both government and head of states to integrate effective NCD treatment and prevention measures that purpose to reduce premature deaths by a third by 2030 (United Nations 2015a).

Figure 1. Mortality from NCDs, 2000-2009 WHO



Source: WHO https://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death

1.1.2 Approaches of Primary health care to attain NCDs prevention and control

Evidence has increasingly highlighted the role of the Primary health care (PHC) approach in effectively and equitably addressing NCDs. WHO highlights two major historical moments that is 1978 Declaration of Alma Ata (WHO, 1978) and the 2018 Astana Declaration as evidence to acknowledge the effort made by PHC in controlling NCDs. (WHO, 2018)

Both declarations admit increased cases of NCDs and the existence of the common risk factors ranging from consumption of unhealthy diets, limited participation in physical activities, and tobacco and alcohol intake revealing the vital role of PHC in combating these factors. NCDs management guidelines include the provision of palliative care for diverse patient's needs and early detection and treatment of NCDs-related diseases.

Primary health care facilitates the incorporation of such interventions enhancing timely treatment as well as early detection. Evidence revealed that the interventions are crucial in relieving economic burden as they assist in reducing treatment costs. Countries having limited health insurance covers are less likely to offer universal access important in enhancing the implementation of NCDs interventions. The management interventions of NCDs are essential in facilitating the achievement of a 25% worldwide target of reducing premature mortality rate caused by NCDs by 2025 as well as attainment of a third decline in NCDs premature deaths by 2030 as per SDG target.

PHC's offer accessible and comprehensive community-based care that fulfills the diverse health needs of individuals. The key principles guiding the operation of PHC include health promotion, accessibility, and participation of community members, intersectoral collaboration, and effective utilization of technology. According to WHO, there are 3 key components of PHC; the first is primary care and essential public health functions as the core of integrated health services, the second is the embracement of multisectoral policy and actions and the third competency is empowering communities and individuals. (WHO, 2021)

Given that primary care is the first contact patients get in touch with within a specific health system, countries have recognized its importance in promoting the overall delivery of better and quality care supporting the technologies and methods utilized by PHC to serve populations, families, and individuals. PHC approach has been acknowledged in extending care services to

resource-constrained areas by mobilizing training of caregivers and healthcare providers. The current review reveals that the service approach is applicable in both low and high-resource settings. Furthermore, the PHC approach not only offers communities an opportunity to access better healthcare but also promotes efficiency, safety, equity, effectiveness, and timelessness delivery of healthcare services. Additionally, it assists healthcare providers to attain desired health outcomes at relatively low cost as well as empower health service users (Haque et al. 2020).

PHC is recognized as the most appropriate approach to enhance the *delivery of patient-centered care* to individuals suffering from NCDs. PHC supports the adoption of an integrated approach to address healthcare issues and enhance prevention. It emphasizes on prioritization of primary care by all stakeholders involved including the government, non-governmental organizations, development partners, at global, regional and country levels, thereby empowering health systems to provide integrated patient-centered care at all levels. (WHO 2018a)

PHC's rationale of encouraging *community participation* enhances the successful incorporation of NCDs prevention and control interventions. For instance, to attain healthy lifestyle changes such as weight loss, engagement in physical activities, and consumption of healthy diets, tobacco cessation, and control of high blood pressure calls for continuous community commitment to successfully induce positive behavior change by offering social support. Additionally, PHC emphasizes on consideration of individuals and community health needs and empowers people to practice self-care promoting overall health wellbeing (Demaio et al. 2014)

The embracement of *inter-sectoral collaboration* as well as the involvement of other private sectors by PHC is crucial in addressing the negative impacts posed by chronic conditions such as financial crisis, health, and social threats. Thus the involvement of the government and private sector is necessary to reduce chronic condition prevalence given that such impacts affect not only the health sector but also other economic and social sectors. (Demaio et al. 2014)

PHC focuses on advocating for equity to avoid burdening low-income and poor families. This helps in combating poverty thereby controlling the spreading of NCDs since poverty encourages the adoption of poor lifestyle behaviors such as smoking and alcohol intake. The approach encourages equal healthcare access to all including the vulnerable groups such as the elderly and the poor affected by NCDs. (WHO 2018a)

PHC calls for the utilization of effective technology given that it enhances the successful implementation of updated treatment and prevention programs as revealed by the 2010 WHO-Package of Essential Noncommunicable (PEN) Disease Interventions for Primary Health Care document. (WHO 2010) Integration of technology is important in enhancing effective management of NCDs by promoting efficiency in medical equipment, human resources, and care delivery. WHO-PEN is a tool to improve access of cost effective interventions to the poor even in resource constrained settings, including health education, promotion of healthy behaviours, early diagnosis of NCDs and their risk factors. Moreover, it employs inexpensive technologies, affordable medications for prevention and treatment NCDS, regular follow-up and referral. However, there is little global evidence about the successful implementation and effectiveness of PEN interventions in programmatic settings, putting as main impeding factors the lack of medicines and high loss to follow up (Aye et al. 2020).

Numerous reports reveal that the PHC approach supports the delivery of *high-quality health care services* by improving access to care thereby increasing patient satisfaction as well as relatively reducing health costs. This can assist in reducing the mortality rate and premature deaths caused by CVDs, chronic respiratory diseases and cancers.

PHC supports Universal Health Coverage (UHC) as global leaders work on the achievement of UHC come 2030. PHC functions effectively and in alliance with UHC as it advocates for access to high-quality health care services at affordable ratings. Evidence reveals that over 400 million people have limited access to quality health care services with an average of 6% of people living in LMIC being pushed to poverty following catastrophic health spending (WHO, World Bank Group 2015). Empowering PHC is a key step in supporting UHC to enhance the delivery of essential health services to all in a caring, accessible, and cost-effective way.

1.2 Albania and Selected Key Characteristics of Albanian Health System

Albania joined the ranks of middle-income countries in 2008. Key health system performance indicators in Albania are mixed. While health outcomes are relatively good by regional standards, financial protection of households against high out-of-pocket payments (OOP) is weak, and quality of care is a significant concern (World Bank, 2014). Spending on the health sector (both public and total spending) remains below average, with high out of pocket costs. Albania spends 6 percent of Gross Domestic Product (GDP) on health care, of which 43 percent comes from the governmental sector. Public spending is dominated by hospital expenditures, amounting to over 57 percent of all expenditures (much higher than the OECD average of below 40 percent), with a disproportionate budget share going towards specialized tertiary services (World Bank, 2014). This reinforces the pattern of patients bypassing first and second level facilities to seek care at high-cost tertiary hospitals (Akshia, Dibra, 2018).

Out of pocket payments (OOP) are among the highest in the region, accounting for almost 55 percent of total expenditures on health; These are spent on outpatient health services (45 percent), pharmaceuticals (45 percent), and inpatient services (10 percent): only about 61 percent of the population (and half of the poorest quintile) is covered by social health insurance. The healthcare system in Albania is mostly public, although private healthcare has become increasingly popular. The public healthcare service is organized at the primary, secondary, and tertiary service levels. Approximately 413 health centers branched out into 2,053 ambulances, as well as 46 specialized polyclinics, offer primary healthcare services and 42 public hospitals offer secondary and tertiary healthcare services. (World Bank, 2014) Pharmaceutical and dental services are almost entirely private. The share of private healthcare services has experienced impressive growth in the last decade. The number of specialized private diagnostic clinics, labs, and hospitals has been growing at a fast pace, especially in major urban areas. The 13 private hospitals, as well as dozens of private multi-disciplinary diagnostic clinics and labs, offer a full range of medical services. (Jacellari, 2019)

Public healthcare spending is partially financed by compulsory health insurance contributions by employees and employers (a 3.4 % health insurance contribution, divided evenly between employer and employee, is imposed on salaries) and subsidized by the state budget. The

Healthcare Insurance Scheme has started implementation in 1995 as an important mechanism for the reformation of healthcare and improvement of the quality of offered services.

The Compulsory Health Insurance Fund (FSDKSH), funded by the health insurance contributions and subsidized by the state budget, reimburses the prescription drugs for the insured and pays for the public healthcare services as well as some approved hospital healthcare services provided by the private healthcare providers. The FSDKSH budget for 2018 was \$374 million, out of which \$97 million was earmarked for the reimbursement of 1,175 prescription drugs, \$73 million for financing primary healthcare services, and \$196 million for the financing of hospital care services. In 2018, FSDKSH had earmarked close to \$30 million to pay for services provided under the Public Private Partnership (PPP) contracts the government has signed in the healthcare sector. (Jacellari, 2019). (PPPs are 'long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance' (World Bank, 2020). The number of reimbursable drugs for 2019 was 1,050.

In 2013, the Albanian government pledged to implement universal healthcare coverage and has since undertaken a series of steps toward implementation of this model. Since January 2016, roughly 600,000 uninsured Albanians benefit annually from free family doctor visits and reimbursable drugs, and close to one million Albanians aged between 35-70 years old, both insured and uninsured, are entitled to benefit from free medical check-ups provided under a PPP contract. (Jacellari, 2019).

Over the last few years, the government has also granted several other PPP contracts in the healthcare sector, including hemodialysis treatments, sterilization of surgical equipment and surgery theaters, and treatment of dangerous medical waste. Most recently, the government signed a PPP for hospital laboratory services. In addition, the government has initiated a reform effort to digitize medical records of all patients, implement e-prescriptions throughout the country, track and trace e-prescriptions, establish a National Center for healthcare information and develop, pilot, and implement e-visits, e-examinations, and e-referrals.

Albania imports all medical equipment and devices and around 90% of drugs. All major pharmaceutical and medical equipment and device manufacturers are present in the market, mostly through distributors.

Some challenges of the current health system include (i) a weak national health information and research system, (ii) lack of facilities and capacity for screening, early diagnosis and effective management of NCDs within the PHC system, (iii) and shortage and retention of health workforce, especially in rural areas and lack of retention.

The country is undergoing important structural reforms: merging health and social policymaking institutions at the national level, an institutional reform that has led to the creation of new institutions, such as the National Health Care Operator with its 4 regional directorates which are undertaking a series of health planning and administrative functions in the area of primary and secondary healthcare services. These developments have followed a wide-ranging territorial reform in 2015 with the merging of small communities into larger municipalities as well as a process of decentralization that aims to provide more power and accountability at the local government level. As these are newly established institutions, they need to be strengthened in order to better plan and manage the PHC system. Also, their role will be further expanded to support PHC facilities. Furthermore, the National Health Strategy 2020 provides that municipalities need have more competencies and be more responsible for issues such as: planning the PHC facilities network, including rehabilitation of premises, purchase of equipment. The integration of health care and social support has already been achieved at the central level of health management. The integration will extend to primary health care services, especially, given that the government has the priority of providing universal coverage, thus, treating the most vulnerable with a basic package of services.

Traditional primary health care services will incorporate more elements of *social protection* while improving coordination between the health system and social services at the municipal level. 'Social protection refers to the public actions taken in response to levels of vulnerability, risk and deprivation which are deemed socially unacceptable within a given society'. This is put into practice by a set of policies and programs designed to reduce poverty and vulnerability by diminishing people's exposure to risks, and enhancing their capacity to protect themselves against hazards and interruption/loss of income'

1.2.1 The burden of chronic diseases in Albania; toward NCD prevention and control

Albania has joined the majority of European countries that face the NCD epidemic as its most important public health challenge, exhibiting a significant increase during the last three decades, a trend which is likely to continue in the future given the increase in life expectancy and aging of the Albanian population.

WHO estimates that NCDs account for about of 90% of the deaths in Albania and the probability of dying between ages 30 and 70 years from the 4 main NCDs is about 19%. The burden of chronic diseases such as cardiovascular diseases, cancer, diabetes is a central point of concern in Albania. (Ministry of Health 2016)

Thus, in Albania, ischemic heart disease was the major cause of mortality in 2019, followed by stroke and lung cancer (Figure 2). As a matter of fact, compared to 2009, there has been an increase in the mortality rate attributable to the ischemic heart disease (35.3%), stroke (36.5%) and lung cancer (43.1% increase). Furthermore, in 2019, compared to 2009, there was evidence of an increase of other diseases, such as colorectal cancer (50.6%), prostate cancer (50.8%), and of the chronic obstructive pulmonary disease 46.6% (IHME, 2021)

Communicable, maternal, neonatal, and nutritional diseases Non-communicable diseases Injuries 2009 2019 % change, 2009-2019 Ischemic heart disease Ischemic heart disease 35.3% Stroke 2 2 Stroke 36.5% Lung cancer (3) 3 Lung cancer 43.1% Alzheimer's disease (4) a Alzheimer's disease 55.5% COPD 6 COPD 46.6% Stomach cancer 60, Lower respiratory infect 28.1% Lower respiratory infect 7 Stomach cancer 22.9% Other cardiovascular Neonatal disorders 22.2% Other cardiovascular Prostate cancer 50.8% Cirrhosis Colorectal cancer 50.6% Prostate cancer Cirrhosis 21.6% Colorectal cancer Neonatal disorders -51.8%

Figure 2. Mortality in Albania (% of death for 2009-2019)

Top 10 causes of total number of deaths in 2019 and percent change 2009-2019, all ages combined

Source: IHME, 2021 http://www.healthdata.org/albania

As for the disability, in Albania, the burden of diabetes has increased by around 40% from 2009 to 2019, followed by lung cancer (around 35%) whereas the burden of ischemic heart disease and stroke has increased by more than 20% (Figure 3).

Communicable, maternal, neonatal, and nutritional diseases Non-communicable diseases Injuries -50% -40% -30% -20% -10% 10% 20% 30% 40% 50% Ischemic heart disease Stroke 2 Low back pain 3 Lung cancer 4 Road injuries 5 6 Neonatal disorders Headache disorders Age-related hearing loss 8 Falls 9 Diabetes 10

Figure 3. Causes of death and disability combined in Albania (% of death for 2019)

Top 10 causes of death and disability (DALYs) in 2019 and percent change 2009-2019, all ages combined

Source: IHME, 2021 http://www.healthdata.org/albania

Concluding, the top ten risk factors contributing to the overall burden of disease (death and disability combined) in Albania included high blood pressure, tobacco smoking, dietary risks, high body mass index, high total cholesterol level, high fasting plasma glucose, air pollution, occupational risks, and malnutrition alcohol and drug use. (IHME, 2021)

Though NCDs in Albania constitute the majority of the burden of disease, often patients are not aware of their condition. (Pirkle et al. 2018)

• Toward prevention and control of NCDs

NCDs prevention and control was included in the legislation on the health sector such as the Law 10107 of 30.03.2009. The prioritized NCDs consist of cardiovascular disease, chronic

respiratory conditions (asthma/ COPD [chronic obstructive pulmonary disease]), diabetes, breast and cervical cancer, and depression.

Tobacco Control policy, implemented in 2007, mandated smoke-free indoor spaces, banned various forms of tobacco advertising, required written health warnings on packaging and levied excise taxes on cigarette sales. Under the current tobacco control policy in Albania, the smoking rate for men declined from 43% in 2009 to 36% in 2018, however, it increased for women from 4 to 5%. (Guliani and Çule 2020)

Since then, a comprehensive approach is being employed by integrating policy and action to reduce inequalities in health and tackling the toll of NCDs by introducing health promotion and preventive programs at a population level; actively targeting sub-groups and individuals at a particularly high risk; and, maximizing population coverage with effective health care services.

With a commitment and vision to provide Universal Health Coverage and quality and timely health services for all Albanian residents, the Albanian programe for the prevention and control of NCDs aims at avoiding premature death and significantly reducing the disease burden from NCD. (Ministry of Health 2017)

In order to fulfil such objective, there is commitment to continue strengthening and expanding of the role of the Primary Health Care, as the gatekeeper of the system, through the implementation of the National Programme of Free-of-charge Check-up for all Albanian residents aged 35-70, removal of all fees for medical visits at the PHC level for all citizens, despite their health insurance status, and further expanding the list of reimbursed medicines.

Furthermore, there are efforts at strengthening of the continuum of care for the management of NCDs, specifically: Tobacco control; CVDs: Upgrading the currently dispersed outpatient Cardiology Cabinets and the establishment of new inpatient invasive cardiology units (angioplasty) in the capital and other major district and use of all available resources for specialized treatment of CVD-s through PPP schemes;

Cancer control: Screening of colorectal cancer through the annual free check-up programme, screening and early detection of breast cancer through the use of stationary and two mobile mammography machines, establishment of chemotherapy treatment units in major district hospitals, upgrade of radiotherapy, improved access to medicines used for the treatment of cancer

(expansion of the list of reimbursed medicines), establishment of palliative care centers in districts; and finally, to further develop the Health Information System and integrate its silos: e-Prescription; e-Referral; development of a model of the electronic medical chart at the hospital level, establishment of the system of electronic medical files at the PHC level. Overall, the proposed inter-sectoral NCD program in Albania builds on the existing policy strategies and programs combining and integrating the efforts of a number of stakeholders both governmental and non-government organization to achieve the NCD targets aligned to the WHO NCD Global monitoring framework. (Ministry of Health 2017)

• Albania and aging population

As one of the last countries in Europe, Albania is starting to experience the effects of population ageing. The median age in Albania is currently 36.4 years. The Albanian life expectancy is estimated at 77 years for men and 80 years for women. (Bruijn et al. 2015)

It is however, forecasted that in 2060, half of the Albanian population will be older than 50 years. (Bruijn et al. 2015)

The composite processes of continuous large-scale emigration and the declining fertility and mortality had an enormous effect on the population structure of Albania.

Most of the elderly in Albania rely on their pensions and remittances from relatives living abroad to cover their living and medical expenses. With the number of Albanian elderlies projected to increase policies to provide more affordable and comprehensive long-term care for the elderly are needed. Currently, there are few government healthcare programs or private long-term care insurance providers to help the elderly Albanians obtain quality medical care.

In the future, due to a low share of the working age population currently contributing to the pension system, it is expected that a major share of the elderly will not have access to a pension income in the upcoming years. Thus, elderly people in Albania face huge problems and difficulties in terms of accessibility and affordability of healthcare services including medications which are necessary for the treatment of several chronic conditions (such as CVD, diabetes, gastrointestinal diseases, arthritis, etc.). At the same time, high levels of chronic illness, a huge burden of avoidable disability, economic deprivation and a lack of social opportunities are persistent for most elderly people.

1.2.2 Primary healthcare system in Albania-a transition history from infective care to NCD prevention and control

Before the Second World War, Albania had few doctors, most of whom had trained abroad, and a small number of private hospitals and institutions run by religious groups. In 1932, for instance, there were 111 medical doctors, 39 dentists, 85 pharmacists and 24 midwives in the country. Most of the population did not have access to health care facilities, which were mainly based in urban areas. Access improved after 1945 when a health care system was developed based on the Soviet "Semashko" model. The first medical school opened in Tirana in 1959. Many medical experts also trained in the Soviet Union and other eastern European countries. Sanitary-epidemiology centres were set up in each of the 26 districts. During the 1960s, an extensive primary health care (PHC) system was developed, providing every village with at least a midwife responsible for antenatal care and immunizations. However, in the 1970s the emphasis switched to hospital care. Hospitals were constructed in every district to provide basic inpatient care, with polyclinics for specialist outpatient care. (Nuri and Tragakes 2002)

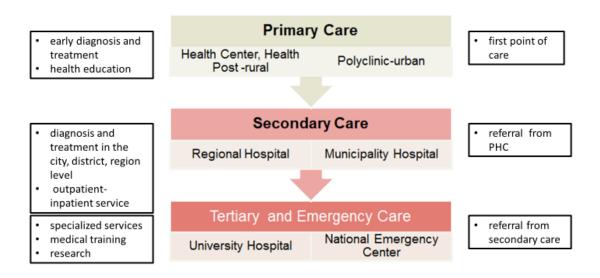
By the 1980s, the Ministry of Health provided and regulated all health services in every district. Some health indicators, such as realizing that infant mortality reduction (as considered a good indicator of a country's socioeconomic conditions) were given priority in policymaking. However, in the early 1990s, this indicator was still high in comparison to the rest of Europe, indicating widespread poverty, malnutrition and poor health services. (Nuri and Tragakes 2002)

• 1991-2000s the transition period

Albania began the transition from a centrally planned to a market economy in the early 1990s. It was the poorest country in the European Region and had a long history of isolation. The dissolution of the Communist model was accompanied by the collapse of its institutions, structures and mechanisms—which meant that new systems had to be developed. The health care system that emerged has faced great difficulties: severe budget constraints due to the shaky economy, disruption and damage caused by civil disturbances, and a population with urgent health needs.

Since then, PHC, in Albania, is mentioned in numerous strategies, policies, and decrees as the government's main focus of health sector reform efforts in Albania.

Figure 4. Referral system-patient flow (author compilation)



Source: Author compilation

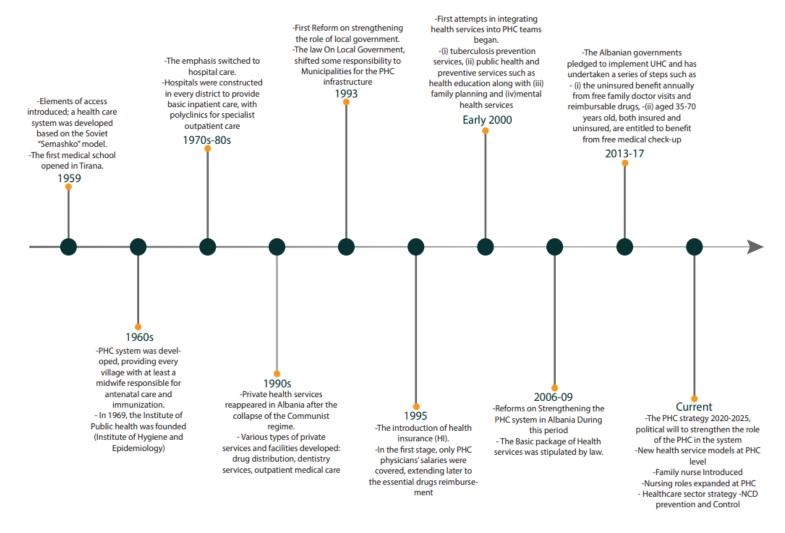
As described in the Long-Term Strategy for the Development of the Albania Health System (Hotchkiss, D.et.al 2005), PHC is seen as the first point of contact of the patient with the health system, and should be considered the "foundation" of that system (Figure 4). However, during this period a number of problems affect the provision of PHC services in Albania such as: (i) limited connections with the broader health system, (ii) fragmented. financing of PHC system (iii) PHC facilities have neither adequate supervision, nor formal management autonomy. (Hotchkiss, D.et.al 2005)

During this period of time, informal out-of-pocket payments were a commonplace at all levels of the system and affecting thus efforts to improve accountability, efficiency, equity, and service utilization. The PHC physical infrastructure has been made out-dated to a large degree by the forceful demographic changes that have left whole villages empty and crowded suburban areas that lack facilities. PHC facilities also used to have limited connections with the populations they served. There has been evidence of the frequent bypassing of PHC facilities and their low

utilization. The population perceived that service was unavailable (doctors were simply not there) and that quality of care was lacking. In response to poor quality of care, patients frequently self-referred to polyclinics and hospitals to seek higher quality care, often incurring additional costs in terms of travel, time, and higher out-of-pocket costs. (Hotchkiss, D.et.al 2005)

Extending, the report highlights that PHC facilities during that period of time also used to offer a limited scope of services in comparison with care offered in other countries at the PHC level. This was partly due to the lack of necessary equipment and supplies, and partly related to the low level of knowledge and skills of PHC practitioners. On the demand side, a minimal focus on prevention had resulted in an ill-informed population with little and outdated knowledge on how to prevent and treat disease, when to seek care, and how to use modern family planning methods. Concluding, there were no mechanisms for the population to complain about health care service delivery or to provide information about their perceptions of quality and efficiency of care, in order for facilities to better respond to individual and community health needs. (Hotchkiss, D.et.al 2005),

Figure 5. Primary healthcare system in Albania-a transition history from infective care to NCD prevention and control (author compilation)



Source: Author compilation

• Reforms continued in 2007-New area for PHC in Albania

In the past two decades, Albania's health care delivery system has experienced substantial structural changes that affect primary health care. Another pronounced reform in the health care sector, was the one that started in January 2007 on implementing 'Basic Health services package', which created the premises for the provision of a standard health care to all residents, in the primary health care sector (Figure 5).

The basic service package is the key instrument that provides the necessary range of services at the PHC level for the entire population. There are seven categories of services included in the existing package: from emergency care to health promotion and education. The package does not specify services provided at health posts or health points. All health centers are committed to providing integrated services in the package although they have variable capacities, skills staff, and access to laboratory tests.

Since then, for both urban areas and rural areas, there is evidence of a steady increase in the number of the overall primary health care visits performed by family physicians in Albania. (Figure 6).

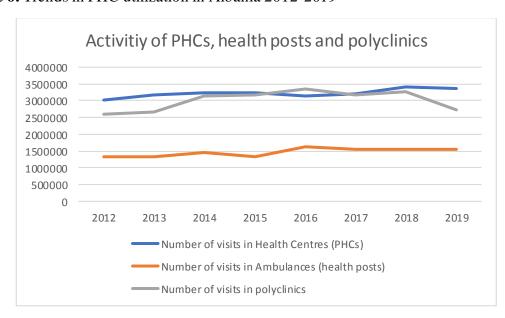


Figure 6. Trends in PHC utilization in Albania 2012-2019

Source INSTAT: http://www.instat.gov.al/en/themes/social-condition/health/#tab2

1.2.3 The actual political commitments; PHC Strategy 2020–2025, reinforcing Universal Health Coverage

Recent Albanian health system policies emphasize the need for universal health coverage, and the provision of quality and equitable health services to the entire population, lifting of copayments for visits to health services, thereby improving access to PHC services.

Primary health care is re-addressed as a policy priority for Albania and this is delineated elsewhere in the country's strategic documents such as "Health Strategy" and **PHC Strategy 2020–2025** -set out a vision to strengthen the country's primary care services delivery to meet up the population's health needs. The PHC strategy 2020-2025 determines the pathways the primary health care system will follow to better and efficiently address the health needs of all communities and different groups of population. (HAP 2020b)

Better access of vulnerable communities to health care services will be achieved through better horizontal integration of the various professionals working at the community level, as well as vertical integration (continuity of care between PHC and hospital/other specialty areas).

The new Strategy aims to: (i) Increase the quality and range of PHC services, which will: reduce the number of referrals to secondary, tertiary and emergency services; increase patient satisfaction; and Enhance the reputation of family doctors. (ii) Provide integrated health and social services to respond to the individual needs of vulnerable individuals and groups. (iii) Improve access to services and provide coordinated and continuous health care through collaboration with medical specialists. (iv) Prepare the health system for potential challenges, including increasing service needs and addressing shortages of health workers by promoting the role of nurses in PHC health centers as well as community nurses. This ambition is well aligned with WHO European Region and global policies and targets on universal health coverage.

1.2.4 NCDs service at PHC level and the composition of PHC teams at urban and rural level

In Albania, PHC is organized through a public network of providers of health services. Each of the 61 municipalities has PHC centres with affiliated health post-ambulatories. On average, one PHC centre offers services to 8000-20000 inhabitants, varying for urban and rural areas, registering a doctor:patient ratio of 1:2500 and nurse:patient ratio of 1:400 (5). All PHC centres are responsible for 24/7 duty. These services are not provided in all affiliated health post ambulatories. Health Centres operate as autonomous units contracted for the health services offered through the mandatory scheme of health insurance and the Basic Primary Healthcare Service Package. The composition of PHC teams varies according to the centre. GPs specialize either in adults (15 years and older) or in children. However, in small rural areas, GPs provide services to people of all ages. Urban areas have paediatricians performing check-ups of healthy children and paediatricians caring for sick children. A similar division of labour applies to nurses. Nurses are often subspecialized, with a narrow scope of services. The number of positions for doctors is in accordance with the population served. The visits revealed high variation in the number of doctors and even more in the number of nurses. This variation, both in quantity and profiles, cannot be explained by the size or the specific health needs of the population served. In Tirana, the organization of the PHC centre includes diagnostic services staffed with specialized doctors, such as cardiologists, rheumatologists, orthopaedic surgeons, surgeons, obstetriciangynaecologists and ophthalmologists (Table 1)

Table 1. Services offered at PHC/hospital level for people suffering from NCDs 2020

	Level of Services, referrals, treatment, drugs facility		Payment/Coverage		
1	Primary health	Immunization, Health education and counseling on NCDs, family planning	-Free: All needed is a 'Health Card' (and not health Insurance)		
	center/Health Post	Screening for NCDs, maternity screening	For diagnostic tests and other paramedical services		
		Management of NCDs, history taking	-Insured and follow referral: Free: most examinations in public facilities (10% for		
		Referral of suspected cases of NCDs	selected tertiary		
		• Diagnostic, rehabilitation,	examinations (such as magnetic resonance imaging, other scans, lithotripsy, angiography, mammography, coronarography)		
		• Prescription of Drugs	-Uninsured people and people without referral- the full price:		
		• Annual Check-up (35-75 yrs)			
2	Polyclinics	partly above plus:			
		• small surgical procedures	OUTPATIENT CARE		
3	District	 Surgery, 	-Insured and follow referral: Free		
	hospitals	Suigory,	<i>-Uninsured with referral</i> : Fixed co-payments : 100 lek () in policlinics or municipal regional hospitals and 500 lek () in tertiary hospitals		
		• internal medicine, inpatient and outpatient service	-Without referral -Fixed co-payments: all patients regardless of insurance status pay:		
4	Regional hospitals	All above plus:	1500 lek () in policlinics or district hospitals; 2000 lek () in regional hospitals;3000 lek () in tertiary hospitals		
		 ophthalmology, 	-Outpatient prescription medicines: Percentage co-payments for Outpatient prescribed medicines: ranging from 0% to 50%		
		• orthopedics,	INPATIENT CARE		

• external injury,		• external injury,	-Free for insured people following referral in public and in contracted private facilities		
 neurology, psychiatry, internal medicine of chest, 		• neurology, psychiatry, internal medicine of chest,	-full price: uninsured people and people without referral		
5		Infectious Diseases management	-Inpatient prescription medicines		
	Tertiary hospitals	 Provision of specialized and advanced medical service Research Centers 	-Free for inpatients in public hospitals		
			- full price: uninsured people and people without referral		

[•] Exemptions are applied on Outpatient prescription medicines and medical products and Diagnostic tests and other paramedical services for categories such as: Pensioners, disabled people, children aged below 1 year, people with cancer, tuberculosis, blindness and conditions such as thalassaemia, multiple sclerosis, transplants, growth hormone deficiency, veterans and people invalided through war

1.3 Role of the Private sector and PHC delivery

Chronic conditions can largely be managed at PHC level and outpatient settings and recent policy developments through strategic documents raise importance in the PHC strengthening intersectoral collaboration with a focus on private sector involvement in the NCDs prevention and treatment. However, until nowadays, most LMIC countries largely focus on developing government owned and operated health facilities. There is, however, growing evidence that it is beneficial for the public health sector to work with the private sector to increase coverage and improve equity, accessibility, quality, efficiency, and sustainability of (PHC) services that ultimately improve health outcomes. (Basu et al. 2012)

At the same time, patients are increasingly using private sector services either because they are more geographically accessible or because they believe that their services are of better quality, despite the need to make out-of-pocket payments. Although the private sector is still relatively small in Albania, its importance in providing outpatient services is growing. More recently, a number of private clinics have set up outpatient services in major cities. Most of them offer high tech treatment and diagnostic services and are extremely well organized and funded. Any form of state insurance does not cover private clinics, and as a result, they are not accessible to poor people or members of other marginalised and vulnerable groups who lack the money to pay for them. Thus, private practices are often not fully integrated into the health system. They do not provide a comprehensive package of services that includes preventive interventions and 24-hour emergency care, nor do they always provide sufficient health data to the central authorities.

The private sector utilization in PHC poses significant challenges and opportunities in terms of the safety, effectiveness and cost of health services. Engaging the private sector to improve PHC within UHC is a complex, multi-faceted endeavour and its' importance is greater for ambulatory care; thus detailing the rationale for engaging the sector is a vital early step. (Joint Learning Network 2016)

Public sector institutions often have a limited experience of engagement with the private sector due to suspicion compounded by a history of a lack communication. They also lack the skills and competencies to engage with autonomous actors through more flexible and consensual approaches (as opposed to direct control). (Joint Learning Network 2016)

Lack of data remains a barrier to effective policy responses to the private sector integration in public health goals. The private market is rapidly growing in Albania yet data and information on its role in the primary health care service provision and utilization is still quite absent.

1.4 Mechanisms for ensuring the Quality of care In Albania

The Government of Albania gives priority to improving the quality of life and more equitable life within and between the counties, as stated by the national strategy for the control of noncommunicable diseases 2016–2020 (1). National Centre for Quality, Safety and Accreditation of Health Institutions (NCQSAHI), founded in 2006, is the institution that supports the Ministry of Health with the implementation of the long term National Health Strategy in the following areas: (i) Continuous improvement of the quality of the health system; (ii) Drafting, distribution and preliminary monitoring of Clinical Guidelines (Clinical Protocols) with the best clinical practices to assist the medical staff; (iii) Accreditation of Albanian public and private health institutions; (iv) Increasing patient safety and minimise medical errors;

All providers need to be accredited every five years. However, no regulations are in place to motivate, obligate or penalize providers who do not comply. NCQSAHI provides support to facilities in preparation for accreditation. Based on regulations issued by the Ministry of Health and Social Protection, a quality coordinator should also be available at each PHC centre, except for rural facilities.

There is concern that quality improvement tools are implemented to a limited extent PHC professionals insufficiently participate in developing clinical guidelines and protocols. Thus, clinical guidelines and protocols for the most prevalent clinical problems are to a lesser extent developed with the involvement of PHC GPs, nurses and patients' associations.

Overall, access, availability and quality of public and private health services is not universal in Albania. The rural population and the elderly are particularly disadvantaged, as are disabled and poor. Health services suffer from structural deficits within the system and a tight budget. Perceived low quality of primary and secondary care leads many patients to seek care in

tertiary hospitals or private sector (Akshia, Dibra, 2018), drug shortages in public facilities often result in patients having to purchase from private pharmacies; and unofficial payments remain common particularly in public hospitals. (Tomini F, Tomini S 2020) Most of the targets set by the Albanian National Health Strategy (ANHS 2016-2020) for lifestyle/behavioral characteristics were prognosed to be hardly achieved by 2020, including here tobacco smoking, alcohol consumption and, particularly, overweight and obesity which are on the rise among Albanian adults. Furthermore, the indicator on out-of-pocket health expenditure is currently behind the envisaged target and unlikely to be achieved. (Burazeri G, Fico A, Ylli A, Roshi E 2021)

1.5 Conceptual Framework

1.5.1 Access and healthcare-seeking behaviours

Everyone has the right to *timely access* to affordable, preventive and curative health care of good quality. (European Commission 2019) In Albania, access to care is written down as *a resident/citizen right* in the Constitution of the Country, law nr. 8417, 1998.

"Access to health care means having the timely use of personal health services to achieve the best health outcomes. Good access to care is comprised of 3 distinct steps: (1) achieving entry into the health care system, (2) obtaining access to essential health care services, and (3) locating providers that can meet patients 'individual needs and with whom they can communicate and build a respectful and trusting relationship". (Toscos et al. 2018) Accessibility is a vital, multi-dimensional aspect of health system performance. It impacts one's overall physical, social, and mental health status and quality of life. Accessibility refers to the characteristics of the service offer that enable people to access services, while access is the way people perceive accessibility. Ensuring access and accessibility to quality services is one of the most permanent responsibility of global public health, with a focus on and articulating actions of health promotion and disease prevention and treatment acute and chronic health problems. (Figueira, Silva, and Silva 2018)

A number of theoretical frameworks have tried to capture these dimensions by highlighting the major barriers – both financial and non-financial – that could inhibit universal access to health services: population coverage, scope of services, level of coverage (cost-sharing),

geographical factors, attitudinal barriers in seeking medical care, provider choice, organisational barriers, patients' preferences and socio-economic characteristics. These barriers to accessing health services lead to: unmet health needs, delays in receiving appropriate care, inability to get preventive services, financial burdens, and preventable hospitalizations. (Kullgren et al. 2012), (Dhillon et al. 2012)

Research related to access in healthcare has historically been influenced by the Andersen model of predisposing (eg, age, sex and social structure), enabling (eg, distance to healthcare) and need (eg, symptoms and functioning) factors. (Aday and Andersen 1974a)

In this study, we use the concept of access first elaborated by Penchansky and Thomas, which summarises a set of dimensions describing the fit between the patient and the healthcare system. The specific dimensions of the framework are further operationalised by Obrist et al namely: Access, Availability, Affordability, Adequacy and Acceptability. (Obrist et al. 2007). To some authors "access" refers to entry into or use of the health care system, while to others it characterizes factors influencing entry or use (*Table 2*). (*Penchansky and Thomas 1981a*).

Other more recent authors have complemented and emphasised the need to more strongly focus on the dynamics of access and have elaborated on five abilities of populations to interact with the dimensions of accessibility: ability to perceive and to seek care; ability to reach, to pay and to engage with healthcare services. (Levesque, Harris, and Russell 2013) Still other authors have stressed that access framework should further embed 'awareness' as an integral part of access. (Saurman 2015)

Table 2.The dimensions of access to healthcare services according to the ACCESS Framework (Penchansky and Thomas; 1981)

Dimension	Definition	Relevant aspects
Availability	'The existing health services and goods meet clients' needs.'	Adequate supply of services, goods and facilities, including types of services, sufficient skilled human resources
Accessibility	'The location of supply is in line with the location of clients.'	Proximity means of transportation and travel time

Affordability	'The prices of services fit the clients' income and a bility to pay.'	Direct and indirect costs of accessing health care
Adequacy	'The organization of health care meets the clients' expectations.'	Organisation of services, including the standard of the facilities and meeting user expectations
Acceptability	'The characteristics of providers match with those of the clients.'	Ethical standards and the appropriateness of services, goods and facilities to address cultural and gender differences and life-cycle requirements; to improve outcomes; and to ensure confidentiality, effective communication and facilitating attitudes

1.6 Evidence on factors influencing access to healthcare

1.6.1 Sociodemographic factors

Access to care often varies based on socioeconomic status, age, sex, disability status, sexual orientation, gender identity race, ethnicity, and residential location. Hence, there is evidence that education and age affect the health care services utilization by individuals aged 65 years and older, especially in systems with well-established PHC infrastructure. (Caner and Cilasun 2019, van den Bussche et al. 2016) Income is a strong predictor of access to health care in the elderly, independent of race. (Fitzpatrick et al. 2004) Other studies indicate that social ties have an impact on elderly accessing services, and more specifically, a high level of friend support has been negatively associated with uncontrolled, and undiagnosed hypertension (Pirkle et al. 2018); proportion of older people seeking health services has been found to be relatively higher for older people who live with at least another adult, compared to those who lived alone. (Maharaj 2012) Generally, access and utilisation of health care is poorer in rural than in urban areas leading to poorer outcomes in the former areas. Health inequalities between rural and urban areas are a consequence of several factors which have been discussed in terms of barriers and facilitators to access. (Wakerman et al. 2008)

1.6.2 Health service providers 'characteristic factors influencing access to health care

Other factors to access are related to ethical standards and the appropriateness of services, goods and facilities to address cultural and gender differences and life-cycle requirements; and to ensure confidentiality, effective communication and facilitating attitudes. For example, attitudes of healthcare workers are associated with older people delaying seeking healthcare (Waweru et al., 2003).

Older people in urban and rural areas revealed that the quality of public healthcare services they received was a major concern including; shortage and unavailability of assistive devices, and perceived lack of respect and sharing of information by health personnel who attended to them. (Maharaj 2012) Under-financing of health systems, over-stretched health workforces, poor health management information systems, unreliable supply of medicines, physical barriers to access healthcare and distance-related barriers are other factors that contribute poor access to healthcare. (HelpAge International 2013)

1.7 The adapted conceptual framework of access and utilization of public and private primary healthcare clinics

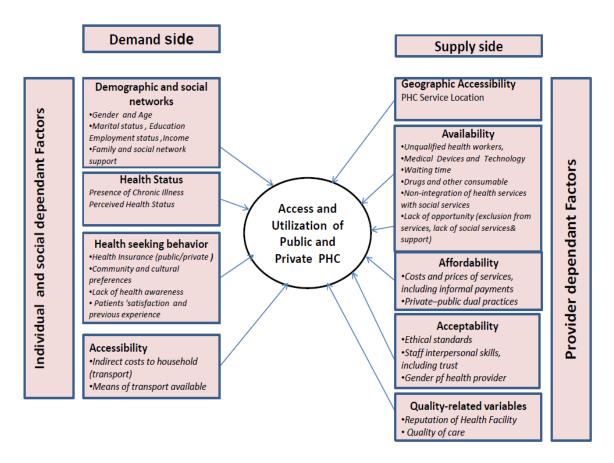
Summarising, factors to consider could thus pertain to supply-side features of health systems and organizations and to demand-side features of populations. Demand-side determinants are factors influencing the ability to use health services at individual, household or community level.

Demand side barriers to care could thus be lack of information on health care choice/providers, lack of education, household and individual lifestyles and cultural preferences, distance/travel costs, user's attitudes and expectations etc. Process factors describe the ways in which access is realised and takes into consideration dynamic interactions between provider and patient behaviour. Consequently, the barriers to access must be identified separately, in order to formulate appropriate interventions. The inadequate levels of PHCs in terms of numbers and services offered, are frequently cited as a fundamental cause of poor health behaviour, especially in rural areas (McMurray and Clendon, 2011).

PHC supply not only refers to the availability of practitioners but to staff attitude and interpersonal skills; any of which can be poor hence reduce the quality and/or quantity of service available (Paphassarang et al., 2002). The number of medical practitioners is inadequate in rural areas, and therefore access being limited.

Therefore, we view access as the possibility to identify healthcare needs, to seek healthcare services, to reach the healthcare resources, to obtain or use health care services, and to actually be offered services appropriate to the needs for care (Figure 7).

Figure 7. Conceptual framework of access and utilization of public and Private primary healthcare clinics (Adapted from (Penchansky andThomas; 1981), (Saad abdullah al-ghanim; 2004)



These dimensions thus represent facilitators or barriers to access to health care at various stages involved in an episode of care. By understanding the barriers and facilitators to accessing and utilising PHCs in rural and urban areas, this study will make a contribution towards reducing inequalities.

Studies have shown that difficult accessibility to primary care services is not only related to the geographical aspect, but also to the lack of services that take into account organizational, economic, social, cultural, religious, epidemiological and communication aspects with the team. In order to improve access and utilisation, a holistic view/frame needs to be developed in the Albania that includes all stakeholders and considers all influencing factors, health and non-health related. Since these factors and their orientation are unique to each country, the organisation of health care delivery, health strategy adopted should also be context specific. In order to achieve these goals, it is therefore necessary to study the specific factors influencing access and utilisation of the PHC services in the public and private settings in Albania.

1.8 Research Gap/Rationale for the study.

Worldwide, there is a growing NCD burden, leading to comparatively high OOPs coming at a large extent from payments on medicines, technologies/diagnostic tests and sometimes consultation fees, especially in those systems which have weak financial protection and less consolidated PHC system. (WHO, 2021; Tesema et.al; 2015) Thus, one of the aims of the SDGs, is 'to achieve universal health coverage (UHC), including access to quality essential health care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all' (Osborn.et al; 2015)

Access to public primary healthcare enables patients and physicians to prevent and better manage illness, while limiting the cost of health service provision and protecting patients from financial hardship related to health. Ultimately, it is increasingly acknowledged also that the quality of services matters to progress toward access to PHC and progressing toward UHC (Kruk; 2019).

While the importance of PHC services in LMIC is generally acknowledged, effective access and use of PHC services, patients view points on quality of care as well as what drives NCD patients to use certain type of services in LMIC, is not well documented or researched. This is also true for Albania and Western Balkan countries, whose healthcare systems are in transition after having been previously focused on curative rather than preventive measures, and on infectious

rather than non-communicable diseases. Unlike many other studies in the western context, where both NCDs and PHC services are well investigated, most healthcare systems in the Western Balkan countries (including Albania) have limited access to, and use of, quality data for informing policy.

Against this background, this study provides new evidence for understanding the care seeking behavior of adults and elderly people suffering from NCDs in such countries. More explicitly, it focuses on the utilization of primary care versus hospitals for initiating care and following up on the chronic conditions. What guides patients' decision to use outpatient private services which are also offered by the public sector is poorly understood. However, problems of quality and accessibility of the public sector alongside with difunctional medical equipment have been identified as drivers for the use of private clinics.

There is still limited information on the demand side available in the literature, specifically on how individuals choose healthcare services and the prevailing characteristics of the providers when deciding to consult a given type of provider according to patients 'view.

In Albania, there is a lack of information on access and utilisation of primary PHC and therefore this thesis provides information on the factors influencing the access and utilisation of PHC in public and private PHC system. The dynamics and patterns of care-seeking behaviors among adults and elderly people with NCDs also remains scarcely documented in Albania, especially related to the first point of service use of persons suffering from an NCD. Information on patient encounters' with PHC both in public and private outpatient settings and their perspective as it relates to the non-clinical quality of care is missing in Albania. Additional evidence is required with regard to public and private users "experiences with quality of care and operating providers" characteristics, factors that drive quality variations and quality improvement approaches in order to guide PHC strengthening. To date, substantial published work is available in this field but quite anecdotal in Albania.

With the ambition to provide information so improve UHC and access to PHC, this study analyses perceptions of the users of public and private PHC services pertaining to non-clinical quality of care and their associations with the sociodemographic characteristics of patients and the type of healthcare provider. Further important to the topics investigated there are two main

Ministerial Orders that have likely led to important changes: Order of Minister of Health and Social Protection, No. 576 date 16.12.2017 "On referral system and tariffs within the public health service". Order of Minister on "Approval of the list of chronic diseases", Nr. 37, date 25.01.2017. Based in these two orders, all the patients are eligible to have free medical care at family physician – PHC – if they have a personal ID. They are also eligible to a first diagnosis at the specialist in case they are assumed chronic disease patients and follow the referral system from PHC onwards. Also, first choice treatments, which are ordered by the specialist and prescribed by the family doctor at PHC, are free. Hence the costs for treatment are likely to have decreased for the population and the need for an insurance card is mainly related to obtain additional tests/treatment options at the level of PHC and/or specialties services.

In the light of the NCDs burden, policy measures under the UHC umbrella, promoting 'health for all', providing equitable services while ensuring minimum exposure of financial hardship on families is needed and highly promoted. Building sustainable social protection schemes alongside with an integration of essential NCD services into PHC level and introducing measures such as removals of fees have proven at some pace success and challenges in addressing OOP payments and release financial constraints on the household budgets. (UN, 2015)

While such policy measures are implemented in different contexts and systems, effectiveness of such policy-measures are of high international interest. (Kanmiki et.al;2019) However, several questions still remain, who pays and how much do NCD people actually pay out-of-pocket and in which type of facilities OOP are more likely to happen?

Such questions are relevant mostly for most healthcare systems in Western Balkan countries which have been suffering the consequences of OOPs (Buch Mejsner et al; 2017) and are striving to instill UHC and integrating NCD services at the PHC level (SEEHN; 2019); however, having limited access to, and use of, quality data for informing policy. (Stănculescu et al; 2014) In the light of such situation, this thesis provides also information for understanding the OOP patterns in the population suffering from NCDs. More explicitly, it focuses on the likelihood of making out-of-pocket payments for consultations, drugs, and tests among the insured and uninsured chronic condition patients consulting different providers.

The findings of this study will inform policy makers and help develop tailor made interventions for improvements in PHC system with the aim to reduce inequalities in access to PHCs and better management of the increasing chronic disease burden in Albania.

2 Aim and Objectives

2.1.1 Aim

The aim of this thesis is to analyse access, quality and utilization patterns (health seeking behaviours and OOPs) of PHC services in Albania as well as the use of private and governmental services. Through this research access to primary healthcare services utilization among elderly (60 years and over) who reported having been diagnosed with one or multiple chronic conditions were examined and compared with adults (18-59 years old). The current role and perspective of private health care are questioned as well in providing primary health care.

2.2 Specific Objectives and Research Questions

Objective 1: To analyse users' perspective of public and private PHC services pertaining to non-clinical quality of care

- RQ 1.1 Which is the level of perceived non clinical quality of care from the governmental health provider compared to private outpatient clinics by adults and elderly people?
- RQ 1.2 Are there differences when comparing aspects of perceived quality between public and private PHC facilities, between urban vs. rural governmental primary health facilities?

Objective 2: To investigate factors and motivators that influence on adults and elderly people' choices to utilize public or private outpatient facilities as their health care providing facility.

- RQ 2.1 Which are the main factors (including gender aspects) and motivators that influence the choice of outpatient health facilities (public vs. private) utilization?
- RQ 2.2 Which are the main variations of patients accessing private vs. public providers related to their socio-economic background, health problems, and quality perceptions?

Objective 3: To assess the care seeking behaviours of adults (aged 18-59)

who suffer from NCDs and compare them to the patterns of elderly people (aged >=60) and establish a possible relationship between sociodemographic variables and care-seeking behaviours.

- RQ 3.1 Where do adults and elderly people Initiate care when facing a health problem (PHC or hospitals)?
 - RQ 3.2 Where do adults and elderly people follow up their NCDs?
 - RQ 3.3 Which are the factors associated with the use of health service provider?

Objective 4: To assess the financial barriers and out-of-pocket payments (OOPs) related to consultations, diagnostic tests, and medicine prescription patterns as self-reported by people suffering from NCDs.

- RQ 4.1 Which are the out of pocket expenditures of households for NCD treatment, incurred by patients over the past 2 months and how does this change between insured vs. uninsured, adults vs. elderly, urban vs. rural?
- RQ 4.2 Are Rural residents more likely to face financial and resource-related barriers compared to urban ones?

2.3 Structure of the thesis

This thesis is comprised of nine chapters: Chapter 1: introduction, set the context of the study, NCDs as global burden and the importance of the accessible PHC health system, delivering high service quality to tackle the NCDs and achieve UHC and discussed the rationale for carrying out a study in Albania. Then it presents a review of the evolution of PHCs in Albania, services offered for NCDs and it concludes with some insights on the perspective and growing importance of private providers and quality of care mechanisms in place. Additionally, the conceptual framework of access and different theories and models that have been offered as way of understanding access and utilisation of healthcare services. Then an argument for going with Penchansky and Thomas

model to conceptually frame and drive this study is presented. The chapter ends with presenting the research gap and the rationale for the study. Chapter 2: presents the aim of the thesis, the Specific Objectives and Research Questions that needs to be answered through the theses. Chapter 3: describes the methodology and the methods used for meeting the research objectives. The health facility survey (Objective 1&2) targeted the public PHC in rural and urban areas and private PHC in urban areas that provided primary care. The household survey (Objective 3&4) targeted adults (aged 18-59) and elderly (aged >=60) who suffer from non-communicable disease (NCD). Chapters 4 and 5: offer the findings and results of the health facility surveys, respectively, chapter 4 analyse the perspectives of public and private primary healthcare Users on non-clinical quality of care and chapter 5 on factors associated with the utilisation of primary care services in public and private facilities. Chapters 6 and 7: present the finding from the household survey, respectively on chapter 6, the health seeking behavior among adults and elderly with chronic health condition(s) and on chapter 7 the financial burden from NCDs (out of pocket expenditures) as the main barrier to NCD care. Chapter 8 presents an editorial piece that provides an opinion nurses in Primary healthcare in Albania; redefining roles and strengthening competencies through education.

Chapter 9 includes a general discussion of the findings, study limitations, contribution to the field and policy implications and it concludes the thesis with suggestions for future research.

3 Methodology

This chapter aims to provide general insight into the study setting in which the research was performed and an outline of the methodological approaches having been applied to answer each of the research questions and address the respective objectives. More methodological details can be found in the chapters devoted to the different papers.

3.1 Study setting

Aiming at improving access to good quality PHC services, the Health for All Project (HAP) was launched in 2015 in Albania, improving primary care services and health promotion activities. The implementation period was initially planned for four years 2015 to 2019, and phase 2 of the project covers the period 2019 to 2023. This PhD connects to HAP, implemented by Swiss TPH. During the first phase, the HAP has implemented different activities to increase primary health care service quality, which directly or indirectly benefits accessibility and quality of PHC. These activities relate to:

- (i) health promotion activities on prevention and treatment of NCDs;
- (ii) continuous medical education (CME) activities for family doctors and nurses in a Peer Group format.,
- (iii) infrastructure improvement of 14 health centres in Fier and Diber. Equipping 80 health centres with doctors and nurses' bags containing medical equipment, as factors of increasing quality of PHC health services.
- (iv) increasing transparency and accountability toward PHC including a better-informed population on patients' rights and improvement of complaining mechanisms

Hence the studies were carried out in the two pilot regions of the HAP: Diber and Fier. Each region consists of municipalities. Municipalities (Albanian: bashki) are the basic administrative divisions of Albania. Prior to 2015, there were two types of municipalities in Albania: municipalities with an urban character called bashki, and municipalities with a rural character called previously 'komunë' (commune). Municipalities are all divided into at least two "administrative units" (njësi administrative), which are sometimes referred to as "municipal units"

or "units of local governance". Administrative units are composed of one or more cities, villages, or neighbourhoods which constitute the third- and final-level of administrative divisions in Albania.

In 2014, the government introduced a new administrative scheme that was implemented in June 2015 with local elections, whereby municipalities were reduced to 61 in total and rural communes were abolished. Most defunct municipalities are now administrative units and may also be cities, villages, or neighbourhoods.

Dibër

Dibër County (Albanian: Qarku i Dibrës) is one of the 12 counties of the Republic of Albania. It was created in 2015 by the merger of the former municipalities Arras, Fushë-Çidhën, Kala e Dodës, Kastriot, Lurë, Luzni, Maqellarë, Melan, Muhurr, Peshkopi, Selishtë, Sllovë, Tomin, Zall-Dardhë and Zall-Reç. The principal town of the county is Peshkopi. The total population is 61,619 (2011 census) and the total area equals 938.65 km2. The county borders on the counties of Durrës, Elbasan, Kukës, Lezhë, Tirana and the country of North Macedonia. It is divided into the four municipalities of Bulqizë, Dibër, Klos and Mat. The municipalities are further subdivided into a total of 290 towns and villages.

Topographically, the county is dominated by mountainous and high terrain, with a great variety of natural features including valleys, canyons, gorges, rivers, glacial lakes and dense forests. Various mountains ranging between 1,500 and 2,700 meters above sea level run the length of the county from north to south, including the Korab mountains in the east with Mount of Gramës and Korab at an altitude of 2,764 metres being the highest mountains of Albania. The Dejë mountain 2,245 metres rises in the center, while the county is dominated by the Lura mountains in the east. The Skanderbeg mountains on the west separates the Central Mountain Range with the Western Lowlands. The county, marked by a significant biological diversity, is water-rich with a dense river network, a rich aquifer system, and significant karst underground watercourses. It is home to the source of the river Mat which rises in Martanesh. Besides the Mat, the Drin river is an important waterway in the region. The county territory covers four distinct climatic types according to the Köppen climate classification; oceanic, continental, mediterranean and subarctic. Located in the interior of Albania, the climate is mediterranean with continental influences. Dibër

is a historically homogeneous county. Its capital and most populous city is Peshkopi. Tourism is one of the most important sectors in the county and has the largest potential to be a source for sustainable income, due to its natural and cultural heritage. Although the county has abundant natural resources like chromium, sulfur and marble. Dibër is predominantly an agriculture county. Agriculture mainly produces fruits and vegetables. (Wikipedia, The Free Encyclopedia 2021)

Fier

Fier County, officially the County of Fier, is a county in the Southern Region of the Republic of Albania. It is the eighth largest by area and the third most populous of the twelve counties, with more than 289,000 people within an area of 1,890 km2 (730 sq mi). The county borders on the Adriatic Sea to the west, the counties of Tirana to the north, Elbasan to the northeast, Berat to the east and Vlorë to the south. It is divided into six municipalities, Fier, Divjakë, Lushnjë, Mallakastër, Patos and Roskovec, all of which incorporate forty-two administrative units. (Wikipedia, The Free Encyclopedia 2021)



Figure 8. Administrative and Territorial Map of Albania

3.2 Methodological and analytical approach

In order to answer the main research questions and to reach the specific objectives of the current thesis, different methods were applied. A detailed description of the material and methods applied for reaching each objective is provided in the following sections. Table 3 provides a summary of the methods used to address each objective, as well as information on when data was collected.

A total of four studies were conducted in the frame of this thesis, with an additional editorial.

Table 3. Summary of the applied methods by objective

Objectives	1.	2.	3.	4.	
	Analyse users' perspective of public and private PHC services pertaining to nonclinical quality of care	Investigate factors and motivators that influence on adults and elderly people' choices to utilize public or private outpatient facilities	Assess the care seeking behaviours of adults (aged 18-59) who suffer from NCDs and compare them to the patterns of elderly people	Assess the financial barriers, out-of-pocket payments (OOPs), and medicine prescription patterns as self-reported by people suffering from NCDs.	
Methods	Health Facility Survey Face to face interviews	Health Facility Survey Face to face interviews	Household survey	Household survey	
Participants	Patients exiting PHC after they had a consultation N=954 patients adults ≥18 years of age	Patients exiting PHC after they had a consultation N= 629 adults ≥18 years of age	Household members suffering from NCDs N= 1,116 adults (aged 18-59) and elderly (aged >=60)	Household members suffering from NCDs N= 898 adults (aged 18-59) and elderly (aged>=60)	
Setting	HAP pilot regions, Fier and Diber	Fier region	HAP pilot regions, Fier and Diber	HAP pilot regions, Fier and Diber	
Time of Data Collection	19 July and 07 August 2018.	19 July and 07 August 2018.	7-20 December 2018	7-20 December 2018	

Health facility survey (Objective 1&2)

The health facility survey (Objective 1&2) targeted the public PHC in rural and urban areas and private PHC in urban areas that provided primary care.

The first study (Objective 1) aimed to analyze perceptions of users of primary healthcare relating to non-clinical quality of care and their association with sociodemographic characteristics of patients and the type of provider. Consequently, public urban and rural PHC clinics and private clinics were the research settings. The World Health Organization responsiveness questionnaire was applied (which is based on a 4-point scale along with 8 non-clinical domains of quality of care). Data were collected among patients aged 18 years or older, accessing the HC and receiving consultation from a health provider. In total, the survey was conducted at 38 public facilities, of which 20 facilities were located in the Diber and 18 in the Fier region. Twenty-seven facilities were located in rural and 11 in urban areas. Additionally, the survey was conducted in 5 private facilities located in the Fier region (as there was no private licensed health facility, fulfilling the inclusion criteria, in the Diber region). An overview on the facilities is provided in Appendix C. The data were analyzed using descriptive statistics and predictors of the quality scores were assessed using linear mixed regression models with random facility intercepts.

The second study (objective 2) aimed to identify key factors influencing the utilisation of governmental and private primary healthcare services. A cross-sectional health facility survey was employed, using a 4-point Likert scale questionnaire to rank the importance of factors driving services utilisation. Exit interviews were conducted with patients who consulted one of 23 primary care providers (18 public and 5 private) in Fier district of Albania in a representative sample of 629 adults \geq 18 years of age. Factors influencing the decision to visit a governmental or private primary care provider, including sociodemographic characteristics, were analysed using mixed logistic regression models with random intercepts at the facility level.

The household survey (Objective 3&4)

The third study (objective 3), aimed to assess the use of different health care service providers by adults (aged 18-59) and elderly (aged >=60) who suffered from at least one non-communicable disease (NCD) and to explore relationships between sociodemographic variables

and care-seeking behaviours. The household survey was conducted as a cross-sectional face-to-face survey at household level in the two pilot regions Diber and Fier. Inclusion criteria for households were that at least one household member living in the household was chronically ill or was acutely ill in the past four weeks. This person also needed to be present during the data collection. Questions on household characteristics as well as the household roster were answered by the household head or its closest available representative. Questionnaires were designed to provide relevant indicators of health patterns and health seeking behaviours as well as of barriers to accessing care fulfilling the requirements from the HAP log-frame specified by HAP team members and standards and experiences from other surveys (e.g. DHS). Different questionnaire sections covered the following areas: general questions, distances to health facilities and services at community level, household characteristics and financial aspects. An individual questionnaire for persons with a chronic condition included disease patterns, health seeking behaviours and access barriers for health seeking.

Data collection was carried out between 7-20 December 2018. Sixteen interviewers were organized in four teams. Each team was headed by one supervisor who was responsible for the organization of the team and quality assurance of the data collection process. Before data collection, an interviewer and supervisor training was conducted over two and a half days (2-4 December 2018), including a pre-test. Interviewers and supervisors were trained on good research practice, including how to handle confidentiality, obtaining consent, objectives of the study, selection principles of households, how to identify patients with a chronic condition within the household and the questionnaires. Interviewers also received a detailed training on the different sections of the questionnaire and the handling of the electronic data collection tool. In addition, the training included a specific session for the supervisors, on quality assurance, ensuring safety and security of the data collectors in the area, relationships with the local representatives, management of tablets and transferring electronic data.

During data collection, households were identified using a random-walk procedure, i.e. a common place was selected within a cluster (village/town) and interviewers walked off in different directions. Interviewers were instructed to select every 3rd household and record all contact attempts (e.g. independently of the availability or eligibility of the household).

We employed binary and multinomial logistic regression to assess factors associated with the type of health service provider used. Analyses were adjusted for clustering within districts of residence. Clustering within communities was also adjusted for. In binary logistic regression models this was done using random community intercepts, and in multinomial logistic regression models clustering was adjusted for using robust standard error estimates provided by the clustered sandwich estimator.

The fourth study aimed to analyse (i) the perceived barriers to seeking care and obtaining treatment for the management of chronic condition(s), (ii) access to medicines and (iii) to assess the financial burden from NCDs as the main barrier to NCD care. We aimed to measure the costs of households for NCD treatment, incurred by patients over the past 2 months and how they were covered. Moreover, we aimed to see any potential difference between rural and urban residents in facing financial and resource-related barriers. A household survey was conducted in Fier and Diber region, Albania, among adults (>=18 years old) in urban and rural settings who suffered from chronic health conditions (n = 1,116). Data collection for all surveys was done using electronic data capture with tablets. The software used was Open Data Kit.

3.3 Ethical considerations

The data for this thesis were obtained from the HAP project, which is led by the Swiss Tropical and Public Health Institute. Thus, ethical clearance for the studies included in the current thesis have been obtained both from the ethics committee of north-western and central Switzerland (EKNZ- Ethikkommission Nordwest- und Zentralschweiz), No. 30715, and by the National Ethics Committee bodies in Albania, nr.55, on the 8th of June 2018. Project HAP submitted a request for approval of the study to the Ministry of Health and Social Protection, to ensure full collaboration and transparency with national and local authorities and health providers. An approval letter for the health facility surveys was received on the 5th of May 2018. The study protocol and questionnaires received ethical clearance from the MoHSP on the 8th of October 2018, Nr. prot.5800 (on household survey). Written informed consent was collected from study participants for the health facility surveys (Objective 1&2) and oral consent was obtained for the household survey (Objective 3&4).

4	Perspectives	of Public	and Private	Primary	Healthcare	Users	in
Two	Regions of Alb	ania on No	on-Clinical (Quality of	Care		

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4.1 Abstract

Background: Aiming to tackle the rise of non-communicable diseases and an ageing population, Albania is engaged in boosting primary healthcare services and quality of care. The patients' perspectives on their experience with public and private providers are, however, missing, although their viewpoints are critical while shaping the developing services. Consequently, we analyze perceptions of users of primary healthcare as it relates to non-clinical quality of care and the association to sociodemographic characteristics of patients and the type of provider.

Methods: A facility-based survey was conducted in 2018 using the World Health Organization responsiveness questionnaire which is based on a 4-point scale along with 8 non-clinical domains of quality of care. The data of 954 patients were analyzed through descriptive statistics and linear mixed regression models.

Results: Similar mean values were reported on total scale of the quality of care for private and public providers, also after sociodemographic adjustments. The highest mean score was reported for the domain "communication" (3.75) followed by "dignity" (3.65), while the lowest mean scores were given for "choice" (2.89) and "prompt attention" (3.00). Urban governmental PHC services were rated significantly better than private outpatient clinics in "coordination of care" (2.90 vs 2.12, P < .001). In contrast, private outpatient clinics were judged significantly better than urban PHC clinics in "confidentiality" (3.77 vs 3.38, P = .04) and "quality of basic amenities" (3.70 vs 3.02, P < .001). "Autonomy" was reported as least important attribute of quality.

Conclusion: While the perception of non-clinical care quality was found to be high and similar for public and private providers, promptness and coordination of care require attention to meet patient's expectations on good quality of care. There is a need to raise the awareness on autonomy and the involvement of patients' aspects concerning their health.

Keywords: primary care, non-clinical quality, private provider, autonomy, communication, Albania

4.2 Introduction

The goal of primary healthcare (PHC) is to provide universally accessible first level services for individuals, families, and communities thereby ensuring their referral to hospital and other specialized services when needed. It is increasingly acknowledged that the quality of services matters to progress toward Universal Health Coverage (UHC). (The Lancet 2018, Kruk, Gage, and Naima T. Joseph, et al. 2018) Patients' viewpoints, perceptions and experiences, including non-therapeutic dimensions of care such as communication, attention, treatment or confidentiality, is a central aspect of quality of care. (The Lancet 2018, Kruk, Gage, and Naima T. Joseph, et al. 2018, Bitton, Ratcliffe, Veillard, et al. 2017, Kringos, Boerma, Hutchinson, et al. 2015)

In Albania, a south-eastern European country with a health system in transition, most health care providers continue to be owned by the Government. They have a 3 tiers-level structure: primary, secondary, and tertiary healthcare services. After the fall of the communism system (1990), various reforms gained pace such as the permission of private service providers to operate, decentralization of primary care management, the complete privatization of the pharmaceutical sector and dentistry and the founding of the Health Insurance Institute. (Maranaj Marku, Council of Europe 2010) Private providers are today essentially concentrated in urban areas and major cities.

Albania has been engaged for several years in improving PHC services to better address health system challenges, such as the steady rise of non-communicable diseases (NCDs). (Ministry of Health and Social Protection 2017a, Ministry of Health 2016, Bruijn et al. 2015) Indeed, the most recent Demographic and Health Surveys (ADHS) conducted in 2009 respectively 2018, indicate for example marked increases in the prevalence rates of hypertension. (Institute of Statistics, Institute of Public Health, and ICF. 2018. 2018)

In 2015, as part of its commitment to move toward UHC, the Ministry of Health and Social Protection (MoHSP) has introduced a free check-up program offered for all citizens aged 35 to 75 years—independent of their insurance coverage or health condition. (Ministry of Health and Social Protection 2017a, WHO 2018) In parallel, a mandatory health insurance scheme is in place, as part of the social protection system, covering medical examinations at the public and, more recently, at some private contracted health providers. Based on the results of ADHS 2018, around

37% of the population aged 15 to 59 years benefits from entitlements through the mandatory health insurance scheme. (Institute of Statistics, Institute of Public Health, and ICF.2018. 2018) Based on the referral system and the drug reimbursement structure (ie, full or partial) the scheme is free or subsidized with co-payment. (Compulsory Healthcare Insurance Fund 2013) As the insurance system favors public providers, they absorb the bulk of service provision, leading to high utilization rates namely of the tertiary levels (university hospitals). (Akshia, Dibra, 2018).

Public PHC is currently being provided in Albania through a well-established network of 413 urban and rural health facilities and additional health posts. A package of basic medical services such as (i) emergency care; (ii) health services for children; (iii) women of reproductive age; (iv) adults and (v) elderly people; (vi) mental health care; and (vii) health promotion and education is offered mainly through health centers. (Compulsory Healthcare Insurance Fund 2013)

In addition, there are private healthcare services. They may be for-profit or not-for profit providers. The for-profit outpatient clinics (providing PHC and specialty care services), which are sometimes located in private hospitals, have experienced substantial growth in the last decade, especially in urban areas. In 2019, 10 private hospitals, 229 specialized private diagnostics and laboratory clinics and 177 outpatients' medical centers and cabinets were licensed. (Ministry of Health 2015) While adding a provider option for patients, they have proven challenging to the coordination of the national health system as, to some degree, they are duplicating both public PHC services and specialty services provided in polyclinics. (Uruçi and Scalera 2014)

Governmental PHC has often been challenged by ill-equipped facilities, bypass to secondary or tertiary care, lack of trust in PHC personnel and access barriers to services (eg, waiting times and distance to PHC centers). (WHO 2018, Akshia, Dibra, 2018, Arqimandriti M, Ivkoviç M, and Naskidashvili I, et al. 2014) At a time of rapid change in health demands and growth in PHC providers it would seem important to understand what service users would value in terms of quality. However, information on patient encounters' with PHC both in public and private outpatient settings and their perspective as it relates to the non-clinical quality of care is missing in Albania.

Quality of Care and Patient Experience Across Settings

Quality of care is a broad concept which includes structural, technical, process, and outcomes aspects. (Hanefeld, Powell-Jackson, and Balabanova 2017, Boller et al. 2003) Different instruments have been developed to measure and assess quality from different perspectives. A tool developed and validated for measuring and analyzing the non-clinical aspects of care is the "health system responsiveness tool." (N. Valentine, de Silva, Kawabata, et al. 2003, (Schäfer, Gw Boerma, Kringos - Pereira Martins, et al. 2013, Lévesque, Haggerty, Beninguissé, et al. 2012) In 2018 World Health Assembly proposed a set of indicators and a framework for measurements in patient centeredness areas to aid countries in embedding patient experience as an assessable and reportable component of quality. (Kruk, Kelley, Syed, et al. 2017)

Both the public and private health organization are engaged in improving quality of care. The private sector is often viewed as more client-centered, (Berendes et al. 2011) better at patient education and interpersonal satisfaction, (Rannan-Eliya, Wijemanne, Liyanage, et al. 2015) and patients seem to experience better timeliness and hospitality. (Basu et al. 2012) Quality of care is comparatively well rated in public health services in some western European countries. (Murante et al. 2017, Bleich, Özaltin, and Murray 2009) Other studies find it difficult to draw clear deductions about the advantage of any particular type of settings, instead associating quality of care with the main features of health service provider such as the organization of and remuneration for services, number of skilled health specialists rather than the clear owners hip of the health facilities. (Mayo-Bruinsma et al. 2013, Tynkkynen and Vrangbæk 2018) Recent systematic reviews led to contradictory conclusions in respect to quality of care differences between public and private providers due to different review methodologies and, above all, diverse settings and contexts where private providers played different roles within the health system. (Coarasa et al. 2017)

Several research studies have shown that rural populations are more reluctant to express discontent and are generally more satisfied with quality of care and health-care systems than their urban counterparts, (Footman et al. 2013) though rural patients appear to mirror an undervaluing of primary care in favor of specialty care. (J. (Jason) Liu et al. 2008) Primary health care in many rural areas have the challenges of; staff recruitment, poor physical amenities; lack of accessibility to diagnostic health services which undermines quality and effective care when contrasted to urban settings. (Jahan, Allotey, Arunachalam, et al. 2014, Papp, Borbas, Dobos, et al. 2014)

Additional evidence is required with regard to public and private users "experiences with quality of care and operating providers" characteristics, (Khan and Hashmani 2018) factors that drive quality variations and quality improvement approaches (Kruk, Kelley, Syed, et al. 2017) in order to guide PHC strengthening. To date, substantial published work is available in this field (Robone, Rice, and Smith 2011, Tille, Röttger, Gibis, et al. 2019, Mirzoev and Kane 2017, N. B. Valentine, Bonsel, and Murray 2007, Röttger et al. 2014)) but none in Albania to the best of our knowledge.

With the ambition to provide information so improve UHC and access to PHC, this study analyses perceptions of the users of public and private PHC services pertaining to non-clinical quality of care and their associations with the sociodemographic characteristics of patients and the type of healthcare provider.

4.3 Methods

Study Setting

The data for this study were collected through a cross-sectional survey (including also exit interviews with patients) at health service level. The study was conducted within the frame of the "Health for All" (HAP) which covers 2 out of 12 regions in Albania. 'HAP' is funded by the Swiss Agency for Development and Cooperation. The overall goal of the project is that the Albanian population benefits from better health through improved primary health care services and health promotion activities. The regions covered by the survey were: (1) Fier which is located South-West of the capital, Tirana, with access to the seaside and (2) Diber a mountainous region, located in the Eastern part of the Country bordering North Macedonia. The census 2011 registered 447 263 persons living in the 2 regions (310 277 in Fier living in 87 605 households and 137036 in Diber living in 33 204 households). The regions cover approximately 16% of the total population of Albania

Study Design and Sampling

A facility-based, cross-sectional survey was conducted including all governmental health centers (HC) in rural and urban areas in 2 regions. The study intended to include also all private health providers offering outpatient/ambulatory services in the regions covered. In one region (Diber), there were no private services and in the other one there were 8 clinics (Fier), all located in urban areas. From these 8 private clinics, 5 consented to participate. Therefore, 38 public healthcare facilities and 5 private healthcare facilities were included in the sampling.

The calculation of the sample size for patients from public facilities was tuned to being able to estimate parameters of patient satisfaction with sufficient precision. As all 38 public facilities of the 2 study districts could be recruited and the numbers of patients interviewed across the different facilities were chosen in proportion to facility size, the standard error associated with estimating a certain prevalence p in the underlying patient population was smaller than or equal to $p\sqrt{(1-p)/N}$, where N denotes the total sample size.

Assuming that 20% of patients attending public health facilities in the 2 districts were unsatisfied with the respective health center, we wanted the respective estimation error to stay below 3% with a probability of 95%. This required a total sample size of 683 patients, that is, an average number of patients per facility of 18. Assuming a drop-out rate of 10%, this number had to be increased to 20. We further increased the number to 25 to gain statistical power for comparisons (eg, between urban and rural facilities). The same sampling strategy as in public facilities, was also employed for private clinics but with higher numbers of patient interviews because of the larger size of the facilities.

Questionnaire on Patient Perception

We assessed patients' perceptions on 8 domains of responsiveness and service quality through the World Health Organization (WHO)'s Health System Responsiveness Questionnaire, a publicly and freely available tool (WHO 2005) which has been widely used in various settings.(N. Valentine, de Silva, Kawabata, et al. 2003, Robone, Rice, and Smith 2011, N. Valentine, Darby, and Bonsel 2008) The tool is structured along 8 domains: (i) autonomy; (ii) choice of health care provider; (iii) clear communication; (iv) confidentiality; (v) dignity; (vi) prompt attention; (vii)

quality of basic amenities; and (viii) access to social support networks. We excluded the domain of "access to social support networks" because our study focused on users of outpatient services. Based on our critique and as suggested by other researchers in this field, we added "coordination of care" as an additional domain, given the importance of patients with chronic conditions in the Albania setting. (Röttger et al. 2014)

All individual items were scored on a scale from 1 to 4 (1 = bad; 2 = rather bad; 3 = good; 4 = very good). Patients were also asked to choose the domain they consider as "most important" when consulting a healthcare provider. Hence, in this study, we make a distinction between 2 categories of users' measures of non-clinical quality of care: (i) patients' most recent experience (the level of responsiveness as measured by the interactions that patients have with the healthcare provider) and (ii) patients' expectations on attributes of quality (patients' evaluations of what is considered important when receiving care in general, relative to their expectations).

The WHO questionnaire was translated from English to Albanian and then translated back to English prior to conducting the interviews. We changed the word "confidentiality" and translated as "privacy respected" and "autonomy" as "involvement in health decisions" in order to be easy comprehended and to be closer to laymen comprehension of the terms. Also, on "coordination of care," we slightly changed the item "the physician knows if certain tests have to be conducted regularly" into "doctor knows your medical history (main developments on illness)" and "you were helped (feel assisted) to transit from one provider to the other". Patients' socio-demographic characteristics such as age, gender, employment status, education, status of health insurance coverage was also collected in addition to the patients' health conditions including self-reported health status (poor/not poor) and the presence of chronic health condition (yes/no). In order to determine the internal consistency of the questionnaire, Cronbach's alpha was calculated.

Data Collection

Data collection took place from July to August 2018. For study inclusion, participants had to be at least 18 years old, and they had to have had some form of outpatient care on the day of the interview.

Interviews were conducted by medical students that had completed at least a bac helor's degree. Prior to data collection, interviewers were trained for 3 days and the questionnaires were pre-tested in a different population but in the same regions. Data collection was done electronically using tablets through Open Data Kit (ODK) platform. Participants' responses were uploaded in a secured server at Swiss Tropical and Public Health Institute (Swiss TPH), Basel, Switzerland on the same day of the data collection and regular data quality check was conducted.

Data Analysis

In a first step, the characteristics of patients were compared across the 3 types of health facilities: (1) public urban PHC clinics, (2) private outpatient clinics, and (3) public rural PHC clinics. Mean scores of each domain, representing patients' experience with quality were obtained using the margins syntax of Stata. Our primary analysis focused on the association between perceived non-clinical quality of care and type of facility. Factors associated with patient's perceived quality of care were included as potential confounders of this association. They were: (i) age; (ii) gender; (iii) education; (iv) occupation; (v) insurance status (yes/no); (vi) self-rated health (poor/good); (vii) presence of 1 or more chronic condition(s); and (viii) utilization of clinics over the past 3 months. Linear mixed models, with random intercepts for districts and facilities nested in districts, were thus used to investigate the association between the utilization of the type of health facility and non-clinical quality of care domains adjusting for patients' sociodemographic characteristics. The score of overall quality was determined as the mean of all available sub-scores requiring that at least 6 of the 8 sub-scores were present. Analyses were repeated in a subsample of patients who had no missing sub-scores and the respective results showed only minor differences. The statistical tests and P-values were obtained from the Wald tests of the respective parameter estimates, P<.05, and P<.1. Data was analyzed using Stata Statistical Software, version 15.

Ethical Considerations

The study protocol was approved by the ethics committee of north-western and central Switzerland (EKNZ- Ethikkommission Nordwest- und Zentralschweiz), No. 30715. The study also received clearance by the National Ethics Committee of Albania, nr.55, date 08.06.2018. All study patients had to provide written informed consent for participation.

4.4 Results

Patients' Characteristics by Type of Healthcare Provider

Out of 1083 who were eligible study participants, 954 accepted to be interviewed corresponding to a response rate of 88%. The characteristics of the study participants are shown in Table 4. There was a slightly higher proportion of female visits compared to male visits (58% vs 42%). The mean age of participants was 37 ± 20.1 . Most of the patients were in the age group 18 to 60 years (54%). About 33% of the participants were unemployed and 50% had basic education (primary and secondary school, 5 to 9 years of study).

Table 4. Patients' Characteristics by Socio-Demographic and Health Measures by Type of Healthcare Provider.

Characteristics	Characteristics Total $N = 954$ Public urban clini $N = 337$		Private outpatient clinics (3) N = 178	Public rural clinics (4 $N = 439$	
	N = 954 =	35%	19%	46%	
Gender					
Male	42% (401)	37% (125)	36% (64)	48% (212)	
Female	58% (553)	63% (212)	64% (114)	52% (227)	
Age mean (year), SD (year)	36 (20.8)	36.5 (20.8)	35 (20.7)	35.9 (20.8)	
18 < 59 years old	54% (478)	52% (161)	57% (95)	54% (222)	
≥60 years old	46% (406)	48% (148)	43% (71)	46% (187)	
Education					
University/college	12% (90)	18% (39)	17% (28)	6% (23)	
High school*	33% (251)	37% (80)	37% (62)	30% (109)	
Primary and secondary chool*	50% (379)	43% (93)	46% (78)	57% (208)	
Illiterate/other	4% (31)	2% (4)	1%(1)	7% (26)	
Occupation					
Employed	24% (199)	24% (64)	32% (53)	20% (82)	
Unemployed	33% (280)	30% (81)	32% (55)	36% (144)	
Pensioner	39% (329)	42% (114)	35% (58)	39% (157)	
Other	4% (30)	4% (10)	1% (2)	5% (18)	
Self-rated health					
Poor	20% (191)	80% (270)	6% (11)	26% (113)	
Good	80% (763)	20% (67)	94% (167)	74% (326)	
Health in surance					
No	19% (180)	6% (20)	33% (58)	23% (102)	
Yes	81% (774)	94% (317)	67% (120)	77% (337)	
Benefit from social-economic su	upport				

No	79% (756)	81% (274)	94% (167)	72% (315)
Yes	21% (197)	19% (63)	6% (11)	28% (123)
Chronic conditions				
0	41% (395)	39% (131)	43% (76)	43% (188)
1	41% (388)	42% (143)	49% (87)	36% (158)
2 or more	18% (170)	19% (63)	8% (15)	21% (92)
Years suffered from the c	chronic illness(es)**			
≤2 years	21% (113)	19% (38)	31% (32)	19% (43)
>2 years	79% (426)	81% (167)	69 % (70)	81% (189)
Number of times health f	acility was attended over the	ne past 3 months		
≤1	23% (222)	19% (62)	33% (58)	23% (102)
≥2	77% (732)	81% (275)	67% (120)	77% (337)
Satisfaction with today's	consultation			
Unsatisfied	5% (43)	4% (12)	0%	7% (31)
Satisfied	95% (911)	96% (325)	100% (178)	93% (408)
Participated in promotion	nactivities			
No	96% (916)	97.6% (329)	100% (178)	93% (409)
Yes	4% (38)	2.4% (8)	0%	7% (30)

^{*}Primary and secondary school are up to 9 years of study (5-9). High school up to 12 years of study.

^{**}For certain sociodemographic categories such as "years suffered from the chronic illness(es)" we received lower responses.

Almost 60% of the all respondents stated that they suffered from at least 1 chronic health condition. The percentage of patients who reported suffering from 2 or more chronic conditions was higher in public rural PHC clinics (21%) and public urban PHC clinics (19%) compared to private clinics (8%). The proportion of patients recently diagnosed with a chronic condition (ie, less than 2 years ago) was higher in private clinics (31%) compared with the governmental PHC facilities (vs 19%), (Table 4).

A considerable proportion of patients utilizing urban public PHC clinics were pensioners (42%). Twenty-seven percent of patients utilizing rural PHC clinics perceived their health status as poor or rather poor, compared to 20% in urban PHC clinics. Nearly a third (28%) of patients attending a rural PHC service indicated that they are currently benefitting from some sort of economic or social aid scheme compared with 19% among those consulting a public urban PHC service. Compared with public urban PHC clinics, private outpatient clinics in urban areas provided services to younger patients (57% of patients were <60 years) who perceived themselves as having good health (94%). Patients visiting governmental PHC clinics hold more frequently a health insurance card (public urban PHC 94% vs public PHC rural 77% vs private outpatient clinics 67%).

Rating of Non-Clinical Care Quality by Patients

For 6 of the 8 domains, Cronbach's Alpha varied between 0.60 and 0.83, while the "confidentiality" and "choice" domains had values of 0.35 and 0.55, respectively. The values of the coefficient for the entire questionnaire was 0.65. The mean responsiveness scores of patients' experience along the quality of care domains by type of health care provider are shown in Table 5. The highest mean scores were reported for the communication domain (mean = 3.75; 95%-confidence interval = [3.70-3.80]) followed by dignity (3.65 [3.58-3.71]) and confidentiality (3.44 [3.31-3.64]). The lowest responses (lowest mean scores) were given for the domains of "choice" (2.89 [2.40-3.38]), "prompt attention" (3.00 [2.86-3.14]) and "coordination of care" (3.10 [2.83-3.37]). When averaging all scales, there was no significant difference between patients using the different types of providers. The overall mean score was however slightly higher among patients consulting rural PHC services as compared to urban governmental PHC-facilities (3.35 vs 3.21 P = .06).

Table 5. Comparison of Patients' Experience on Non-Clinical Quality of Care Domains by Facility Type Through Mean Scores† (and 95%-confidence interval).

Domains/quality attributes	Total population	Public urban (2)	Private urban	Public rura1(4)	Pvalue
Mean [95% Conf. Interval]	TotaTpopulation	Tublic urban (2)	(3)	Tublic Tutar(4)	1 value
Dignity $(n = 954)$	3.65 [3.58-3.71]	3.70 [3.58-3.82]	3.81 [3.64-3.98]	3.59 [3.52-3.67]	2 versus 3; P = .28
Diginty (ii 754)	3.03 [3.30-3.71]	3.70 [3.36-3.62]	3.01 [3.04-3.70]	3.37 [3.32-3.07]	2 versus 4; P = .16
Communication $(n = 933)$	3.75 [3.70-3.80]	3.71 [3.61-3.81]	3.7 [3.56-3.83]	3.79 [3.72-3.85]	2 versus 3; $P = .88$
				_	2 versus 4; P = .19
Coordination of care $(n = 854)$	of care 3.10 [2.83-3.37]	2.90 [2.71-3.08]	2.12 [1.86-2.38]	3.35 [3.23-3.47]	2 versus 3; P < .01
(n – 654)				=	2 versus 4; P < .01
Confidentiality ($n = 940$)	3.47 [3.31-3.64]	3.38 [3.15-3.60]	3.77 [3.45-4.09]	3.46 [3.31-3.61]	2 versus 3; $P = .04$
				_	2 versus 4; P = .5
Choice $(n = 790)$	2.89 [2.40-3.38]	2.69 [2.18-3.10]	2.57 [2.00-3.14]	3.06 [2.65-3.46]	2 versus 3; P = .78
				_	2 versus 4; P = .02
Autonomy (n = 772)	3.19 [3.05-3.33]	3.1 [2.84-3.37]	3.42 [3.06-3.79]	3.17 [3.00-3.34]	2 versus 3; P = .16
11,000,000,000		e.r (2.0 · e.e.)	52 [e.oo e./s]	===	2 versus 4; P = .66
Prompt attention $(n = 622)$	3.00 [2.86-3.14]	3.17 [2.97-3.36]	2.94 [2.71-3.18]	2.95 [2.78-3.11]	2 versus 3; $P = .07$
1 Tompt attention (ii = 022)	3.00 [2.00-3.14]	3.17 [2.77-3.30]	2.74 [2.71-3.16]	2.73 [2.76-3.11]	2 versus 4; P = .01
Quality of basic amenities	3.14 [2.98-3.31]	3.02 [2.69-3.36]	3.70 [3.23-4.17]	3.10 [2.87-3.32]	2 versus 3; P = .01
(n = 954)	3.14 [2.96-3.31]	3.02 [2.09-3.30]	3.70 [3.23-4.17]	3.10 [2.87-3.32]	2 versus 4; P = .7
Total gapes $(n = 900)$	2 20 [2 21 2 29]	2 21 [2 07 2 22]	2 2 6 12 07 2 42	2 25 [2 26 2 42]	2 versus 3; $P = .65$
Total score (n = 890)	3.30 [3.21-3.38]	3.21 [3.07-3.33]	3.26 [3.07-3.43]	3.35 [3.26-3.42]	2 versus 4; P = .06

 $^{^{\}dagger} Mean \, values \, were \, obtained \, from \, linear \, mixed \, models \, with \, random \, intercepts \, for \, districts \, and \, facilities \, nested in \, districts. \, S \, tatistically \, significant, \, P < .05 \, .$

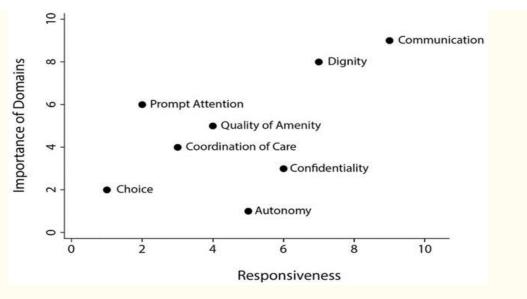
Urban governmental PHC services were rated significantly better than private outpatient clinics in "coordination of care" (2.90 vs 2.12, P < .001). In contrast, private outpatient clinics were judged significantly better than urban PHC clinics in "confidentiality" (3.77 vs 3.38, P = .04) and "quality of basic amenities" (3.70 vs 3.02, P < .001).

For the other domains, no statistically significant differences were observed. Differences were observed in the mean values between governmental urban and rural PHC services: patients consulting in rural PHC services provided higher average ratings for "coordination of care" (3.35 vs 2.90, P < .001) and the "ability to choose a doctor" (3.06 vs 2.64, P = .02), while the ratings for the domain of "prompt attention" was significantly lower compared with governmental urban PHC settings (2.95 vs 3.17, P = .016).

When ranking the importance of domains for consulting by type of provider, among all patients included in the survey by total, "communication" was rated highest, followed by "dignity" (Figure 9). The domains seen as most important, communication and dignity, also received the highest mean quality ratings.

The "prompt attention" domain was considered as an important domain by patients (ranked third); at the same time, it received low mean scores. "Autonomy" and "choice of provider" were least frequently reported as most important domain, also demonstrating lower mean ratings compared to other domains.

Figure 9. Importance and associated responsiveness of attributes of non-clinical quality of care†.



[†]Importance of the domains were calculated based on the patients' individual ranking and were then crossed with the respective domains' mean values (responsiveness).

Predictors of Non-Clinical Quality of Care

Table 6 and Table 7 present the results of multivariable analyses of the 8 domains quality scores after adjustment for socioeconomic and health conditions of respondents. The mean total score showed no statistically significant difference between patients by type of health care provider (coefficient = 0.12, P = .27). However, the adjusted mean total score was significantly higher among rural patients compared to those consulting a public urban HC (coefficient = 0.2, P = .01).

Table 6. Differences in Domains and Overall Scores According to Provider Type, Adjusted for Patients' Characteristics. †

	Dignity	Communication	Coordination of care	Confidentiality	Choice
Coef.CI	Coef.(CI)	Coef.(CI)	Coef.(CI)	Coef. (CI)	Coef.(CI)
Constant	3.75 [3.56; 3.94]	3.64 [3.48; 3.80]	2.29* [2.04;2.54]	3.33* [3.02; 3.64]	2.34 [1.85; 2.84]
Provider ref. u	ırbanPHC				
Private clinics	0.09 [-0.15; 0.34]	-0.02 [-0.20; 0.16]	-0.62*[-0.94;-0.30]	$0.45^*[0.03;0.86]$	0.09 [-0.47; 0.66]
RuralPHC	-0.09 [-0.27; 0.09]	0.07 [-0.06; 0.22]	$0.52^*[0.29;0.76]$	0.18 [-0.11; 0.47]	$0.55^*[0.13; 0.97]$
Genderref.fe	male				
Male	-0.006 [-0.06; 0.05]	-0.03 [-0.09; 0.02]	0.07 [-0.01; 0.15]	0.02 [-0.04; 0.07]	0.02 [-0.06; 0.13]
Age ref. <60 y	/ears				
>60 years	0.03 [-0.06; 0.13]	0.04 [-0.05; 0.14]	-0.02 [-0.15; 0.09]	0.007 [-0.09; 0.10]	0.04 [-0.11; 0.21]
Education ref	. university				
High school (12 years)	-0.01 [-0.11; 0.07]	0.08[0.01; 0.18]	0.03 [-0.09; 0.15]	-0.02 [-0.11; 0.07]	-0.01 [-0.16; 0.14]
Primary (9 years)	-0.05 [-0.14; 0.04]	0.08 [-0.01; 0.18]	0.05 [-0.07; 0.17]	-0.05 [-0.15; 0.04]	0.03 [-0.11; 0.19]
Other	-0.08 [-0.24; 0.08]	$0.19^*[0.03, 0.35]$	0.25 [0.03; 0.46]	0.18 [0.01; 0.35]	0.33 [0.05; 0.6]
Chronic cond	itions ref. no Ch. condition	on (0)			
1	0.01 [-0.05; 0.08]	-0.03 [-0.09; 0.04]	$0.16^*[0.06; 0.25]$	-0.07 [-0.08; -0.06]	0.04 [-0.08; 0.15]
≥2	-0.02 [-0.10; 0.07]	0.01 [-0.07; 0.1]	$0.2^*[0.07; 0.32]$	0.05 [-0.04; 0.14	0.04 [-0.1; 0.19]
Insurance ref.	not insured				
Insured	-0.03 [-0.11; 0.03]	-0.01 [-0.09; 0.06]	$0.21^*[0.09; 0.31]$	-0.01 [-0.09; 0.07]	0.08 [-0.05; 0.22]
Utilization of	HC ref. (<=1)				
<u>≥2</u>	-0.001 [-0.07; 0.07]	0.02 [-0.05; 0.09]	$0.12^*[0.02; 0.21]$	-0.012 [-0.08; 0.06]	0.07 [-0.05; 0.2]
BenefitingSE	.AIDref. no***			-	0
Yes	-0.08*[-0.16; 0.01]	-0.07** [-0.15; 0.01]	0.03 [-0.07; 0.13]	-0.05 [-0.13; 0.03]	0.11 [-0.02; 0.25]
Occupation re	f.employed				

Unemployed	0.06 [-0.01; 0.14]	0.07** [-0.004; 0.14]	0.09 [-0.008; 0.19]	0.03 [-0.04; 0.11]	-0.11 [-0.24; 0.02]
Pensioner	-0.05 [-0.16; 0.05]	-0.04 [-0.01; 0.06]	0.14* [-0.02; 0.28]	-0.06 [-0.17; 0.05]	-0.14 [-0.33; 0.04]
Health service	e ref. satisfied				
Unsatisfied	0.09[-0.11; 0.28]	-0.16 [-0.35; 0.03]	0.18 [-0.06; 0.43]	0.1 [-0.10; 0.31]	0.29 [-0.07; 0.64]

 $^{^{\}dagger}$ The analyses were conducted using linear mixed models with random intercepts for districts and facilities nested in districts. All variables were simultaneously included in the respective models. P-values were obtained from the Wald tests of the respective parameter estimates *P < .05. **P < .1. ***Benefit from social economic support.

Table 7. Differences in Domains and Overall Scores According to Provider Type, Adjusted for Patients' Characteristics.†

	Autonomy	Prompt attention	Qual. of Amenity	Total mean score
Coef. CI	Coef. (CI)	Coef. (CI)	Coef.(CI)	Coef. (CI)
Constant	2.80*[2.41; 3.19]	3.44* [3.21; 3.68]	2.94* [2.51; 3.38]	3.05*[2.89; 3.21]
Provider ref. urban PHC				
Private clinics	0.48* [-0.05; 1.02]	-0.24*[-0.47;-0.01]	0.8* [0.29; 1.33]	0.12 [-0.09; 0.34]
RuralPHC	0.21 [-0.18; 0.61]	-0.13 [-0.31; 0.05]	0.06 [-0.31; 0.43]	$0.2^*[0.04;0.36]$
Gender ref. female				
Men	0.04 [-0.07; 0.14]	-0.03 [-0.12; 0.05]	0.004 [-0.08; 0.09]	0.02 [-0.02; 0.05]
Age ref. <60 years				
>60 years	-0.04 [-0.21; 0.13]	0.04 [-0.09; 0.18]	0.11 [-0.03; 0.25]	0.02 [-0.03; 0.09]
Education ref. university				
High school (12 years)	-0.08 [-0.23; 0.09]	-0.21*[-0.35; -0.08]	-0.02 [-0.15; 0.11]	-0.02 [-0.08; 0.03]

Primary (9 years)	0.01 [-0.15; 0.16]	-0.27* [-0.41; -0.14]	0.05 [-0.08; 0.18]	0.015 [-0.07; 0.04]
Other	-0.01 [-0.33; 0.29]	-0.19 [-0.47; 0.08]	0.18 [-0.05; 0.43]	0.15 [0.04; 0.25]
Chronic conditions ref. no Ch.	condition (0)			
1	0.06 [-0.06; 0.19]	-0.16* [-0.27; -0.05]	0.016 [-0.08; 0.11]	0.002 [-0.04; 0.05]
≥2	0.12 [-0.03; 0.27]	-0.16* [-0.29; -0.02]	-0.008 [-0.14; 0.12]	0.02 [-0.03; 0.08]
Insurance ref. not insured				
Insured	0.16* [0.13; 0.30]	0.04 [-0.06; 0.16]	-0.02 [-0.13; 0.09]	$0.06^*[0.01; 0.11]$
Utilization of HC Ref. (<=1)				
≥2	0.12**[-0.01; 0.25]	-0.04 [-0.14; 0.07]	0.04 [-0.07; 0.14]	0.03 [-0.02; 0.08]
Benefiting SE.AID *** ref. no				
Yes	0.02 [-0.11; 0.16]	0.01 [-0.11; 0.13]	0.05 [-0.06; 0.16]	0.005 [-0.05; 0.05]
Occupation ref. employed				
Unemployed	-0.10 [-0.23; 0.03]	-0.06 [-0.17; 0.05]	-0.02 [-0.13; 0.08]	0.01 [-0.04; 0.06]
Pensioner	-0.14 [-0.33; 0.05]	-0.07 [-0.22; 0.08]	-0.09 [-0.25; 0.06]	-0.04 [-0.11; 0.03]
Health service ref. satisfied				
Unsatisfied	0.09 [-0.31; 0.52]	0.23 [-0.09; 0.55]	-0.14 [-0.43; 0.15]	0.07 [-0.05; 0.21]

 $^{^{\}dagger}$ The analyses were conducted using linear mixed models with random intercepts for districts and facilities nested in districts . All variables were simultaneously included in the respective models. Statistically significant, *P < .05. **P < .1. *** Benefit from social-economic support.

Patients consulting a rural PHC manifested a higher average rating on the domains of "coordination of care" (coefficient = 0.5, P < .01) and "choice" (coefficient = 0.5, P = .01) compared with patients from public urban PHC facilities.

The mixed model results showed that patients attending private providers reported lower scores on coordination of care (coefficient = -0.62, P < .01) and prompt attention (coefficient = -0.24, P = .03) in comparison to urban PHC clinics but reported a higher average scores of confidentiality (coefficient = 0.45, P = .03), quality of basic amenities (coefficient = 0.81, P = .002) and autonomy (coefficient = 0.48, P = .07).

Possession of a health insurance card was associated with a higher mean total score on quality of care (coefficient = 0.06, P = .02). Also, more frequent utilization of the facility was associated with higher mean values of the domains of "coordination of care" (coefficient = 0.12, P = .01) and—by trend—on autonomy (coefficient = 0.12, P = .07).

Patients with 1 or more chronic health conditions reported a lower average score on the "prompt attention" domain compared with those not suffering from any NCD (coefficient = -0.16, P = .03). However, they perceived experiencing better coordination of care when compared with healthy participants (coefficient = 0.16, P = .001; coefficient = 0.2, P = .001).

4.5 Discussion

This study has offered insight into the non-clinical quality of care attributes, simultaneously by measuring patients' experience and expectations of quality among public and private PHC providers respectively, in 2 regions of Albania. The findings of this study are discussed based on the relevance of the main non-clinical quality attributes (domains) and their perceived responsiveness by healthcare provider type. Although the study instrument (questionnaire) showed overall good internal consistency, there were some outliers on confidentiality and choice domain, possibly related to lack of previous experiences with these terms by patients and diversity of items. Similar patterns of variability are however reported elsewhere in the literature. (Kooy et al. 2014)

Quality of Care by Type of Health Care Provider

The study indicates that urban public PHC services and private outpatient clinics do perform similarly in respect to attributes of non-clinical quality of care. This is in contrast to, Bleich and colleagues who identified lower quality rates amongst private healthcare users compared to public counterparts, in a study conducted in 21 European Union countries. (Bleich, Özaltin, and Murray 2009) These results deviate from findings of other studies indicating that private health facilities appear to be of higher (interpersonal) process quality, including responsiveness and effort, and conceivably being more patient-orientated than public facilities. (Berendes et al. 2011, Rannan-Eliya, Wijemanne, Liyanage, et al. 2015, Basu et al. 2012)

Our results do suggest that while the overall quality ratings were similar, private providers are rated better, on quality of basic amenities, confidentiality, and autonomy. Although confidentiality was well rated in terms of responsiveness (patients' experience when receiving care, as assessed by the mean sores) (Table 5, Figure 9), this domain was considered by respondents as of comparatively low importance for consulting a PHC service (Figure 9). This aligns to other studies which identified confidentiality being a neglected aspect of care in less developed countries, partly due to lower importance given to this domain, mainly attributed to resource limitations and lack of awareness. (Wang, Maitland, Nicholas, et al. 2017) One reason why confidentiality is better perceived in private sector in the present study could be linked to relatively good infrastructural conditions, appropriate space and waiting rooms. Indeed, the private providers in Albania have substantially invested in modern and updated technology and medical devices. (Uruçi and Scalera 2014)

At the same time, quality of basic amenities was perceived as an important attribute of quality of care (Figure 9) but were poorly rated by users of governmental services. Public health services in Albania over the last 2 decades are paradoxically perceived as a mix of poor quality in terms of infrastructure, (Ministry of Health and Social Protection 2017a, Uruçi and Scalera 2014, 'Peabody, DeMaria, Smith, et al. 2017) yet, with highly satisfied patients (Kiefer and Kadesha 2015) yielding positive estimations on staff skills in terms of accurate diagnosis and staff readiness to respond on time in a kind and polite way. (Kalaja, Myshketa, and Scalera 2016)

Similar perceptions do prevail when comparing urban and rural PHC experiences with the non-clinical quality of care: patients attending rural PHC were less critical and reported higher levels of agreement with the quality attributes compared to urban patients, reconfirming previous studies of rural patients being more positive about the care environment. (Footman et al. 2013, Ganguly and Sharma 2014) One could argue that the reforms and efforts of the governments of Albania and their partners in improving rural PHC services by (i) refining physical infrastructure of the facilities, (ii) equipping facilities with appropriate medical devices, and (ii) fostering staff continuous education activities, (Kiefer and Kadesha 2015) might have positively impacted rural populations' perception. It should be pointed out that efforts toward quality improvement initiatives and UHC have been the focus of the Albanian government. Additionally, since 2009 there has been compulsory accreditation of public and private health services providers (with an exception of laboratories), and the providers are expected to meet minimal standards of quality of care. (Arqimandriti M, Ivkoviç M, and Naskidashvili I, et al. 2014)

The attitudes of the rural patients interviewed within the present study, may also mirror the past communism area positions of the society with strong community ties, where traditionally state-owned institutions, doctors included, were the ultimate and unquestionable authority. (Footman et al. 2013, V et al. 2007) The findings may also reflect a lack of awareness of patients' rights and weak, undeveloped patients' centeredness concepts. Nevertheless, when compared with urban patients in public facilities, rural patients gave considerably lower mean values on prompt attention (Table 5), perceiving difficulties related to geographic proximity, means and costs of transport and waiting time. However, after adjustments for socioeconomic and health characteristics, these results did not yield a statistical significance when compared to urban public providers (Table 6 and Table 7). The pattern of differences in the mean scores between the different types of facilities did not change when analyzing the data only for Fier region, (the district that had both public and private clinics), see Supplemental Table 1. The magnitudes of differences were quite comparable with the exception of the mean value of "Choice" dimension among patients attending urban public facilities where the mean value decreased from 2.69 to 2.26 after excluding the district Diber (the district with no private clinics).

Patient-Provider Interaction: The Path Toward Informative and Participatory Decision-Making

Among the 8 non-clinical care attributes of quality, patients rated communication and dignity the highest. By contrast the choice of provider, prompt attention and coordination of care were scored lowest (Figure 9). These findings are consistent with previous research where both communication and dignity were highly rated in 5 central European countries. (V et al. 2007) Some authors consider that this pattern can be elucidated by the historical, cultural, and social environment (Mirzoev and Kane 2017) which formed populations' expectations when encountering the health providers and health system. Also, in terms of importance of domains, as depicted from patients' theoretical point of view, our study showed that patients, independent from using a public or private provider, agree that communication and dignity were the most important attributes of quality, followed by prompt attention. This is partly different from the outcomes of a previous study involving 41 countries who selected prompt attention as the most important domain, followed by dignity and communication. (N. Valentine, de Silva, Kawabata, et al. 2003)

When averaging total scale (Table 6), patients receiving social or economic aid reported lower dignity and communication mean scores compared to those not receiving it. This aligns to previous research that has found that socio-economically disadvantaged groups are treated with less respect and inadequate communication by health workers. (N. B. Valentine, Bonsel, and Murray 2007)

The autonomy domain incorporates the concept of patients' empowerment and their right (including their caregivers' rights) to medical information and their choice to refuse a medical treatment. However, autonomy did not appear to be among the important or even well-rated domains in our study. In fact, it was frequently rated as one of the least important domains (Figure 9). This shows that involvement of patients in treatment choices is still an evolving area, especially in the governmental sector. Some efforts are being invested by private outpatient clinics in giving patients more information about alternative types of treatments and tests; however, in our study there were not any noteworthy differences compared to the public sector. It has been argued that low attention to autonomy can be explained by persistent paternalistic behaviors of both provider and patients regarding their position with each other and within the health system. (V et al. 2007) Patients' voice in healthcare delivery process and community involvement on quality of

care improvement initiatives are latent in Albania and have yet to be actively developed in the health system to support health policymaking. (Ministry of Health and Social Protection 2017)

Prompt Attention, Choice, and Coordination of Care

When averaging ratings of responsiveness for the total population, domains of "ability to choose doctor," "prompt attention," and "coordination of care" were among the lowest rated, suggesting a poor performance. "Prompt attention" was ranked third by the level of importance and it was the second lowest rating by the level of responsiveness (Figure 9). This indicates that this domain is of high importance to patients but not experienced satisfactorily in the frame of their most recent PHC consultation, especially in rural settings.

Respondents receiving care from private outpatient clinics provided a low average score on the "prompt attention" domain. This may be related to 2 facts; first, private outpatient clinics operate during some hours of the day, by inviting several specialist doctors, sometimes from the capital city of Tirana or nearby countries such as doctors from Greece, Italy, or Turkey. Second, the patients attending private clinics frequently do not benefit from health insurance coverage. They may be living in close or distant villages, and they may have gone through different processes and obstacles within the public health care system prior to ending up at the private clinics. Moreover, doctors working at the same time at the public and private health sector (dual practices) and patient juggling are a concerning phenomenon, especially in low- and middle-income countries, (Slipicevic and Malicbegovic 2012) making private PHC services not constantly available due to limited presences of doctors, hindering thus prompt attention, choice, and good coordination of care. (Uruçi and Scalera 2014)

The factors mentioned above might also explain the discontent of patients with their ability to choose the provider they want to consult about their medical condition even when choosing or transiting to the private health providers.

Sociodemographic Characteristics and Perceived Quality of Care

Our results showed that being in the possession of a health insurance card, having utilized the health service more recently and being a pensioner, were good predictors of positive quality ratings

of the domains of "coordination of care" and "involvement in healing options" (autonomy). At the same, suffering from 1 or more chronic conditions were good predictors of lower quality ratings on the "prompt attention" domain and higher ratings for coordination of care. Thus, while shaping the new service delivery models, policy makers and public health researchers should emphasis the ways in which to deploy health workers and how to engage patients in treatment choices in order to deliver well-coordinated care

In the current study, people in good health were overall more critical of the quality of care, especially with the ability to choose a provider, while gender and age were no predictors of quality of care ratings. Previous studies have yielded mixed results between perceived quality and patients' sociodemographic and health characteristics.(Bleich, Özaltin, and Murray 2009, Robone, Rice, and Smith 2011, Mirzoev and Kane 2017, Ganguly and Sharma 2014, V et al. 2007, Starfield, Lemke, Herbert, et al. 2005) Low perceived quality of care has been associated with users in poor health, uninsured people or users that have made fewer visits to providers. (Bleich, Özaltin, and Murray 2009) Other studies associate perceived good quality with older age and higher income, (N. B. Valentine, Bonsel, and Murray 2007) self-reported good health status and rural residency. (Footman et al. 2013)

Patients' perceived quality differences may also be explained by variability of the quality instruments and the context on which the instruments have been implemented, factors related to individual characteristics, previous encounters with health care providers and the cultural, historical and geographical environment.

Study Limitations

This study has some limitations. The number of respondents who answered each item, varied from one domain to the other (selecting for example the "non applicable" answer option), reflecting variable understanding and sensitivity of respondents to 8 domains of WHO responsiveness tool. Therefore, when data was analyzed, a condition was set to have at least 75% of the all domains (6 out of 8) entirely answered. However, the mean values trend did not change even when we ran the analysis under different domains fulfilled rather than 6. The study was conducted applying a widely accepted and validated tool, however, entirely relying on self-reporting perceptions rather than measurements of an impartial observer; therefore, possible

variations of the patients' perceived non-clinical quality may be attributed to differences in patients' characteristics, cultural aspects, previous experience and expectations rather than actual provider practice. Moreover, the questionnaire has not been validated previously in Albania. The response rate was quite high (88%), but certain categories of patients, for example younger patients did not give consent to participate. Therefore, a certain response bias cannot be excluded. Since the data collection took place during July and August, certain health conditions, typically for the other seasons (allergies or flu) might be less represented. Further, while all governmental providers in the 2 regions covered by the study participated, 3 out of 8 private out-patient provides did not consent to participate in the study. Private outpatient clinics were all located in urban areas of 1 of the 2 study regions. Consequently, the study is not in a position to analyze urban-rural differences in user perspectives on private services for both districts. This said, in Albania private services are nearly exclusively situated in urban settings so that the findings represent the general setting as prevailing in Albania. The 2 regions covered by the study make up around 16% of the territory of Albania and demographically represent around 15.7% of the population. One region (Diber) represents the mountains relatively poor part of the country while the second (Fier) is characteristic for the coastal, partially industrial settings in the country. Thus, the 2 regions reflect 2 patterns of Albania but cannot be considered as fully representing the socio-cultural and economic diversity of the country. Consequently, we cannot exclude the possibility that if applied to other regions, namely the urban context of the capital city Tirana, the results would differ. Last, given the inclusion criteria, participants had to benefit from some of outpatient care on the day of the interview; thus, people consulting PHC for other reasons such as for reimbursement of drug prescription, receiving a medical certificate or medical clearance for driving license were not included in the survey.

4.6 Conclusion

The overall perception and ratings of non-clinical quality of care by patients is similar across those consulting governmental and private services respectively in urban and rural areas. Respondents rated their experience with quality of care high, indicating that this dimension matters for consultation. Other dimensions of importance for patients independently of the type of service provider were communication and dignity. Opposite, users of public rural PHC services rated their

experience with "prompt attention" considerably lower than those consulting public urban PHC services. Patients attending private outpatient clinics rated the dimension "coordination of care" as low.

Patients' involvement in their care was not prioritized by patients and considered as a less important aspect of quality. This would suggest that relationship between health care provider and the patient should change from a "paternalistic" model to a "co-managing the illness" model, where both patients and caregivers meaningfully participate in decisions related to the healing process. Educating patients and doctors to make the most of their interactions would be an effective way to tackle the low awareness on autonomy.

Given the ageing population and concomitant rise of chronic health conditions, home care models, might be beneficial to reach out into communities and raise promptness of response of services. As Albania moves toward a better coordinated health service it will be of importance to build up an electronic medical record system so that different providers can share and exchange relevant patient information. In the absence of a consolidated health information system, lack of timely exchange of patients' medical records, within and between public and private healthcare providers, members of the allied health workforce such as nurses could act as a point of continuity of care between patient, family and provider, improving thus coordination of care.

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Supplemental Table 1

Comparison of patients' experience on non-clinical quality of care domains by facility type through mean scores † (and 95%-confidence interval) only for **Fier district**

Domains				
Mean, [95% Conf.	Public Urban (2)	Private Urban (3)	Public Rural (4)	P value
Interval]				
Dignity	3.72	3.82	3.55	2 vs 3; p = 0.07
	[3.67-3.77]	[3.73-3.91]	[3.45-3.65]	2 vs 4; p < 0.01
Communication	3.69	3.70	3.82	2 vs 3; p = 0.95
	[3.59-3.79]	[3.56-3.85]	[3.76-3.88]	2 vs 4; p = 0.03
Coordination of	2.76	2.12	3.33	2 vs 3; p < 0.01
care	[2.57-2.96]	[1.90-2.34]	[3.17-3.50]	2 vs 4; p < 0.01
Confidentiality	3.54	3.79	3.54	2 vs 3; p = 0.04
	[3.34-3.75]	[3.68-3.90]	[3.30-3.77]	2 vs 4; p = 0.96
Choice	2.26	2.34	2.89	2 vs 3; p = 0.64
	[2.09-2.43]	[2.05-2.63]	[2.42-3.35]	2 vs 4; p = 0.02
Autonomy	3.22	3.42	3.24	2 vs 3; p = 0.24
	[2.94-3.50]	[3.22-3.62]	[3.08-3.40]	2 vs 4; p = 0.88
Prompt attention	3.07	2.87	2.85	2 vs 3; p = 0.10
	[2.91-3.22]	[2.70-3.04]	[2.75-2.96]	2 vs 4; p = 0.03
Quality of basic	2.84	3.67	2.96	2 vs 3; p <0.01
amenities	[2.36-3.33]	[3.61-3.74]	[2.64-3.28]	2 vs 4; p = 0.70
Total score	3.14	3.25	3.30	2 vs 3; p = 0.12
	[3.05-3.23]	[3.14-3.35]	[3.20-3.39]	2 vs 4; p = 0.02

 $[\]dagger$ Mean values were obtained from linear mixed models with random intercepts for districts and facilities nested in districts. Statistically significant, p<0.05.

5 Factors associated with the utilisation of primary care services: a cross-sectional study in public and private facilities in Albania

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5.1 Abstract

Objectives: To identify key factors influencing the utilisation of governmental and private primary healthcare services in Albania.

Design: A cross-sectional health facility survey using a 4-point Likert scale questionnaire to rank the importance of factors driving services utilisation.

Setting: Exit interviews with patients who consulted one of 23 primary care providers (18 public and 5 private) in Fier district of Albania from the period of July–August 2018.

Participants: Representative sample of 629 adults ≥18 years of age.

Main outcomes measures: (1) Factors influencing the decision to visit a governmental or private primary care provider and (2) the association of sociodemographic characteristics and patients' decision to attend a given provider. Data were analysed using mixed logistic regression models.

Results: Nearly half of the participants in this study were older than 60 years (45%). The majority (63%) reported to suffer from a chronic condition. Prevailing determinants for choosing a provider were 'quality of care' and 'healthcare professionals' attitudes. Solely looking at patients using a public provider, 'geographical proximity' was the most important factor guiding the decision (85% vs 11%, p<0.001). For private provider's patients, the 'availability of diagnostic devices' was the most important factor (69% vs 9%, p<0.001). The odds of using public facilities were significantly higher among the patients who perceived their health as poor (OR 5.59; 95% CI 2.62 to 11.92), suffered from chronic conditions (OR 3.13; 95% CI 1.36 to 7.24) or were benefiting from a socioeconomic aid scheme (OR 3.52; 95% CI 1.64 to 7.56).

Conclusion: The use of primary healthcare is strongly influenced by geographical and financial access for public facility users and availability of equipment for private users. This study found that aspects of acceptability and adequacy of services are equally valued. Additional commitment to further develop primary care through engagement of local decision-makers and professional associations is needed.

5.2 Strengths and limitations of this study

- In the context of a growing importance of the private sector, this study informs on the reasons for the use of private and public services in a mostly rural setting in Albania.
- This study contributes to a better understanding of the individual and health system
 provider-related factors associated with the use of healthcare services. Thus, factors of
 operational relevance for improving primary care and strengthening the health system are
 decorticated.
- The study covered representative sample of users of primary care in one region and included 18 public facilities and 5 private settings.
- The study was relying on self-reporting perceptions rather than measurements of an impartial observer; therefore, possible variations of the patients' perceived importance may be attributed to differences in patients' characteristics, cultural aspects, previous experience and expectations rather than actual provider practice.
- The region where the study was conducted reflects generalised patterns of Albania but cannot be considered as fully representing the sociocultural and economic diversity of the country. Consequently, we cannot exclude the possibility that if applied to other regions, the results would differ.

5.3 Background

Access to public Primary Health Care (PHC) enables patients and physicians to prevent and better manage illness, while limiting the cost of health service provision and protecting patients from financial hardship related to health (Stigler et al. 2016, Kringos, Boerma, Hutchinson, et al. 2015, (Kruk, Gage, and Naima T. Joseph, et al. 2018, Bitton, Ratcliffe, Veillard, et al. 2017)

As an extension of choice between different treatments and to access reliable services that are responsive to patients' preferences, there are also the private providers, which are indeed an important source of healthcare and have a role to play in delivering good and affordable health services. Though there is an array of theoretical research on factors enabling or hindering the uptake of such services (Aday and Andersen 1974b, Penchansky and Thomas 1981b, Peters et al.

2008, Jean-Frederic Levesque, Harris, and Russell 2013, Saurman 2015, Russell et al. 2013, Comino et al. 2012, Tang, Xu, and Zhang 2016), little is known what motivates and drives utilization of public and private primary health care services in rural settings in Albania.

Albania, a south East-European post-communist country, with a health system in transition (Nuri and Tragakes 2002), has undertaken initial steps in strengthening the role of PHCs services. In 2015 a national free checkup-program for those 45 years and older as well as free access to preventive services for the entire population was introduced. Despite these strategic actions which have generated positive trends in terms of PHC utilization, there is concern that these trends might diminish due to a lack of culture of prevention, inherited from the old 'curative' health system (WHO 2018, Sentell et al. 2018) and due to ill equipped facilities, which indeed, often push patients to bypass PHC in favor of specialty care or private providers. (WHO 2018, Arqimandriti M, Ivkoviç M, and Naskidashvili I, et al. 2014)

In Albania, private outpatient providers have experienced, massive growth over the last two decades, principally in large urban settings of Tirana. They offer a full range of medical services, starting from diagnostics and providing more comprehensive treatment and support, duplicating the functions of both public PHC clinics and polyclinics of specialties. Most of these services are also provided by public PHC as delineated among else to the recent PHC basic package of services. (Compulsory Healthcare Insurance Fund 2013) However, evidence on the determinants of utilization of public PHC and private facilities associated with the utilization of each provider type, is currently missing, including in respect to patterns in rural settings and secondary cities.

Governmental primary healthcare care plays an important role in immunization and reproductive health. The expectations of what PHC should achieve in the near future regarding the prevention, treatment and management of noncommunicable diseases (NCDs) are delineated and indorsed in different strategic national documents, as an effective response to the Albanian health system challenges, such as continuous raise of NCDs and aging population. (Ministry of Health and Social Protection 2017a, Ministry of Health 2016, Bruijn et al. 2015)

Access to most public services is free and there are generally no fees at the point of use (PHC), whereas the private sector generally requires out of pocket payments or possession of private health insurance. (Compulsory Healthcare Insurance Fund 2013) The model of the health insurance

scheme in the Republic of Albania is a mix model, based on mandatory and voluntary contributions, as well as funding from the state budget. The economically active population pays for state health insurance, while the state budget through general taxation covers the inactive population and the categories in need, thus giving the scheme a solidarity approach. The mechanism for implementing the health insurance scheme is based on annual contracts between the health insurance fund with public and certain private health service providers for the provision of a defined health service package. The health insurance scheme covers: (i) Primary service; (ii) Hospital service (except psychiatric hospitals); (iii) List of reimbursable drugs. Compulsory health insurance finances an essential service package, which includes: visits, examinations and medical treatments in public primary health care centers and public hospitals; visits, examinations and medical treatments in certain contracted private primary care providers and private hospitals; medicines, products and medical treatments from contracted health care providers. (Fondi i Sigurimit të Detyrueshëm të Kujdesit Shëndetësor 2019)

Meanwhile, private healthcare services consist mostly of private for-profit health services organizations or faith-based facilities which deliver outpatient care. Across the country, there are as per 2020, 10 private hospitals; 229 specialized private diagnostic and laboratory centers; and 177 outpatient medical centers and cabinets, principally situated in urban areas. (Ministry of Health 2015)

Too often research on PHC is focused on measuring inputs to care—including supplies, infrastructure and financing—while ignoring the core functions of service delivery as experienced by users of the system (Hirschhorn et al. 2019) which are indeed an important consideration in health service research for policy and planning reasons. (Field and Briggs 2001) This study assesses factors motivating patients to utilize governmental PHC and outpatient private clinics and possible sociodemographic (individual) characteristics associated with the attendance of public PHC and private clinics.

Drivers of health services utilisation in public and the private settings

Patients' choice to utilize a public or a private facility within a health system with a diversity of providers is guided by a range of factors. Researchers have identified factors which relate to:

- (i) individual characteristics using the service such as: health status, knowledge and beliefs as well as sociodemographic and socioeconomic characteristics (Aday and Andersen 1974b, Penchansky and Thomas 1981b, Peters et al. 2008, Field and Briggs 2001, O'Donnell 2007)
- (ii) service provider characteristics, including ownership, size, service type, accreditation and reputation of the respective institution; and
- (iii) patients' perceptions of the quality of services provided along with health service providers' 'responsiveness are key factors in determining the use of the health care facility. In fact, quality of care as a determinant for choosing healthcare providers has been gaining grounds over the past decades. (Gage et al. 2018, Tancred, Schellenberg, and Marchant 2016, Nørgaard et al. 2012)

Good access to healthcare services is seen as key driver for increasing utilization of services. Access, defined as a measure of the proportion of the population that reaches appropriate health services' is a complex and multi-dimensional concept susceptible to various frameworks and interpretations (Aday and Andersen 1974b, Penchansky and Thomas 1981b, Peters et al. 2008, Jean-Frederic Levesque, Harris, and Russell 2013, Saurman 2015, Russell et al. 2013) Theoretical research related to access in healthcare has historically been influenced by the Andersen model of predisposing (e.g., age, sex and social structure), enabling (e.g., distance to healthcare) and need (e.g., symptoms and functioning) factors.(Aday and Andersen 1974b)

Other authors have emphasized the need to more strongly focus on the dynamics of access and have elaborated on five abilities of populations to interact with the dimensions of accessibility: ability to perceive and to seek care; ability to reach, to pay and to engage with healthcare services (Levesque, Harris, and Russell 2013); Still other authors have stressed that access framework should further embed 'awareness' as an integral part of access. (Saurman 2015)

In this study we use the concept of access first elaborated by Penchansky R and Thomas JW. in 1981(Penchansky and Thomas 1981), which summarizes a set of dimensions describing the fit between the patient and the health care system (Figure 10). The specific dimensions of the

framework are further operationalized by Obrist et.al (Obrist et al. 2007), namely: Access, Availability, Affordability, Adequacy and Acceptability (Table 3).

Figure 10. The concept of access: definition and relationship to consumer satisfaction. Adapted from Penchansky and Thomas. (Penchansky and Thomas 1981), Concept of access first elaborated in 1981



What guides patients' decision to use outpatient private services which are also offered by the public sector is poorly understood: (Kumar et al. 2015) However, problems of quality and accessibility of the public sector alongside with difunctional medical equipment have been identified as drivers for the use of private clinics (O'Donnell 2007, Jean-Frédéric Levesque et al. 2006, Balabanova et al. 2012, Peabody et al. 2017, Y. Liu et al. 2018) The private for-profit sector positions itself as a driver of innovation, a provider of higher quality care, able to offer greater efficiency and improved access via new delivery models. (Basu et al. 2012, Kim et al. 2018)

There is still limited information on the demand side available in the literature, specifically on how individuals choose health care services, and the prevailing characteristics of the providers when deciding to consult a given type of provider according to patients 'view.

Goals of this study

The present study has two objectives:

- a. To analyse factors influencing utilisation of public funded PHC and private facilities, as viewed by patients.
- b. To analyse the association of service utilisation by provider type with the sociodemographic and health characteristics of the respondents.

Study design

A cross-sectional representative patient exit survey was conducted in one region of Albania. The study used face-to-face interview to collect data from patients attending both public PHC centres and private outpatient clinics. The focus of the structured interview was on personal characteristics, health service-related views and priorities of patients.

Setting and sampling

The study was conducted in urban and rural areas of Fier region in Albania. The region is located 98 km southwest of Albania with access to the seaside. The most recent census 2011 registered 310 277 persons living in in Fier. Patients who sought care were included in the sample with a probability proportional to healthcare utilisation numbers in 2017. Thus, the study covered all 18 public PHCs and the 5 out of 8 licensed private outpatient clinics who agreed to participate. Adults of more than 18 years of age were interviewed through an exit interview after their visit. Inclusion criteria for the health facilities were as follows: (1) public and private health facilities, (2) at least one medical doctor working at the facility and (3) provision of care and prevention related to chronic diseases (eg, diabetes mellitus, hypertension). Inclusion criteria for an exit interview with a patient were: (1) patients, either 18 years or older or accompanied by a legal representative accessing the health facility and receiving consultation from a health provider and (2) written informed consent of the patient or her/his's legal representative.

Method of measurements, the development of the questionnaires

A structured questionnaire was developed to collect data on (1) patients' sociodemographic characteristics and (2) principal reasons behind utilisation of each facility.

The questions addressed patients' sociodemographic characteristics such as age, gender, employment status, education, status of health insurance; patients' health conditions were also collected including self-reported health status (poor/not poor), presence of chronic health condition (yes/no).

Then, patients were asked to rank the importance of the 12 items (questions). The 12-item questionnaire was developed based on the five dimension of the ACCESS framework: (Penchansky and Thomas 1981b, Obrist et al. 2007) (see table 3) covering aspects of geographic and financial accessibility, availability, affordability, adequacy and acceptability.

The dependent variable was the utilisation of publicly funded PHC or private facilities. The independent variables were the sociodemographic characteristics of the study participants such as gender, age, health insurance.

In order to assure content validity of the questionnaire, a pretesting was done. After the pretest, we received the interviewer feedback and minor adjustments were made to the wording of questions as well as the pre-defined answers. Finally, a panel of four staff, compounded of a one public health specialist, one academic staff and two operational managers, reviewed the questionnaire and made comments and suggestions.

Secondary outcomes were descriptively assessed by questions such as 'for what health-related condition did the patient consult the facility today'; if they had 'consulted a doctor working in the public health sector before (yes/no)'; 'how many times had they attended the facility over the last 3 months' and 'how often had they been referred in other public/private medical institutions by their doctor over the last 3 months'.

Questionnaires were translated from English to Albanian. To assure the accuracy of the translation, questionnaires were translated into Albanian and back-translated.

Data collection

Data collection took place from July to August 2018. The face-to-face interviews were conducted respecting privacy of patients. Interviews were conducted by the Faculty of Medicine students with a bachelor or upper level education; interviewers were trained for 3 days before actual data collection. Data collection was done electronically using tablets. The questionnaire software used for this study was Open Data Kit. The data collected from the questionnaires was transferred to a server in Basel, Switzerland on the same day where an initial quality check was regularly conducted.

Data analysis

In a first step, patients' sociodemographic characteristics were analysed across the two types of health facilities and described respectively. For certain characteristics, such as health status, data were collected on a 4-point Likert scale (with 1=good, 2=rather good, 3=rather poor and 4=poor). In order to facilitate analysis, the health rate was then dichotomised as good and poor health. Next, patients' ratings of the importance of each item influencing their decision for consultation at the respective type of facility were recorded on a 4-point Likert scale (with 1=not important at all, 2=not important, 3=important and 4=very important). Scales were then dichotomised by collapsing categories 1 and 2 into '0=not important' and categories 3 and 4 into '1=important'. Dichotomised items were compared in terms of percentage of positive agreements between public and private facilities using χ^2 tests. The test was performed on a 5% level of significance, indicating the existence of differences between the type of providers (public and private) for each aspects of access attributes. In these simple comparisons, we also looked for potential geographical clustering differences. Sociodemographic factors potentially associated with a patient's decision for a specific provider were selected as explanatory variables. The dichotomous dependent variable was the type of healthcare facility used: public PHC centre versus private outpatient clinic.

Then, mixed logistic regression models with random intercepts for the three different communities (Lushnje, Fier, Mallakaster) were used to assess the associations of sociodemographic variables with the facility type used. Results are reported as ORs along with

95% CIs. Results with a p<0.05 were considered statistically significant. Data were analysed using Stata Statistical Software, V.15.

Patient and public involvement

During the pretest, we received the interviewers' feedback from the interaction with the patients in the fieldwork. The questionnaire was updated based on the outcome of the pretest.

5.4 Results

Patients' characteristics by type of healthcare provider considerations

Out of 750 eligible study participants, 629 accepted to be interviewed corresponding to a response rate of 84%. Table 8 shows the sociodemographic and health profile of the patients participating in the study, by type of facility. The sample consisted of 250 males (40%) and 379 females (60%). Forty-five per cent of the respondents were more than 60 years old. Around four-fifths (77%) of the respondents had a valid health insurance card and 18% were currently benefiting from a form of social or economic aid. With regard to education, 47% of the respondents had an elementary education (5–8 years) and 14% of the respondents had a college or university degree.

Table 8. Patients' characteristics on sociodemographic and health measures by type of healthcare provider

Characteristics	Total population		blic PHC inics	Private outpatient clinics		
	N	%	N	%	n	%
Gender	629		451		178	
Male	250	40	186	41	64	36
Female	379	60	265	59	114	64
Age	624		449		175	
<59 years old	344	55	240	53	104	59
≥60 years old	280	45	209	47	71	41
Education	512		343	67	169	33
University/college	74	14	46	13	28	16
High school (12 years)	187	37	125	37	62	37
Primary and secondary school (5–9 years)	242	47	164	48	78	46
Iliterate/other	9	2	8	2	1	1
Occupation	554		386	70	168	30
Employed	151	27	98	26	53	32
Unemployed	182	33	125	32	57	34
Pensioner	221	40	163	42	58	34
Health rate	629		451	72	178	28
Poor	145	23	134	29	11	6
Good	484	77	317	70	167	94
Health Insurance	629		451	72	178	28
No	142	23	84	19	58	33
Yes	487	77	367	81	120	67
Benefit socioec. aid	629		451	72	178	28
No	515	82	348	77	167	94
Yes	114	18	103	23	11	6
Chronic conditions	629		451	72	178	28
0	231	37	155	34	76	43

1	279	44	192	43	87	49
Two or above	119	19	104	23	15	8
Years suffering from NCDs	379		277	73	102	27
2 (≤2) years	87	23	55	20	32	31
>2 years	292	77	222	80	70	69
No of times facility attended	629		451		178	
≤1	140	22	82	18	58	33
≥2	489	78	369	82	120	67

[•] NCDs, non-communicable diseases; PHC, primary healthcare.

Characteristics of patients using public and private services

In regards to the health-related characteristics of the respondents, more than two-thirds (63%) of the respondents reported that they had suffering from at least one chronic illness and about one quarter of them (29% in public clinics and 6% in private) perceived their health status to be poor. The percentage of patients who reported suffering from two or more chronic conditions was higher in public PHC clinics (23%) compared with private clinics (8%), while the proportion of patients who were diagnosed with a chronic condition less than 2 years ago was higher in private clinics (31%) compared with the governmental PHC facilities (20%). Patients using governmental PHC clinics reported an average of 3 visits to the health facility over the past 3 months compared with 2.5 visits among patients attending private clinics (data not shown).

The main reason for accessing healthcare facilities was related to patients' chronic health conditions (54% in public vs 44% in private facilities). A greater proportion of patients attending public PHCs reported that they were often referred to another provider (eg, specialist) for complementary examinations as compared with those attending private providers (70% vs 23%). Around 85% of patients attending private PHC indicated that they consulted a doctor working in the public health sector before attending the private facility.

Factors influencing patients' choice for a specific provider type consultation

Figure 11 shows the responses of the study participants on the importance of different provider-related factors which influenced them to use the respective type of healthcare facility.

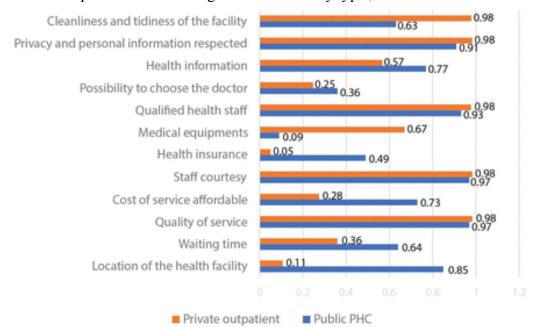


Figure 11. Principal reasons for using healthcare facility type†.

†Percentage of positive agreements were obtained by patients 'ratings of each item as 'important' or 'very important' when consulting public and private facilities. PHC, primary healthcare.

Items considered as important by patients of both types of providers were 'quality of care', and 'healthcare professionals' attitudes' being both qualified and courteous (see figure 11). The high importance for the respective items implies that these factors are the strongest ones influencing and possibly driving health facility utilisation. Items considered as least important 'possibility to choose doctor', 'wait time' and 'health insurance'.

There were significant differences between the two patient groups regarding the importance attributed to items such as the 'location of the facility', 'availability of medical devices', 'wait time', health insurance and 'cost of service', 'cleanliness and tidiness of the facility' (p<0.05 for all, see table 9).

Table 9. Principal reasons for using the health facility type (rating of items as 'important' or 'not important')

Variables <u> </u>	Total population		Publi	с РНС	Private outpatient clinics		P value*	P value†
_	N	%	N	%	N	%		
Location of the health facility	629		451	71.7	178	28.3		
No	227	36	68	15	159	89	< 0.001	< 0.001
Yes	402	64	383	85	19	11		
Waiting time	629		451	71.7	178	28.3		
No	277	44	163	36	114	64	< 0.001	< 0.001
Yes	352	56	288	64	64	36		
Quality of service	629		451	71.7	178	28.3		
No	15	2	12	3	3	2	0.5	0.7
Yes	614	98	439	97	175	98		
Cost of service	629		451	71.7	178	28.3		
No	253	40	124	27	129	72	< 0.001	< 0.001
Yes	376	60	327	73	49	28		
Staff courtesy	629		451	71.7	178	28.3		
No	18	3	15	3	3	2	0.3	0.4
Yes	611	97	436	97	175	98		
Health insurance	629		451	71.7	178	28.3		
No	399	63	229	51	170	96	< 0.001	< 0.001
Yes	230	37	222	49	8	4		

Medical devices	629		451	71.7	178	28.3		
No	465	74	409	91	56	33	< 0.001	< 0.001
Yes	164	26	42	9	122	67		
Availability of qualified health staff	629		451	71.7	178	28.3		
No	16	3	12	7	4	2	0.7	0.8
Yes	613	97	439	93	174	98		
Possibility to choose the doctor	629		451	71.7	178	28.3		
No	421	67	287	64	134	75	0.005	0.001
Yes	208	33	164	36	44	25		
Availability of health information	629		451	71.7	178	28.3		
No	180	29	103	23	77	43	< 0.001	< 0.001
Yes	449	71	348	77	101	57		
Privacy respected	629		451	71.7	178	28.3		
No	43	7	40	9	3	2	0.001	0.01
Yes	586	93	411	91	175	98		
Cleanliness of the facility	629		451	71.7	178	28.3		
No	167	27	165	37	2	2	< 0.001	< 0.001
Yes	462	73	286	63	176	98		

^{*}P values using χ^2 tests. †The p values are obtained from mixed logistic regression models adjusting for potential clustering within the facilities attended. PHC, primary healthcare

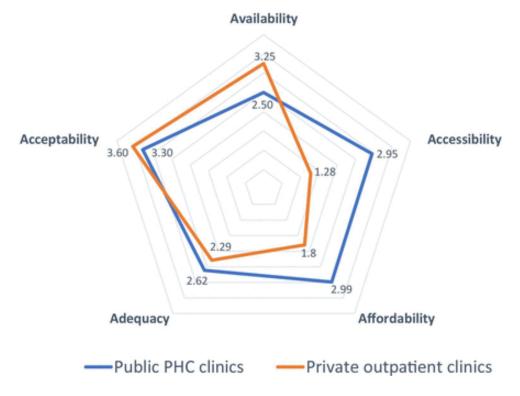
Compared with public PHC patients, persons attending private outpatient clinics were more likely to report 'availability of medical devices', 'privacy and personal Information respected' and 'cleanliness and tidiness of the facility' as influential reasons to use the respective medical institution (p<0.001, table 9). On the other hand, only 28% of people attending private clinics reported that the affordable cost of services was an important factor for them to utilise the respective service and only for 36% of them said short wait time having been an important criterion, while the respective percentages were 73% and 64% among attendants of PHC's (p<0.001).

Further, 'location of the facility' and 'health insurance' were assigned more importance by public PHC patients than by patients attending private clinics 'users (p<0.05, table 9).

Discriminating mean access domains 'results between public and private primary care facilities

The two groups of patients had different views on some of the access elements/dimensions. As visualised in radar chart plots (see figure 12), the affordability, accessibility and availability domains differed most between patients of the two groups. Patients attending public PHC clinics rated access elements (items) significantly higher than those attending private clinics, who, in turn, considered availability items as more important. Adequacy and acceptability items were evaluated similarly by both groups of patients.

Figure 12. Radar chart plots: mean scores of access domains in patients of public and private clinics. PHC, primary healthcare.



Individual factors associated with patients' utilisation of public and private settings

Table 10 shows the ORs of using public PHC facilities vs private health facilities associated with different individual factors. The odds of using public facilities were significantly higher among the patients who perceived their health as poor (OR 5.59; 95% CI 2.62 to 11.92) and among those who were benefiting from a socioeconomic aid scheme (OR 3.52; 95% CI 1.64 to 7.56). Patients suffering from two or more chronic conditions had higher odds of using governmental PHC facilities (OR 3.13; 95% CI 1.36 to 7.24) compared with those that reported no or just one chronic health condition. Women were less likely than men to use public facilities (OR 0.64; 95% CI 0.40 to 1.04).

Table 10.ORs of attending a public health facility associated with different patient characteristics*

Variables/factors	OR	P value	95% CI
Gender			
Female	0.64+	0.07	0.40 to 1.04
Age			
>60 years	0.73	0.46	0.32 to 1.68
Education			
High school (12 years)	0.96	0.9	0.50 to 1.86
Primary 9 years)	0.79	0.49	0.40 to 1.55
Other	1.95	0.59	0.18 to 21.3
Occupation			
Unemployed	1.1	0.76	0.61 to 1.98
Pensioner	0.85	0.71	0.35 to 2.04
Benefiting socioeconomic aid			
Yes	3.52	0	1.64 to 7.56
Health insurance	1		
Insured	1.35	0.3	0.76 to 2.38
Chronic conditions	i		
1 chronic cond.	1.22	0.53	0.66 to 2.25
2 or more chronic cond	3.13*	0.01	1.36 to 7.24
Health condition	i		
Poor health	5.59	0	2.62 to 11.9

^{*}Statistically significant+by-trend statistically significant, p=0.07+; ORs were obtained from a mixed logistic regression model including all the variables listed in the table along with random intercepts for the three subterritorial divisions of Fier region.

5.5 Discussion

In the present survey, we asked patients who consulted a public or private provider through an exit interview to rank the importance of the items that influenced their decision to use the respective facilities. Common and discriminating items (factors) and relevant sociodemographic

characteristics associated with the priority for a given facility type are described and discussed according to their importance, relevance and context, guided by the access framework.

'Perceived quality of care' and 'attitudes of healthcare providers'

The results of this survey show that 'quality of care', and 'healthcare professionals' attitudes were the most important criteria influencing the choice of the type of health facility for public and private health facility users alike. Irrespective of the health facility type, patients rated good quality of care and qualified, courteous healthcare staff among their principal reasons for using the respective type of healthcare facility, while their rating of other aspects of care such as cost of service, health insurance or choice of doctor differed. These results are in line with previous research findings, indicating that quality of care matters and frequently overrules other factors influencing healthcare service utilisation. (Gage et al. 2018, Karim et al. 2016, Oladipo 2014, Okonofua et al. 2018) This also suggests that further improvements of quality of PHC care in Albania might have a positive impact on boosting PHC utilisation, which may be particularly relevant for targeted populations such as women, patients with chronic health conditions, patients benefiting from socioeconomic aid and elderly people. (Ministry of Health and Social Protection 2017a, Ministry of Health 2016)

Although an increase in the number of doctors available in a community results in an increase in healthcare utilisation of all types, (Jin et al. 2017), the mere availability of a provider will not imply that the facility will be used and proper care will be obtained. Of ten, utilisation of health services is a product of dynamic interactions between providers and patients, where health professionals' communication skills, supportive non-judgmental behaviour and empathy further facilitates/drives the health service utilisation.

Previous research has shown that poor health worker attitudes or practices negatively influence the quality of services and decreased utilisation of facilities. (Bakeera et al. 2009) On the other hand, skills and competence of the care provider play a significant role in service utilisation. (Tancred, Schellenberg, and Marchant 2016, Karim et al. 2016,) Training programmes, empowering health professionals with formal quality improvement methods and patient-centred communication skills, have proven to increase the quality of healthcare as seen by patients. (Nørgaard et al. 2012)

'Geographical proximity' and 'availability of medical devices'

In this study, notable differences were identified regarding the importance of specific items/factors for the choice of the type of health facility between patients attending public and private clinics. Our results suggest that having access to a facility which is close to the dwellings is an important factor for patients attending public PHCs. Linking health facilities to populations has been a traditional index of healthcare coverage. Previous studies have shown that access to health facilities as characterised in terms of location or transportation means were important factors influencing health service utilisation. (Okonofua et al. 2018, Syed, Gerber, and Sharp 2013a, Dassah et al. 2018) Additional evidence from the literature shows that the differential distribution of financial resources, lack of transport means disfavours the poorest and negatively influences utilisation of health services. Thus, efforts of improving geographical access to PHCs in Albania might primarily lead to higher utilisation rates in periurban areas, while access might still be impeded in rural and remote areas with mountainous environments where transport means are severely restricted (in terms of availability or affordability).

Within the present study, only 11% of patients who attended a private outpatient clinic ranked the location of the facility as an important factor. An explanation might be that the private clinic users are willing to travel longer distances and consider that their healthcare needs are better met in a private clinic. In fact, 67% of the users of the private outpatient clinics viewed 'availability of medical devices' as an important (or very important) factor motivating them to attend a private outpatient clinic. According to our study results, availability of functional and modern medical equipment and ancillary facilities may partly explain why patients choose to use private outpatient clinics. This also confirms that private outpatient clinics are better equipped with adequate medical equipment. Consistent with several studies, other research conducted in Albania also indicates that public PHC have lacked proper medical equipment. (WHO 2018d) A study conducted in 550 health cetres in 2014 found that only slightly more than half of the health centres (57% of the total sample) were 'properly equipped' with medical equipment and only about half of health centres were properly stocked with the respective relevant medications. (Arqimandriti M, Ivkoviç M, and Naskidashvili I, et al. 2014)

However, commitment to upgrade PHC in terms of infrastructure and equipment was made through health policy in cooperation with several partners operating in the health sector. This has resulted in a range of investments towards health facilities and maintenance on the recent years.(HAP2020a) Thus, in the time frame of 2015–2018, several rehabilitations of infrastructure, and procurement of basic essential equipment for doctors and nurse and health professional continuous education activities were done, especially in Fier, Diber (HAP 2020a) and in Tirana.(Save the Children 2020) Based on a survey conducted in 2018, there has been substantial improvements on availability of basic equipment and transparency and public accountability. (HAP 2020a)

Moreover, a programme of rehabilitation of 300 health centres across the whole country and building 80 new facilities is currently in place from the Ministry of Health and Social Protection. (Vata 2018)

'Wait time'

In our study, wait time was not among the most important factors determining the choice of health facility type neither among patients from public nor among patients from private clinics. Governmental PHC services in Albania are typically not perceived as extremely busy and hence the waiting time is usually relatively manageable for users. Moreover, the waiting time was rated almost equally across respondents irrespective to employment status or age category. Previous research indicates that excessive wait times deter the use of health services and may sometimes result from the inefficient use of existing capacity or a failure to design services around the needs of patients. (Gulliford and Morgan 2013)

Sociodemographic and health gradients

Regarding sociodemographic and health-related characteristics associated with utilisation of each provider type, we found that females were more likely to use private clinics than men. This could be explained with the availability of the medical equipment and diagnostics (eg, for gynaecological services); patients who chose private outpatient clinics were also more likely to assess their health status as better compared with users of public PHC centres. This is contrary to other studies, having found that a significantly higher percentage of patients having chosen private

settings perceived their health status as poor. (Tang, Xu, and Zhang 2016, Basu et al. 2012, Kim et al. 2018, Berendes et al. 2011)

This study found that having two or more chronic health conditions was significantly associated with public PHC care utilisation. This might suggest that several NCDs are mainly being treated at the PHC level in Albania. Moreover, these findings may support existing evidence that people with chronic diseases are primarily patronised by the public healthcare sector. (Kiefer 2015) A review of additional literature suggests inconsistent results on whether perceived severity of condition or quality of care are driving factors for choosing private care over other healthcare options. (Tang, Xu, and Zhang 2016, Basu et al. 2012, Kim et al. 2018, Berendes et al. 2011, McPhail 2016)

Private outpatient clinics utilisation: Is there a choice or a need?

A choice between public and private providers is of less importance than the ability to choose between different treatments and to access reliable services that are responsive to patients' preferences. (Berendes et al. 2011, Joint Learning Network 2016) Our results might imply that patients used the private sector because of diagnostic services. The governmental health insurance fund does not contract all private outpatient clinics, except with few selected private hospitals. As a result, they are not accessible to poor people or members of other marginalised and vulnerable groups who lack the money to pay for them.

Furthermore, private providers who provide care for patients who have previously consulted public facilities before (PHC or hospitals) cannot fully access patients' public electronic health records as the public sector is currently not equipped with a well-developed, central national electronic patient record system, pooling information both from public and private healthcare providers. This raises concerns about potentially excessive procedures and medical tests that patients have to go through once they visit private practitioners or outpatient clinics of the private hospitals.

Our study, based on patient's ranking, contradicts the claim that the public sector appears frequently to lack timeliness or quality (Basu et al. 2012); however, the private sector, like in other

studies, is positively perceived as offering better hospitality towards patients in terms of basic amenities or medical supplies.(Berendes et al. 2011)

The private sector utilisation in PHC poses significant challenges and opportunities in terms of the safety, effectiveness and cost of health services. Engaging the private sector to improve PHC within UHC is a complex, multifaceted endeavour and its' importance is greater for PHC; thus, detailing the rationale for engaging the sector is a vital early step.

5.6 Conclusions

This study is one of the first in Albania having analysed individual and health system-related factors influencing health care-seeking- behaviour among patients from public and private outpatient facilities.

The study identified 'perceived quality of care', 'availability of qualified staff' and 'staff courtesy' as important criteria for the choice of health facility, irrespective of whether patients attended a public or a private facility. The two groups of patients differed in their view of the importance of 'location of facility', which was evaluated as important by the majority of patients attending public PHCs but only by a minority of patients from private clinics. Conversely, the 'availability of medical equipment' was considered as important by private clinic users.

Sociodemographic and health gradients were also associated with the type of healthcare provider chosen. Users of public PHCs were more likely to report chronic health conditions.

Seeking care from public PHCs providers was strongly associated with financial access to health services such as dependency on a form of socioeconomic aid scheme.

Although equipment availability has substantially improved in the time period of 2015–2018 in the region where the study was conducted, efforts to further upgrade medical equipment and associated workforce skills are needed to sustainably increase access to and utilisation of public PHCs. Moreover, in the light of the new administrative and territorial reform in Albania (2015) (Nr. 139/2015 and LIGJ 2015), where municipalities have the possibility to do assessment of local service, rehabilitation and maintenance of facilities, and evaluation of educational and promotional

activity at a local level, there is need for strong commitment of all stakeholders, such as local decision makers, professional associations to support and to invest into public PHC.

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6 Health Seeking Behavior Among Adults and Elderly With Chronic Health Condition(s) in Albania.
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6.1 Abstract

Aim: Assess the use of different health care service providers by adults (aged 18-59) and elderly (aged >=60) who suffer from non-communicable disease (NCD) and explore relationships between sociodemographic variables and care-seeking behaviors.

Methods: A cross-sectional survey was conducted in the districts of Diber and Fier in December 2018, using random cluster sampling. Descriptive statistics were used to compare the care-seeking behaviors of adults and elderly people. We employed binary and multinomial logistic regression to assess factors associated with the type of health service provider used. Analyses were adjusted for clustering within districts of residence.

Results: Out of 3,799 respondents, 1,116 (29.4%) suffered from an NCD. Of these, 95% sought to obtain care for their chronic condition through public healthcare providers. The elderly were more likely to use primary healthcare services (PHC) to initiate care when facing health problems (56%), compared to those aged 18-59 years (49%, p < 0.001). Over the last 8 weeks, 82% (914/1,116) of participants sought care. Binary and multinomial logistic regression analyses, adjusted for socio-demographic variables, showed that the elderly were more likely to choose PHC services (OR 1.56; 95% CI: 1.04; 2.35). Moreover, individuals who suffered from hypertension used PHC services more frequently than hospitals (OR 1.94; 95% CI: 1.32; 2.85). A positive association was found between living in an urban area and seeking care for NCDs at polyclinics (OR 10.1; 95% CI: 2.1; 50.1). There was no significant gender difference observed with regard to the type of provider consulted.

Conclusion: Public facilities were reported as the main providers for initiating care and the main providers used in the 8 weeks prior to the interview. While a majority of elderly people visited a PHC to initiate treatment (and follow up) on their chronic conditions, a substantial proportion of adults (aged 18-59) initiated and sought regular NCD care at a hospital. Educating patients and caregivers on active participation in NCD prevention, management, and control through the PHC level should be a long-term effort, along with the establishment of well-structured referral mechanisms and integrated care systems.

Keywords: non-communicable diseases, care-seeking behavior, elderly, primary healthcare, hospital

6.2 Introduction

Non-communicable diseases (NCD) are an undisputed global challenge, increasing and multiplying with age, and are associated with higher and disproportional use patterns of health services.(Barnett et al. 2012, World Health Organization. 2020, Bauer et al. 2014, OECD and European Union 2016, Williams et al. 2018, Institute of Statistics, Institute of Public Health, and ICF. 2018. 2018)

Care-seeking behaviors (e.g., initiating care at the right time, with the right provider, maintaining regularity of care seeking) are a prelude to a successful management of such conditions. (Sara MacKian 2003) These behaviors are influenced by a variety of factors: socioeconomic conditions, age, gender, financial means, their own perceived health status and illness, type of illness, as well as the available health services and access to them. (Sara MacKian 2003, Fradgley, Paul, and Bryant 2015, Stănculescu and Neculau 2014a) Elderly people are particularly vulnerable to variability in their care-seeking patterns, including both over and underutilization of healthcare services. The elderly are also seen as dependent on their families or head of households. (Farrow 2010, Lipitz-Snyderman and Bach 2013, Hearn et al. 2019) Indeed, adults and elderly with chronic conditions may receive care from multiple providers, across multiple settings, yet this care is often poorly structured. (Elliott et al. 2018) Studies have shown that 75 - 85% of conditions can be dealt with by utilizing primary health care (PHC) providers, while a consultation with a specialist is only necessary 10 - 12% of the time. Furthermore, only 5% of cases require a referral to higher levels of care. (Niyas, Karimi, and Kavosi 2018) In order to better manage NCDs, emphasis is put on public health prevention policies through PHC institutions.(Bauer et al. 2014, Mayes and Armistead 2013) PHCs are a hub for continuity of care because they are the "first point of contact" and help patients coordinate their care across the system. (World Health Organization. 2020, OECD and European Union 2016, Van Houdt et al. 2013)

Albania, a South-Eastern European (SEE) country, is amongst the majority of European countries that regard the NCD epidemic as its most important public health challenge. The burden of chronic diseases (e.g., hypertension, cardiovascular diseases and diabetes) are a central point of concern. In the decades ahead, it is predicted that the burden of chronic disease in Albania could increase further due to (i) lifestyle, (ii) lack of awareness of the disease, (iii) lack of the culture of prevention, inherited from the past ex-communist system, and (iv) heavily relying in curative care (polyclinics and hospitals) rather than prevention of the disease. (Pirkle et al. 2018, Nuri and Tragakes 2002, WHO 2017, Akshia, Dibra, 2018)

Albania is also beginning to experience the effects of population ageing. Starting from 2011 and looking ahead to 2060, the median age (33 years) is expected to increase by an additional 17 years. Elderly people in Albania face multiple challenges: changes in lifestyle that lead to smaller families, rural to urban migration and decline of remittances from their children (Bruijn et al. 2015, Ministry of Health 2016))

While the majority of healthcare in Albania is provided by the state, the private sector's importance is growing, mainly in urban areas. Governmental service provision is organized along three tiers: primary, secondary and tertiary healthcare services. (Nuri and Tragakes 2002)

Access to PHC public services is free; since 2017, no citizen has been charged at the entry point of care, irrespective of their insurance status. Meanwhile, access to publicly financed outpatient specialist care requires a referral by a PHC provider. Outpatient specialist visits, with a PHC referral, are free of charge for people covered by the Mandatory Health Insurance Fund (MHIF). People without a PHC referral pay out of pocket based on tariffs set by the Ministry of Health and Social Protection (MoHSP), with tariffs varying by service. Those who are diagnosed with a condition can then either access inpatient care following the referral system and get free visits, or go directly to a specialist and pay the tariffs. Co-payments are applied to outpatient prescribed medicines, medical products and some diagnostic tests. (Tomini F, Tomini S 2020)

PHC services provides a package of basic medical aid: emergency care; mental health care; health services for children, women of reproductive age, adults and elderly people; health promotion and education. (Compulsory Healthcare Insurance Fund 2013) In order to implement each PHC service package, health centers are supplied with medical equipment, such as nebulizers,

nasal speculums, otoscopes, ophthalmoscopes, glucometers, neurological hammers, stethoscopes, thermometers, and EKGs, etc.(Ministry of Health and Social Protection 2018) The list of essential drugs and consumables includes water for injections, atropine sulphate, dextrose, mannitol, diazepam, epinephrine, vitamins, dexamethasone, amoxicillin, etc.(Ministry of Health and Social Protection 2018)

In rural areas, a typical health center is staffed by up to three primary care doctors and nursing staff. By contrast, urban areas have PHCs as well as larger polyclinics that provide outpatient specialist care. These polyclinics serve sometimes as a first point of contact. In the private sector, principally in bigger urban settings, outpatient clinics offer a full range of medical services, anywhere from diagnostics to providing more comprehensive treatment and support (Nuri and Tragakes 2002, Tomini et al. 2015, Hotchkiss, D. et.al 2005, WHO 2018) The private sector requires out of pocket payments or possession of private health insurance. However, access to some private inpatient care services, such as nephrology and cardiac procedures, are also provided for publicly insured people. (Compulsory Healthcare Insurance Fund 2013, Ministry of Health and Social Protection 2018b, B.Small, Gretchen A, J. Porrazzo 2015)

In the last decade, a comprehensive approach has been employed by the Albanian government in order to tackle the toll of NCDs. With their aim being to strengthen and expand the role of primary health care, (WHO 2017) the government has done the following: (i) implementation of the national programme of free check-ups offered for all citizens aged 35 to 75 years (independent of their insurance coverage or health condition (WHO 2017) (ii) removal of all fees for medical visits at the PHC level for all citizens, and (iii) expansion of the list of reimbursed medicines, especially for chronic health condition(s).(WHO 2018, Ministry of Health and Social Protection 2017a, Ministria e Shëndetësisë dhe Mbrojtjes Sociale 2019, Compulsory Health Insurance Fund 2015)

Although there has been a positive trend of visits to primary care facilities over the last decade (Instituti i Shëndetit Publik 2012), there are claims that, despite the above policy initiatives to boost PHC service utilization, hospital doors are under "pressure". In order to legally book a consultation in a hospital, known as "bypassing" the referral system, one must pay a fee of 21.5 Euro to the tertiary care institution; otherwise, the referral system is very strict in applying the rules that define a patient's pathway into the system. (Nuri and Tragakes 2002, Akshia, Dibra,

2018, Arqimandriti M, Ivkoviç M, and Naskidashvili I, et al. 2014, Uruçi and Scalera 2014) Despite the evidence that NCDs can be managed at the PHC level, a fair amount of patients choose to bypass PHC services and consult directly with hospitals. (Akshia, Dibra, 2018, Walley et al. 2012)

The dynamics and patterns of care-seeking behaviors among adults and elderly people with NCDs remains scarcely documented in SEE countries, including Albania. As a result, we chose to investigate the first point of service use of persons suffering from an NCD in Albania.

Frameworks for studying care-seeking behavior

There are different features that shape the healthcare utilization behaviors of patients. In order to understand decision making in health service utilization, classical models rely on identifying drivers that influence the choice.(Kroeger 1983) Among them, Andersen's Behavioral Model of Health Services Use is most often used in the literature. This model includes the predisposing factors age, sex and social structure, as well as 'enabling' (e.g., distance to healthcare), and 'generating need' (e.g., symptoms and impaired functioning). (Aday and Andersen 1974b) In this study, we use the concept of access (first elaborated upon by Penchansky and Thomas), which summarizes a set of dimensions, describing the fit between the patient and the healthcare system. (Penchansky and Thomas 1981) The specific dimensions of the framework were further operationalized by Obrist et. al (Obrist et al. 2007) and applied in the Albanian context (Gabrani, Schindler, and Wyss 2020b), namely: access, availability, affordability, adequacy and acceptability of healthcare services.

Added value and relevance (beyond national context)

There is consistent international commitment to reducing the burden of NCDs. (World Health Organization. 2020, WHO 2017, Allen et al. 2020) Multiple declarations have been made regarding the importance of the role PHC services play in preventing and controlling NCDs, especially in low and middle-income countries (LMIC). Designating primary health care as an avenue for the management of NCDs offers long-term, proactive, patient-centered and community-

based care. (Bauer et al. 2014, OECD and European Union 2016, Mayes and Armistead 2013, Van Houdt et al. 2013)

While the importance of PHC services in LMIC is generally acknowledged, effective access and use of PHC services, as well as what drives NCD patients in LMIC, is not well documented or researched. (Fradgley, Paul, and Bryant 2015, Mayes and Armistead 2013, Ebrahim et al. 2013)

This is also true for SEE countries, whose healthcare systems are in transition after having been previously focused on curative rather than preventive measures, and on infectious rather than non-communicable diseases. (Stănculescu and Neculau 2014a) Unlike many other studies in the western context, where both NCDs and PHC services are well investigated, most healthcare systems in SEE countries have limited access to, and use of, quality data for informing policy. (World Health Organization. 2020, Allen et al. 2020)

Against this background, this study provides new evidence for understanding the careseeking behavior of adults and elderly people suffering from NCDs in LIMC countries. More explicitly, it focuses on the utilization of primary care versus hospitals for initiating care and following up on the chronic conditions. (Stănculescu and Neculau 2014a, WHO 2020b)

The aims of this study are to assess the health seeking patterns of adults (aged 18-59) who suffer from NCDs and compare them to the patterns of elderly people (aged >=60) in order to establish a possible relationship between sociodemographic variables and care-seeking behaviours.

6.4 Methods

Study Design and Area

The data for this study were collected by the Household Survey within the "Health for All" (HAP) project in Albania, funded by the Swiss Agency for Development and Cooperation. (Kiefer 2015) The overall goal of the project is to help the Albanian population achieve better health through improved primary health care services and health promotion activities that are directed at prevention and treatment of NCDs.

The household cross-sectional survey was conducted in December 2018 in two regions: (1) Fier, a partially industrial region located South-West of the capital, Tirana, with access to the seaside and Diber, a relatively poor, mountainous region located in the eastern part of the country bordering North Macedonia. The regions of study are also described in two recent publications. (Kiefer 2015, Gabrani, Schindler, and Wyss 2020a) The two regions make up around 16% of the territory of Albania and demographically represent around 15.7% of the population (447,263 out of 2.8 million). The 2011 census registered 310,277 people living in 87,605 households in Fier, and 137,036 people living in 33,204 households in Diber. (Kiefer 2015) Distribution of governmental services, such as PHC centers and regional hospitals, are comparable in both regions; however, in Diber there are no licensed private hospitals or clinics, and the geographical proximity/accessibility of health facilities is lower than in Fier. These regions are representative of Albania, with the exception of the capital city of Tirana.

Study Population

The study population consisted of adults, aged 18 years and above who reported suffering from NCDs such as hypertension, heart problems (CVD), diabetes, rheumatism, respiratory diseases and diseases of the nervous system, mental health, stroke and cancer. Participants resided in selected households, and consented to take part in the study. Information on sociodemographic characteristics, type of illness, diagnosis and health seeking behavior were obtained.

Sampling

This survey was based on a cross-sectional cluster sample design using population estimates from the 2011 census, extrapolated to 2018. Sampling was conducted in a two-stage approach to obtain representative data for the two regions of Albania that were covered (stratified by urban and rural areas).

The sample size calculation was based on estimating important prevalence with sufficient precision in each of the two districts. For instance, a true outcome prevalence of 10% was to be estimated within an error margin of 3%, with 95% certainty. Based on experience, we assumed a

cluster size of 12 households and an intraclass correlation of 0.04 would provide a design effect of 1.44, rounded to 1.5. With an assumed non-participation rate of 10%, this resulted in 53 clusters, or 634 households, per district.

The required number of clusters was obtained according to the formula:

$$k=1.1\times(1.96 \wedge 2\times p\times(1-p))/(B\times m\wedge 2)\times DF, k=1.1\times(1.96 \wedge 2\times p\times(1-p))/(B\times m\wedge 2)\times DF,$$

where k = required number of clusters, p = 0.1 (true prevalence), B = 12 (cluster size), m = 0.03 (error margin) and DF = 1.5 (design factor).

Households were included if at least one person who resided there suffered from a chronic condition or disability that lasted more than 3 months. Within each household, the "head of household" was asked about characteristics of the home and its members, including health and insurance status. We then randomly selected one individual to obtain information regarding their type of illness, diagnosis and health seeking behavior.

Questionnaire Development

The questionnaire was designed to provide relevant information on health patterns and care-seeking behaviors of adults and elderly people suffering from NCDs. The questionnaire applied was divided into two parts: (i) household questions, such as distances to health facilities and services at community level, household characteristics, etc. and (ii) individual questions for persons with at least one chronic condition, including socio demographic information (e.g., age, gender, education, employment, insurance and respective NCD(s), and specific information on disease patterns and health seeking behavior. The primary outcome was the type of provider that individuals with NCDs visited over the past 4–8 weeks.

Specifically, the questionnaire included items investigating three main areas of interest: (1) service provider where the patient-initiated care, (2) the place of diagnosis of their NCDs, and (3) service provider consulted within the 8 weeks prior to the interview. Information about the patients' first contact was obtained by asking them which health facility they would most likely go to for initial medical assistance when facing health problems. Regarding the most recent visits, we asked patients to further specify the healthcare provider they consulted within the last 8 weeks (related

to their NCD care needs). In the analysis, we only looked at the first service use and not on multiple service uses. Respondents with chronic conditions who did not exclusively use PHCs were asked about the reasons for bypassing PHCs.

Data Collection

Data collection was carried out between the 7th-20th of December 2018 by 16 interviewers, organized into four teams. Each team was headed by one supervisor who was responsible for the organization of the team and quality assurance of the data collection process. Before data collection, interviewers and supervisors were trained in a two-and-a-half-day course, which included a pretest. Data collection was done using electronic data capture with tablets, equipped with Open Data Kit software (ODK), and was handled through a structured questionnaire. Respondents were asked questions without hearing the survey choices (i.e. respondents were given the chance to respond freely). Based on the answers given by the respondents, respective categories were ticked by the interviewers. In other cases, the answer categories were prompted by the interviewers from the ODK form.

Statistical Analysis

Data were analyzed using STATA, version 14 (Stata Corp, College Station, TX, USA). The respondents participating in the survey were stratified into two main groups, namely adults (aged 18–59) and elderly (aged > =60) who reported having an NCD. The care-seeking patterns were assessed through descriptive statistics and binary and multinomial logistic regression models. The dependent variable was the type of facility utilized (primary care settings vs. hospitals) for regular care seeking during the last 2 months. The health care providers included district level health care facilities.

Binary logistic regression models were used to identify factors associated with the preference for attending a primary care health facility as opposed to a public hospital. These analyses were then refined by distinguishing different types of primary care facilities (i.e., PHC facility, a polyclinic or health post) in multinomial logistic regression models. Based on existing literature and our research questions, we included both socio-economic and health characteristics of the

respondents, such as (1) gender (male or female), (2) age group (18–59 or > =60 years), (3) residency (urban or rural), (4) health insurance and socioeconomic beneficiary status (yes or no), and (5) the respective type of NCD. Region of study was further included to adjust for unobserved confounders differing between the two regions. Moreover, we investigated the relationship between different reported conditions and the use of PHC settings as regular NCD providers. Standard errors of parameter estimates were adjusted for potential clustering of the data within communities of residence. Results of the multinomial logistic regression models are expressed as relative risk ratios (RRR) which can also be interpreted as odds ratios (ORs) between the specific outcome level and the reference outcome level for the respective factors. In our analyses, we always used "public hospital" as a reference level.

Ethical Considerations

The study protocol and questionnaires received ethical clearance from the MoHSP on the 8th of October 2018, Nr. prot.5800. Given the lack of preference of the patients for written consent, mainly due to their reluctance to share personal information, oral informed consent was obtained from all respondents at the beginning of the interview. It was pointed out that participation was voluntary and that the respondents could withdraw their participation at any time. The head of household was also provided with an informational letter on the objective and the purpose of the survey and aspects relating to the confidentiality of information.

6.5 Results

General Characteristics of the Households

Overall, we established contacts with 1,371 eligible households, 82 (6%) of which did not consent to participate. This resulted in 1,289 households. From 3,799 adult individuals living in these households, 1,116 (29. 4%) suffered from an NCD.

Nearly two-thirds (64%) of the households were located in rural areas. The average number of household members was 3.4 persons (SD 1.8). The most common sources of income for households were governmental pensions (59%), followed by farming/livestock (33%), remittances (27%), salary (26%), social aid (20%), and private business (13%). Average age of household members was 41 years. More than half of the individuals were married (58%) and more than one third were single (34%). The most common educational degree obtained was completion of secondary school (grades 6–9, 43%), while others had a high school degree (grades 10–12, 30%).

Socio-Demographic Characteristics of the NCD Respondents by Age Category

Table 11 presents the characteristics of the respondents who provided information on their chronic condition(s). Of the 1,116 interviewees, 63% were females, 41% were between the ages of 18–59, and another 59% were more than 60 years old.

 Table 11. Patients' socio-demographic characteristics by age category.

Characteristics	Total pop	oulation (n = 1,116)	Aged 18–59 ye	ears (n = 447)	Aged	l> = 60 years (n = 669)
<u>=</u>	n	%	n	%	n	%
Gender						
Male	407	36	144	33	263	39
Female	709	64	303	67	406	61
Age						
18–59 years	447	40	447	40		
≥60 years	669	60			669	60
Education						
None	12	1	3	1	9	1
pre-	2	0	0	0	2	0
school/kindergarten						
primary (grade 1–5)	193	19	10	2	183	30
secondary grade	495	48	238	55	257	42
(grade 6–9)						
high school	268	26	142	33	126	21
Technical/college	13	1	5	1	8	1
University	57	5	31	7	26	4

Source of income						
Private business in Albania	144	7	81	11	63	5
Salary	266	13	140	18	126	10
Pension	733	35	134	17	599	46
Social aid	209	10	111	14	98	8
Farming/livestock	371	18	181	24	190	15
Remittances	307	15	101	13	206	16
Other	38	2	22	3	16	1
Marital Status						
Married	832	75	391	87	441	66
Divorced	7	1	6	1	1	0
Separated	1	0	0	0	1	0
widow/er	241	22	20	4	221	33
Single	35	3	30	7	5	1
Health Insurance						
Yes	958	86	339	76	619	93
No	158	14	108	24	50	7
Benefiting soc. Aid						

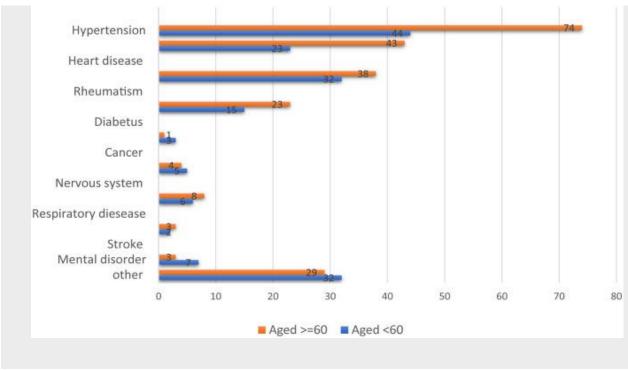
Yes	229	21	124	28	105	16
No	887	79	323	72	564	84
Location of Resi	dence					
Rural	712	64	282	63	430	64
Urban	404	36	165	37	239	36

In both age groups, most people lived in rural areas (64%). The age distribution was similar in urban and rural areas. Older participants were more likely to have a low education level (primary education or below) than younger participants. The main sources of income were pensions and remittances for the older age group (elderly) and farming or salaried activities for the younger age group (adults). The coverage of health insurance was higher among the elderly.

Self-Reported NCDs Among Adults and Elderly People

Figure 13 presents the self-reported NCDs among the study respondents. Prevailing chronic conditions among adults and elderly were: high blood pressure (adults 44%, elderly 74%), heart problems (adults 23%, elderly 43%), rheumatism (adults 32%, elderly 38%), and diabetes (adults 15% elderly 23%). Chronic conditions were more common among females than males for rheumatism (women 44%, men 22%) and high blood pressure (women 69%, men 50%); no substantial gender differences were identified for the other various chronic conditions.

Figure 13.Frequency of self-reported NCDs among adults and elderly (numbers in percentages).



About one-third of the interviewees (344/1,116) reported having two chronic conditions, 35% (235/669) of whom were the elderly group and 24% (109/447) the adult group; from there, 16% (180/1,116) indicated having three conditions and 5% (60/1,116) indicated having four or more chronic conditions. The respective percentages were consistently higher in the elderly group than in the adult group. Prevailing paired combinations were hypertension and heart problem (31%), hypertension and rheumatism (31%), hypertension and diabetes (15%), and heart problems and rheumatism (5%).

Initiating Care

Of our interviewees, 96% of them used public sector health providers for initiating care. Only 4% declared that they received care through private providers, typically by a private hospital or clinic (75%).

Table 12 shows the patterns of health facility utilization, categorized by age, in a broad spectrum of care seeking. Overall, 547 people (53% of the 1,078 total sample who sought care at the public health sector) responded that they initially sought care at a health center when facing health problems, followed by hospitals (33%), health posts (12%), and polyclinics (2%).

Table 12. Types of clinics attended by adults and elderly with NCD(s) for initiating care, establishing diagnoses, and seeking regular care (follow up)*

	Totalpopulat	ion	Aged 18–59 y	ears	Aged > = 60 y	ears	P*
Total n= 1,078	Obs. Nr.	%	Obs. Nr.	%	Obs. Nr.	%	
Initiate care	1078		427		651		< 0.001
Governmental hospital	351	33	171	40	180	28	
Governmental policlinic	23	2	5	1	18	3	
Governmental health center	574	53	208	49	366	56	
Health Post	130	12	43	10	87	13	

Establish diagnose								
Total n=1,058			n=414			n=644		
Governmental hospital	678	64	278	67	400	62		
Governmental policlinic	47	4	13	3	34	5		
Governmental health center	298	28	113	27	185	29		
Health Post	35	3	10	2	25	4		
NCD care over 8 week	cs							
totaln=790		n	= 294		n=496		< 0.00	
Governmental hospital	295	37	135	46	160	32		
Governmental policlinic	37	5	15	5	22	4		
Governmental health center	416	53	127	43	289	58		
Health Post	42	5	17	6	25	5		

p-values using Chi square tests.

The proportion of persons using a hospital for initiating care was 40% among adults and 28% among the elderly (p < 0.01, see Table 12). Conversely, the elderly were more likely to attend governmental PHC health centers and affiliated health posts for initiating care (elderly 56% vs. adults 49%, p < 0.001).

The study participants established their laboratory diagnosis mainly through hospitals (64%), followed by PHC centers (28%) and polyclinics (4%); there was little variation between the two age groups in terms of proportions.

Use of Health Care Within the Last 8 Weeks

Out of 1,116 adult participants with a chronic condition,82% of respondents consulted a health service provider over the past 2 months. Contrastingly, 18% did not seek care or relied on self-treatment.

Of 914 people who sought care over the last 8 weeks, 790 people indicated having consulted a public provider (see Table 12). Among them, respectively, 53% consulted PHCs, 37% consulted hospitals, 5% consulted health posts, and 5% consulted polyclinics. Those in the adult group were more likely to frequent a hospital (adults 46% vs. elderly 32%, p < 0.01). Oppositely, those in the elderly group were more likely to attend governmental PHC health centers and affiliated health posts during the eight weeks preceding the interview (elderly 58% vs. adults 43%, p < 0.001). Patients were most commonly treated by a doctor and/or a nurse.

Participants had certain reasons for choosing their respective providers for NCD treatment, those of which include geographical proximity to the health provider (49%), low costs (37%), good services (27%), insurance coverage (24%), familiarity with the staff (22%), quality of care (19%), and well-qualified staff (15%).

Frequency of Health Seeking Behavior

Out of 1,116 persons with a chronic condition, 44% (n = 495) sought care once per month. Another 35% (n = 391) sought care several times per year. In general, the health services utilization was higher among the elderly, who predominantly sought care once per month [52% (n = 349)]. Compare this to the adults, who mostly sought care several times per year for their chronic condition [46% (n = 207)] (Table 13).

Table 13. Frequency and regularity of health seeking behavior for chronic condition among adults and elderly (n = 1,116).

	Tota	al pop.	Aged 18	3–59 years	Age	d> = 60 years
_	Freq.	Percent	Freq.	Percent	Freq.	Percent
Does not seek	34	3	19	4	15	2
Several times per month	117	10	43	10	74	11
Once per month	495	44	146	33	349	52
Several times per year	394	35	207	46	187	28
Once per year	57	5	27	6	30	4
Less regular than once per year	19	2	5	1	14	2
Total	1,116	100	447	100	669	100

The main reasons for not seeking care were related to self-medication and the belief that the health problem would go away without medical treatment. Lack of financial funds was another aspect that patients mentioned, as well as the lack of time/transport.

Factors Associated With the Use of Health Service Provider Within the Last 8 Weeks

Given that the vast majority of the study participants reported utilizing governmental providers, the present study solely focuses on those who have consulted a governmental service and further assesses the level of care and possible association with their sociodemographic characteristics. In order to establish such an association, logistic and multivariate regression methods were employed. Because the respondents could indicate multiple levels of services used, we set a condition in the regression model to include those who mentioned one choice. This resulted in a total of 698 observations included in the analysis.

Table 14 shows the observed associations of socioeconomic factors (e.g., age, household socioeconomic beneficiary status, location of residence, type of chronic condition, health insurance, marital status) with the type of healthcare facility chosen for the provision of the NCD follow up.

Table 14. Odds ratios of using primary care facilities as opposed to public hospitals for NCD-care in the preceding 8 weeks associated with different personal characteristics

Variables /Factors		*Any primary care setting (a, b or c)		Polic	Policlinic (a)		PHC (b)		osts (c)	** p	*** p
		OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI		
Gender	Male										
	Female	0.97	0.66; 1.42	1.40	0.29;6.63	0.99	0.67; 1.49	0.54	0.21; 1.34		
Age	<60 year										
	>=60 year	1.56	1.04; 2.35	0.67	0.10; 4.15	1.67	1.10; 2.53	0.76	0.29; 2.00	0.03	0.01^{b}
Marital Status	Married										
	Widower	0.97	0.62; 1.51	3.85	0.84; 17.6	0.89	0.57; 1.40	1.81	0.62; 5.25		$\begin{array}{c} 0.08^a \\ 0.02^c \end{array}$
	Single/ divorced	1.09	0.40; 2.99	0.74	0.02; 23.7	1.38	0.49; 3.87	0	0		
H. Insurance	Yes										
	No	1.08	0.51; 1.87	0	0	1	0.56; 1.76	3.26	1.15; 9.27		0.03°
Socio,econ.Aid	No										
	Yes	0.79	0.51; 1.21	1.42	0.25; 7.80	0.73	0.47; 1.14	1.29	0.45; 3.63		0.03^{b}
Location	Rura1										
	Urban	0.93	0.65; 1.33	10.1	2.1;50.1	0.91	0.63; 1.31	0.42	0.14; 1.21		0.05^{a}
Ch.Conditions											

Hypertension	y vs. n	1.94	1.32; 2.85	0.60 0.15;2	2.48 1.94	1.31; 2.88	3.31	1.20; 9.01	0.01	0.08 ^b
Diabetes	y vs. n	0.71	0.46; 1.08	0.29 0.05;	1.61 0.73	0.47; 1.12	0.61	0.19; 1.91		
Heart problems	y vs. n	0.69	0.48; 0.98	0.24 0.05; 1	1.04 0.74	0.51; 1.05	0.41	0.16; 1.03		
Stroke	y vs. n	0.55	0.17; 1.69	0	0 0.65	0.21; 2.01	0	0		
Cancer	y vs. n	0.84	0.24; 2.90	0	0 1.01	0.29; 3.45	0	0		
Respiratory diseases	y vs. n	1.54	0.78; 3.03	0.66 0.06;	6.92 1.50	0.75; 2.98	2.33	0.57; 9.47		
Mental disorder	y vs. n	1.67	0.59; 4.73	1.51 0.054	3.4 1.25	0.41; 3.81	9.57	1.75; 52		0.01°
Nervous system	y vs. n	1.20	0.50; 2.87	1.72 0.18;	16.7 1.29	0.53; 3.12	0	0		
Rheumatism	y vs. n	0.86	0.60; 1.23	1.66 0.48;5	5.76 0.85	0.59; 1.22	0.69	0.29; 1.63		

^{*}RRR (relative risk ratio) ratio between the relative risk of attending the respective facility between patients with and without the respective socioeconomic characteristic or disease and the corresponding relative risk of attending a public hospital.

^{**}p-value of likelihood-ratio test of the association of the respective factor with the odds of choosing any primary care setting as opposed to a public hospital (results from the Logistic regression).

^{***}p-value of likelihood-ratio test of the association of the respective factor with the odds of choosing a specific primary care setting (a, b, or c) as opposed to a public hospital (results from the Multinomial logistic regression).

^{*}Primary care, Any Primary care setting (of a, b, or c).

After adjusting for the sociodemographic factors, the elderly group were consistently more likely to choose a primary healthcare setting. Given the choice between attending a primary health care facility or a public hospital, the odds that elderly people opt for a primary care setting increase by a factor of 1.56 (95% CI:1.04; 2.35) and by a factor of 1.67 (95% CI: 1.10; 2.53) for PHCs, compared to the choice of attending a hospital for NCD follow-up care.

Regarding the role of marital status, widows were more likely than married people to follow up on their chronic health conditions at polyclinics (OR 3.85; 95% CI: 0.84; 17.6). Additionally, a positive association was found between living in an urban residence and seeking regular NCD care at polyclinics (OR 10.1; 95% CI: 2.1; 50.1).

Individuals who suffered from hypertension tended to regularly follow up on their condition at the primary care level, as opposed to a public hospital, especially at a PHC (OR 1.94; 95% CI: 1.31; 2.88) or health post (OR 3.31; 95% CI: 1.20; 9.01).

A positive association was observed between people with no health insurance and the preference for health posts for managing chronic health conditions (OR 3.26; 95% CI: 1.15; 9.27). There was no significant gender difference observed with regard to opting for a primary health care setting (polyclinics, PHC or Health posts).

Reasons for Use of PHC Services and Other Providers Simultaneously

From the total sample, 985 respondents (87%) reported having a facility closer to the (than the nearest hospital (1–5 km). Patients often chose to visit both PHC facilities and public hospitals because they had been referred by their doctor (adults 31%; elderly 26%) or that tests (adults 26%; elderly 22%) or services had not been offered at the level of the PHC provider (adults 16%; elderly 16%). Almost 7% of patients with a chronic condition chose to exclusively (or occasionally) visit a public hospital, due to their perception of a doctor's competence and perceived poor quality of services (see Table 15).

Table 15. Reasons for not using PHC services.

Reasons for non-utilization of PHC $(N = 1205)^*$	Aged 18–59 years		Aged> = 60 years	
	n	%	n	%
Services are not offered	89	16	109	16
Too far, no transport	3	1	20	3
Not competent staff	34	6	43	6
Not all tests could be conducted	141	26	145	22
I was referred (to specialist doctor)	167	31	173	26
I know the other doctor	21	4	44	7
Facility closed	22	4	29	4
Poor service	47	9	50	8
Other	19	3	49	8
Total population	543	45	662	55

*(N=1,205) respondents have chosen more than one answer.

6.6 Discussion

This study adds evidence to the care-seeking patterns and health service consultations among adults and elderly people suffering from NCDs in LMICs, responding to the recent call for more empirical research to understand the health service utilization by patients with NCDs in LIMCs.(Ebrahim et al. 2013)

Several studies have investigated health services utilization patterns of people with NCDs at PHC and hospital level in near-by countries, (Grustam et al. 2020, Janković et al. 2019, Lahana, Pappa, and Niakas 2011) as well as in more distant countries with different systems. (Y. Liu et al. 2018) The questionnaire used for this study was previously used in the frame of study in 2015 in Albania. (Kiefer 2015) The questionnaire and study variables are comparable to the previous similar studies such as those conducted in Serbia, Bosnia and Hercegovina, and Greece. (Grustam et al. 2020, Janković et al. 2019, Lahana, Pappa, and Niakas 2011)

Our findings provide new evidence on drivers of the use of PHC services by patients with chronic conditions, and thus contributes to the international debate for moving towards Universal Health Coverage. (World Health Organization. 2020, Pirkle et al. 2018, Ministry of Health 2016, Allen et al. 2020, Ebrahim et al. 2013)

Initiating Care

The provider of choice for initiating care for patients with NCDs were either a government PHC (e.g., health centers, polyclinics and health post) or a public hospital. The reasons for these choices were: geographical proximity, low costs, health insurance coverage and quality of services. These findings are similar to those from previous studies which showed that such facilities are the first point of care for patients with any disease in Albania. (WHO 2018, Kiefer 2015)

The preference for PHC institutions when initiating care has also been found in studies undertaken in other settings where primary care is either evolving, or is a vital pillar of the overall health system. However, the findings are not conclusive; there is concern that primary care facilities remain underutilized in settings where the PHC is less consolidated.(Grustam et al. 2020, Janković et al. 2019, Lahana, Pappa, and Niakas 2011, Y. Liu et al. 2018)

The behavior among adults and the elderly population related to 'the initial point of care' varied; a greater proportion of adults (40%) suffering from NCDs initiated care directly at the hospital level through self-referral, bypassing PHC services. The study results indicate that adults frequently go directly to the hospital, albeit associated with higher costs. This finding has also been stated in previous research conducted. There is evidence that older and less educated patients are more likely to follow the advice of their PHC provider, and are therefore less likely to bypass the gatekeeping system. (Victoor et al. 2012, Groenewoud 2008)

Higher-level public hospitals in Albania are largely perceived to have better health resources, both in terms of workforce and diagnostics, and a greater ability to provide quality of services compared to public health facilities at lower-levels. This could explain why a relatively high proportion of adults decide to initiate care directly at the hospital level.

Use of Health Care Providers Within the Previous 8 Weeks

The study results indicate that, given the choice between attending primary care facilities or a public hospital, the odds that elderly people would use the primary care facilities were consistently higher compared to adults. Patients who chose to consult with other providers over consulting with PHC facilities (e.g., polyclinics, specialists in hospitals) did so mainly because they were either referred, not all tests were available, or services were not offered.

These findings indicate an opportunity to provide specific NCD screening and management programs in primary healthcare facilities. NCD screening and diagnostic services could be similarly provided through existing government healthcare facilities (i.e., primary healthcare centers and health posts). Thus, having well-established referral patterns and integrated service models where both specialists at polyclinics or hospitals, and also family doctors at PHCs, hold a role and are related through well-structured systems to each other, would increase the effectiveness and efficiency to manage chronic conditions. Updated protocols, along with mechanisms ensuring their effective use (e.g., electronic decision support systems), may tackle both the high referral rate and the bypassing of the PHC system, thereby increasing the potential for primary health care to better contribute to NCD follow-up.

Therefore, continuous professional development systems should ensure that the knowledge and skills of healthcare professionals are regularly updated, and that essential NCD services, including those relating to the elderly and mental health conditions, are provided with good quality.

No association was found between insurance status and primary healthcare service utilization. In fact, since 2016, even the uninsured population suffering from an NCD are entitled to drug reimbursement schemes. All the patients are eligible to have free medical care through a family physician (i.e., PHC) if they have a personal ID. They are also eligible for an initial diagnosis from a specialist, (if assumed to be chronic disease patients) after which they follow the referral system from PHC and onwards. Moreover, first choice treatments (i.e., drugs), which are ordered by the specialist and prescribed by the family doctor at a PHC facility, are reimbursed. Consequently, a health insurance card is mainly necessary for obtaining additional tests and treatment options at the level of PHC and/or specialty services.

We found that 18% of people who were chronically ill did not consult a service within the previous 8 weeks of the interview, thus exhibiting a lack of a regular care-seeking behavior or relying in self-treated, for example by going directly to a pharmacist.

Limitations of the Study

Health Seeking Behaviors and the Respective NCDs Relied Entirely Upon Self-Reporting.

Given the age distribution of the patients suffering from NCDs, a higher number of elderly people are present in the sample (which is expected, although it might imply some underrepresentation of younger adults). The differentiation between high blood pressure and heart problems may have led to some confusion in the way lay persons use concepts of circulatory problems (high blood pressure) and cardiac/heart problems (ischemia, for instance). The regions where the study was conducted represent both the mountainous and coastal regions of Albania. Given the socio-cultural and economic diversity of the country, care-seeking patterns in major urban cities, namely Tirana, are likely to differ. Complementary qualitative research may be conducted in the future, including in-depth interviews or focus group discussions. This could aid in the investigation of health seeking pathways and identify reasons why chronically ill patients choose to by-pass PHC services and consult directly at hospital level.

6.7 Conclusions

This study indicates that, in the two regions of study, ~90% of the households' healthcare demands for NCD management was addressed by the public health sector, often via the primary care level and public hospitals.

Patients most commonly chose to visit both PHC facilities and hospitals because they were referred, or because of the lack of tests/services accessible to them at the PHC level of care. While elderly people most frequently initiated treatment and followed up on their respective chronic conditions at the PHC level, a substantial number of adults initiated and sought regular NCD care at the hospital level. This would indicate a propensity for younger NCD patients to choose more facilities with higher-level healthcare than is actually necessary, compared to the elderly group.

Primary health care services were more likely to be the regular NCD care provider for people suffering from hypertension. Meanwhile, polyclinics were more likely to be used among those who suffered from conditions such as mental disorder, stroke and cancer. Participants living in urban areas were more likely to seek regular care at polyclinics compared to their counterparts living in rural areas.

In order to foster and scale management of chronically ill patients in primary care settings in Albania, there is a need for (i) updated protocols on standardized procedures of NCD treatment for adults/elderly people and systems assuring their effective use, (ii) increased referral support, (iii) essential diagnostic tools, (iv) skillful health workforce at PHC level who are able to manage and coordinate NCD care, and (v) raising of population awareness on the benefits of primary care for the integrated management of chronic conditions.

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7 Out of Pocket Payments and Access to NCD medication in two regions in Albania

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7.1 Abstract

Objective: The financial burden from noncommunicable diseases (NCDs) is a threat worldwide, alleviated only when there is good access to health providers and affordable medicines. In Albania, a western Balkan country, the governments have committed to implementing Universal Healthcare Coverage (UHC). Through this study, we aimed to assess the financial barriers and out-of-pocket payments (OOPs) related to consultations, diagnostic tests, and medicine prescription patterns as self-reported by people suffering from NCDs.

Methods: A household survey was conducted in two regions of Albania. Included in the analysis are respondents who suffered from chronic health conditions (n=1,116), and respondents who consulted a health care provider within the last 8 weeks (n=898). Mixed logistic regression models were employed, with random intercepts at the level of communities, in order to assess the association of OOPs with age, gender, residency, health insurance, marital status, barriers experienced, and type of chronic condition(s).

Results: On average, the odds of financial barriers increased by 41% with each additional chronic disease. Elderly adults were less likely to experience financial barriers or multiple barriers compared to younger adults. Of those who consulted a provider, 95% also received a drug prescription. Among them, 94 % were able to obtain all the drugs prescribed. Out-of-pocket payments occurred throughout the NCD treatment process; specifically, for consultation (36%), diagnostic tests (33%), and drugs purchased (88%). Drug expenditures accounted for 62% of all household expenditures. Respondents with health insurance were less likely to pay for consultation and drugs. The elderly were less likely to pay for consultations and tests. Those who lived in urban areas were less likely to pay for drugs and consultations. Patients encountering any form of barrier when seeking care had increased odds of OOPs for consultations (OR; 2.25 95% -CI; 1.56; 3.24) and tests (OR; 1.64 95% -CI; 1.14; 2.36).

Conclusion: Out-of-pocket payments largely concerned the purchase of prescribed drugs, making them the most important cost driver for NCD patients. Hence, reducing access barriers and further tackling the high costs of drugs will be important to accelerate the UHC agenda. Here, it is

of importance to raise the population's awareness on patients' rights, knowledge of their entitlements to health insurance, and on the current health reforms.

Keywords: Out of pocket payments (OOP); primary health care (PHC), chronic disease; non-communicable disease (NCDs); Albania, Western Balkans, Europe

7.2 Introduction

The burden from the rise of noncommunicable diseases (NCDs) alongside an ageing population (OECD and European Union 2016, WHO 2021) is a world-wide phenomenon in both developed (Arsenijevic et al. 2016, Fradgley, Paul, and Bryant 2015) and developing countries. (Walley et al. 2012, Brundisini et al. 2013) It causes comparatively high out-of-pocket payments (OOPs), especially in countries which have weak financial protection systems (WHO 2021, WHO 2018) and less consolidated primary health care (PHC) services. OOPs are direct (at the point of service) financial contributions, or co-payments, by patients and their families associated with consumption of medical products (such as medicines) and/or services. They can be formal as well as informal. (WHO 2021, WHO 2018, Tesema et al. 2020, World Bank Group 2015)

Treatment of NCDs, such as diabetes, cardiovascular diseases (CVD), chronic respiratory diseases (CRD) and cancer often put stress and constraints on household's budgets, and can push them into poverty. (Arsenijevic et al. 2016) There is evidence that high OOPs are often related to the purchase of medicines, which can range anywhere from 70% of total health expenditures (in several Low and Middle Income Countries (LIMCs)) down to less than 10% (in some high income countries).

People with one or several NCDs are at times unable to access healthcare due to barriers encountered when seeking healthcare, during treatment, or when trying to get medication. (Fradgley, Paul, and Bryant 2015, Brundisini et al. 2013, Corscadden et al. 2018)

Different systematic reviews claim that the main barriers of access to health care among people with NCDs are: proximity (Brundisini et al. 2013, Thorpe et al. 2011, Syed, Gerber, and Sharp 2013) lack of adequate public transportation (especially in rural areas) (Syed, Gerber, and

Sharp 2013), affordability, and financial difficulties. (Garcia-Subirats et al. 2014, Temple and Williams 2018, Brems et al. 2006)

In addition to access to public and private healthcare providers for consultation, diagnosis and prescription, the availability and access to affordable medicines is a prerequisite of effective NCD management. (WHO 2013b)

Thus, it is highly advocated that implementing Universal Health Coverage (UHC) principles will grant 'health for all' and release households from substantive OOP payments for health care. (Walley et al. 2012, WHO 2018, Elliott et al. 2018b, WHO 2020) More recently, the financial risk protection for households is reinforced in the Sustainable Development Goals (SDG) agenda, as a means for reducing poverty. (UN 2015) There is evidence that social health insurance improves access to health care services and decreases OOPs. (Arsenijevic et al. 2016, WHO 2018, WHO 2020)

However, OOPs among insured people are still considered high in several countries, putting into question the effectiveness of the health financing reforms. (WHO 2018)

Albanian health system and financial protection policy

Albania, a post-communist Western Balkan country, has joined the majority of European countries in treating the NCD epidemic as its most important public health challenge. Overall, ischemic heart disease was the major cause of mortality in 2019, followed by cerebrovascular disease and lung cancer. Healthcare in Albania is still mainly provided by the public/state, but the number of private health providers has strongly increased over the last three decades (Gabrani, Schindler, and Wyss 2020b), and they offer a range of services (mostly in urban areas). (Gabrani, Schindler, and Wyss 2020a) It is divided into three levels: primary, secondary and tertiary healthcare services. (Tomini et al. 2015, Hotchkiss D.et.al 2005, Nuri and Tragakes 2002, WHO 2018b) Economically active populations pay for health insurance, while state budget funds (which come from general taxation) cover inactive populations and those in need, giving the scheme a solidarity approach for vulnerable populations. (Compulsory Healthcare Insurance Fund 2013)

The basic service package is the key instrument that indicates the necessary range of services to be provided at the PHC level for the entire population, regardless of the insurance status. The basic package encompasses: 1) health care in emergency cases, 2) health care for children and for 3) adults, 4) women and reproductive health, 5) elderly care, 6) mental health care and 7) promotion and health education. (Compulsory Healthcare Insurance Fund 2013)

Contracts with public and private providers concerning the provision of health service packages are the mechanism through which the health insurance scheme is implemented. The health insurance fund signs yearly contracts with primary healthcare services, as well as hospitals and provides indications on reimbursable drugs. Additionally, most diagnostic tests and paramedical services are free of charge in public facilities for insured people who follow the referral system.

Currently, around 60% of the population is covered. In contrast, coverage in the poorest quintile is lower, standing at 50%. People without valid health insurance and people accessing hospital services without a referral pay the full price for outpatient prescribed medicines, diagnostic tests, paramedical services (such as physiotherapy and speech therapy), inpatient care and pay fixed co-payments for outpatient specialist visits. (Tomini F, Tomini S 2020)

Over the last decade, the Albanian government has pledged to implement UHC and has since undertaken a series of additional steps to adhere to this commitment. Since January 2016, roughly 600,000 uninsured Albanians benefit annually from (i) free family doctor visits, (ii) drug reimbursements of up to 50% of the drugs' price (determined by the essential drugs list, if they suffer from NCDs and follow the referral system), and (iii) entitlement to benefit from free medical check-ups (applying to nearly one million Albanians aged between 35-70 years old, both insured and uninsured.

Despite this, the out-of-pocket share of the current spending on health has consistently been among the highest in Europe, accounting for over 50% of total spending on health in Albania in 2016. A recent study indicates that in 2015, 66% of households reported OOPs, down from 72% in 2009. In 2015, over 12% of households – around 399,000 people – experienced catastrophic levels of spending on health care, defined as out-of-pocket spending that exceeds 40 % of a household's non-subsistence spending. (Tomini F, Tomini S 2020)

While policy measures -under the UHC umbrella- are implemented in different contexts and systems, effectiveness of such policy measures are of high regional/international interest. (UN 2015, Kanmiki et al. 2019) Several questions still remain: who pays and how much do people suffering from NCDs actually pay out-of-pocket and in which type of facilities are OOPs more likely to happen? Such questions are relevant for most healthcare systems in Western Balkan countries (Bredenkamp 2007) where the patients and their households are exposed to the consequences of OOPs (Buch Mejsner and Eklund Karlsson 2017, Vian et al. 2006, Arsenijevic, Pavlova, and Groot 2013) and aim to move towards UHC and integrating NCD services at the PHC level (South East European Health Network 2019). However, these countries face limited access to, and use of quality data for informing policy. (Stănculescu and Neculau 2014b)

In the light of such a situation, this study provides information for understanding the OOP patterns in the population suffering from NCDs. More explicitly, it focuses on the likelihood of making out-of-pocket payments for consultations, drugs, and tests among the insured and uninsured chronic condition patients consulting different providers. Through this study, we aim to investigate the access to NCD medications, associated OOPs and financial barriers, as self-reported by people suffering from NCDs.

7.3 Methods

Study Design and Area

The data for this study were collected by the Household Survey within the "Health for All" (HAP) project in Albania, funded by the Swiss Agency for Development and Cooperation (Kiefer 2015). The household cross-sectional survey was conducted in December 2018 in two regions: (1) Fier which is located South-West of the capital, Tirana, with access to the seaside and (2) Diber a mountainous region, located in the Eastern part of the Country bordering on North Macedonia. The study design and area are fully described in recent publications. (Kiefer 2015, Gabrani, Schindler, and Wyss 2021a)

Study Population

The study population comprised of adults aged 18 years and above who reported suffering from NCDs such as hypertension, heart problems (CVD) diabetes, rheumatism, respiratory diseases and diseases of the nervous system, mental health problems, stroke and cancer, who were residing in the selected households, and had consented to take part in the study. Households were included if at least one person in the household suffered from a chronic condition or disability that had lasted for more than 3 months. Within each household, the household head was asked about characteristics of the household and household members, including the health and insurance status. In a next step, we randomly selected in each such household one of the adults with a chronic disease to obtain information on the type of illness, diagnosis and health seeking behavior, barriers encountered, access to medicine and OOP payments.

Sampling

The sampling was conducted in a two-stage approach, selecting villages within districts and households within villages, while stratifying between urban and rural areas, to obtain representative data for the two selected regions of Albania. The sample size calculation is described in Gabrani, et al.(Gabrani, Schindler, and Wyss 2021a)

Variables and Questionnaires

Through the questionnaire we aimed to assess (i) the prevalence of financial barriers as perceived by people suffering from NCDs, (ii) patterns of medicine prescription, access and purchase and (iii) OOP expenditures.

First, respondents were asked if they consulted a healthcare provider within the last 8 weeks. If the answer was affirmative, then they were asked if they faced difficulties in seeking NCD services, and if so, what kind of difficulty they encountered. Barriers were grouped as: lack of transport, insufficient financial funds, distance of facility, lack of health insurance, non-availability of gender specific doctor, lack of trust in doctor, believed resolution of problems without treatment, self-medication, non-availability of health services needed and long waiting time.

Respondents were also asked about the actual OOP expenditures for the NCD treatment over the last 8 weeks. The OOPs were divided into 4 domains: a) treatment costs - (formal fees for consultation); b) money spent on means of transport; c) money spent on diagnostic tests and d) patterns of drug prescription and drug procurement by patients. The fees for transport were only considered for the median individual expenses, thus not being included in any further analysis. We investigated and analyzed associations of the reporting of out of pocket payments for consultations, tests and drugs with the sociodemographic characteristics. We were particularly interested in differences associated with holding an insurance card, living in rural as compared to urban areas, and with consulting lower tier levels of care such as PHC, health posts and policlinics as compared to higher tier levels such as hospitals.

We considered potential vulnerable groups who may be more likely to face barriers to access to care and to have to make OOPs, i.e., patients living in rural areas, suffering from multiple chronic conditions, having lower income, or being older than 60 years. Respondents were categorized into two groups, those with only one chronic condition vs. those with more than one condition. Chronic conditions asked were hypertension, diabetes, heart problems, stroke, cancer, respiratory diseases, mental disorder, nervous system and rheumatism.

Data collection

Data collection was carried out between December 7 to 20, 2018, by 16 interviewers who were organized in four teams. Each team was headed by a supervisor who was responsible for the organization of the team and quality assurance of the data collection process. Initially, interviewers and supervisors were trained in a two-and-a-half-day course, including a pre-test. Data collection was done using an electronic data capture tool programed in Open Data Kit (ODK) software and implemented on tablets. ("ODK" 2018)

Statistical Analysis

Data were analyzed using STATA, version 14 (Stata Corp, College Station, TX, USA). In the present analysis we were mainly interested in the likelihood of out of pocket payments for

consultations, drugs and tests. Descriptive analyses were stratified by type of residence (urban vs. rural), health insurance status (insured vs. non-insured), age (>= 60 years vs. 18-59 years) and region (Diber vs. Fier). vs. >= 60 urban and rural; insured and uninsured; adults (aged 18–59) and elderly (aged >=60); and Diber and Fier (regions). Mixed logistic regression models with random intercepts at the level of communities were used to assess the association of experiencing OOP (for consultation, drugs and test respectively), with age, sex, income, health insurance, marital status and chronic condition(s). Regarding barriers, the following binary outcomes were considered: (i) "encountering any barrier(s) vs. no barriers", (ii) "encountering financial barriers vs. no barriers", (iii) "encountering non-financial barriers vs. no barriers" and (iv) "encountering one or more than one barrier vs. encountering no barrier".

Ethical considerations

The study protocol was approved by the ethics committee of north-western and central Switzerland (EKNZ- Ethikkommission Nordwest- und Zentralschweiz), No. 30 715. Moreover, the study protocol and questionnaires received ethical clearance from the Ministry of Health and Social Protection (MoHSP) on the 8th of October 2018, Nr. prot.5800.

7.4 Results:

Socio-demographic characteristics of respondents

Among the households included in the sample who represented 3,799 persons, 1,116 (29.4%) suffered from at least one chronic condition. Out of them, 64% were females, 40% were between 18 to 59 years old. The majority of people lived in rural areas (64%). Eighteen percent of respondents were working in the agriculture sector. Thirty five percent of the respondents were retired. 15% of the respondents mentioned receiving remittances. Overall, 86% (576) of the respondents reported having health insurance and this percentage was higher among urban residents. Respondents who consulted a health care provider within the last 8 weeks and provided information on prescribed medicines were 898 (81%) and the subsequent analysis on OOPs was only conducted within this group. Complementary information on the socio-demographic

characteristics of respondents are further detailed in a previous article.(Gabrani, Schindler, and Wyss 2021a)

Access barriers as identified by respondents

The two biggest difficulties with seeking care for chronic patients were the unavailability of financial means to cover for medical expenditures and transport costs, followed by long waiting times and non-availability of required services. The results of logistic regression models assessing the associations of socio-economic variables with the presence of financial and non-financial barriers are given in table 16.

Table 16. Odds ratios of experiencing barriers for seeking NCD service by sociodemographic characteristics

Variables/Factors			f the barriers no barriers)	Financial Barriers (a)		Nonfinancial Barriers (b)		Multiple barriers (one or more) (c)		**p- value
		OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	
Residency	Rural									
	urban	0.42	0.23-0.77**	0.37*	0.16-0.86	0.56	0.32-1	0.42**	0.23 -0.8	
Age	=									
	>=60 yrs	0.58**	0.39-0.85	0.49**	0.28-0.84	0.72	0.44-1.16	0.58**	0.39-0.85	
Marital Status	Married									
	Alone	1.2	0.85-1.86	1.51	0.89-2.58	1.12	0.68-1.86	1.2	0.85 -1.87	
Health Insurance	no									
Hearth insurance	=	1.51	0.00 0.57	1.1	0.52.222	1.06	0.07.206	1.51	0.00.0.57	
	yes	1.51	0.88-2.57	1.1	0.53-2.23	1.96 ⁺	0.97-3.96	1.51	0.88-2.57	
Socio,econ.Aid	no no									
	yes	1.22	0.79-1.87	1.41	0.79-2.53	1.09	0.63-1.89	1.22	0.79-1.87	
Gender v27	Male									
	Female	0.95	0.67-1.36	0.75	0.46-1.22	1.15	0.72-1.84	0.95	0.67-1.36	
Number of ronic conditions										

categorical	=									
	2	1.04	0.68-1.57	1.65	0.91-2.97	0.74	0.43-1.26	1.04	0.68-1.57	
	3	1.22	0.75 -1.98	1.92+	0.97-3.82	0.88	0.47-1.62	1.22	0.75-1.98	
	4	1.42	0.74-2.71	2.08	0.82-5.29	1.06	0.48-2.36	1.41	0.74-2.71	
	5	1.81	0.55-5.99	4.64+	0.99 -21.73	0.87	0.17-4.46	1.81	0.55-5.99	
	>= 6	3.72	0.70-19.6	14.1**	2.45-92.46	0	0	3.72	0.71-19.63	
continuous		1.16+	0.99-1.36	1.42**	1.14- 1.77	0.97	0.78; 1.20	1.05	0.80-1.38	
District	Diber									
	Fier	2.54***	1.51 -4.29	2.41**	1.18-4.92	0.85	0.43-1.67	2.5***	1.5-4.29	

All reported coefficients other than the one for chronic condition as continuous variable are from the model including number of chronic conditions as categorical variable *** p < 0.001, ** p < 0.05, * p < 0.05, * p < 0.01

Urban residents were less likely to report any barrier (OR: 0.42; CI 0.23 to 0.77), financial barriers (OR: 0.37; 0.16 to 0.86) and multiple barriers (OR: 0.42; CI:0.23 to 0.8) as compared to rural residents.

There were no significant differences by gender, although females were slightly more likely to experience non-financial barriers (OR: 1.15; CI: 0.72-1.84).

Elderly adults were less likely to experience financial barriers or multiple barriers than younger adults (see table 16). People entitled to any socioeconomic aid were slightly more likely to experience financial barriers (OR 1.41; CI: 0.79 to 2.53) and multiple barriers (OR: 1.22; CI: 0.79 to 1.87).

People experiencing multiple physical health conditions (such as suffering from two or more NCDs) were more likely to experience any type of barriers, as shown in table 1. On average, the odds of financial barriers increased by 41% with each additional chronic disease (OR: 1.42 (CI 1.14 to 1.77, p = 0.002) and the odds of barriers to obtaining care showed an average increase by 16% with each additional chronic disease (OR: 1.16; CI: 0.99 to 1.36, p = 0.06).

When respondents were asked if their medical condition worsened due to the difficulties encountered, 89% of them affirmed this statement. Furthermore, to cope with such difficulties, 57% had to show up at an emergency department and 36% had to modify their treatment. However, only 20% of the respondents stated to be aware of any patient complaint system.

Medicine prescription patterns and Access to NCD medication over the last 8 weeks

Respondents were asked if any medicines were prescribed to them by the doctor during the most recent visits within the last 8 weeks and if they were able to obtain the prescribed medicines.

Information on medicine prescription patterns and OOPs were obtained by 898 respondents (see online supplement 1 on sociodemographic characteristics of the patients included the present sub-study). Nighty five percent of the respondents reported having received a drug prescription during their recent visits to the providers (see table 17). Of the total number of patients who had received a prescription, 94% were able to get all drugs. In order to obtain these drugs, 38% had to

pay for all prescribed medicine, while 49% had to pay for at least one of the drugs and 13% received the drugs 'for free' (100% reimbursed).

Table 17. Access to medicine and associated expenditures (N = 898)

Variable		Count	Percent
Visited facility over the last 8 weeks (and information on medication obtained)	Yes	898	81
Drugs prescribed by the doctor (4/8 weeks)	Yes	857	95
Availability of drugs at the pharmacy (of n 857)			
	All available	797	93
	Partly available	53	6
	Not available	7	1
Obtaining the available drugs (of n 850)			
	obtained all	<i>797</i>	94
	partly obtained	46	5
	Not obtained	7	1
Reasons for not obtaining (procuring all the drugs N=53	Pharmacy not visited (e.g. pharmacy too far away)	2	3
	Could not afford, very expensive	34	52
	Medicines do not have good quality	15	23
	Health status has improved	3	4
	Other	12	18
Payment for obtained drugs 843			
	obtained all for free	109	13
	I paid for all the medicines prescribed	324	38
	Obtained partly for free and I paid for at least one	410	49

Among those who received a prescription, 6% were not able to procure at least one drug. Among those who were not able to get all the prescribed drugs lack of money was the most important reason given (52%).

Out-of-pocket Payment for NCD treatment over the last 8 weeks

The total OOP expenditures were assessed along the main expenditure categories, i.e., consultation fees, (laboratory) diagnostic tests and prescribed medicine. Five percent of respondents reported to have given non-monetary gifts, and the value of these gifts was also obtained. However, non-monetary gifts were not included in any additional descriptive analysis.

Up to 64% of all patients suffering from NCDs reported not paying for health care consultation or visit at the respective health facility over the last 8 weeks and 67% did not pay anything for laboratory tests. However, close to 88% paid for drugs. Thirty three percent of those who paid for consultations paid also for the drugs and 91% paid for consultation or drugs.

Median individual expenses in the past 8 weeks were 28.5 Euro (3500 ALL) for everything related to the treatment of chronic conditions, 19.5 Euro (2400 ALL) for drugs and 1.63 Euro (200 ALL) for transportation. Median expenses on tests and consultations were in both cases 0.

The mean of individual shares of drug costs was around 62%, and the respective means were 15% for transportation costs and the rest for both treatment and consultation costs.

Table 18. Out-of-pocket Payment for NCD treatment over the last 8 weeks

Variable OOP	Consul	tations	Te	sts	Drugs		
_	Nr	%	Nr	%	Nr	%	
All Respondents (n=898)	320	36%	296	33%	787	88%	
Public (n=777)	248	32%	229	29%	677	87%	
Public and private (n=86)	47	55%	47	55%	76	88%	
Private (n=35)	25	71%	20	57%	34	97%	

PHC (n= 504)	153	30%	139	28%	429	85%
Hospital (n=354)	139	39%	134	38%	319	90%
Urban (n=332)	108	33%	115	35%	278	84%
Rural (n=566)	212	37%	181	32%	509	90%
Insured (n=786)	262	33%	254	32%	679	86%
Uninsured (n=112)	58	52%	42	38%	108	96%
Benefitting from SE (n=187)	56	30%	57	30%	165	88%
Not Benefitting from SE (n=711)	264	37%	239	34%	622	87%
Adults (n=352)	152	43%	137	39%	319	91%
Elderly (n=546)	168	31%	159	29%	468	86%
Diber (n=434)	152	35%	126	29%.	379	87%
Fier (n=464)	168	36%	170	37%	408	88%

Out-of-pocket Payment by Insurance status, residency and type of provider

Overall, 86% of the respondents reported having a valid health insurance and this percentage was higher among urban residents as compared to rural ones (89% vs. 69%) and in Diber as compared to Fier (86% vs. 63% respectively). Health insurance coverage among males and females was almost the same (males 74%, females 77% respectively).

The median of total individual costs among patients with chronic conditions was 44.3 Euro (5450 ALL) for uninsured patients and 27.6 euros (3400 ALL) for insured ones.

The percentage of respondents who reported paying for health care consultation was higher among those who were uninsured (52%) than among those with a valid insurance card (33%). The respective percentages of patients paying for drugs were 96% and 86%, respectively.

Of those who held a valid card, 31% paid for both consultations and drugs while 89% paid for consultations or drugs.

Regional differences in the distributions of OOP payments were observed, with median costs for the treatment of chronic conditions in the past 8 weeks being higher in rural settings compared to urban ones (rural: 33.4 Euros, 4100 ALL urban: 24.4 Euros 3000 ALL).

In contrast, the frequency of out-of-pocket payments for health care consultations did not vary by region (35% Diber vs. 36% Fier) but by type of residency, with 37% among those living in rural areas as compared to 33% among those from urban areas. The same pattern was observed with payments for drugs, with 90% among rural residents as compared to 84% among urban ones. Respondents from the Diber region had lower prevalence of OOP payments in all three components as compared to those from the Fier region, the relative difference being highest with payments for tests (37% vs. 29%).

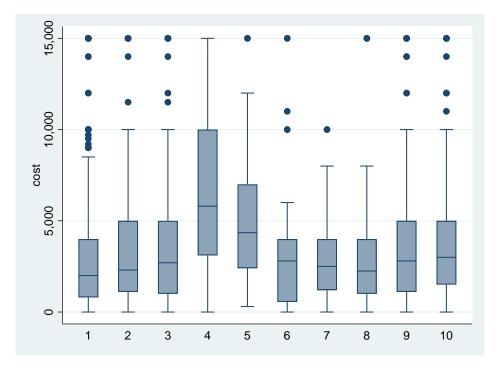
People attending public facilities only were less likely to pay for consultations than those who attended public and private facilities, the respective percentages being 32% and 55%. Among those who attended a private provider only in the last 8 weeks, the respective percentage was 71%. The prevalence of OOP-payments for tests were 29% among those attending public facilities only and 57% among those attending private facilities. Among those who attended primary care facilities (i.e., PHC facility, a polyclinic or health post), the frequency of OOP payments was consistently lower than among those attending hospitals (see table 18)

Out-of-pocket Payment by type of NCD

Figure 14 shows a box-and-whisker plot of the distribution of the costs on medicines, by type of chronic condition. The middle fifty percent of the respondents spent between 8 to 33 Euros. For people with strokes, the median expense was highest (47 Euro), followed by cancer (35 Euro);

rheumatism and respiratory disease (23 Euro for each). The median consultation costs were zero in both regions and independent from the setting. Median costs for tests were also zero.

Figure 14. BOX-plot -of individual OOP-payments for drugs in the past 4 weeks by type of NCD



Determinants of Out-of-pocket payments for NCD treatment

(consultation, tests and drugs)

Table 19 shows the shows the associations of socioeconomic and socio-demographic determinants (gender, age, socioeconomic beneficiary status, barriers encountered, location of residence, type of chronic condition, health insurance, marital status) with the likelihood of OOP-payments for consultations, tests and drugs.

 Table 19.Odds ratios of making Out-of-Pocket Payments over the last -8 weeks

Variables		An	y OOP	Cons	sultation (a)	D	rugs (b)	Te	ests (c)	*p-value
/Factors	M-1-	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI	
Gender	Male									
	Female	1.31	0.77; 2.23	0.99	0.72;1.38	1.22	0.78; 1.92	1.41*	1.1; 1.96	
Age	<60 yr >=60 yr	0.67	0.37; 1.22	0.63	0.45;0.89	0.76	0.46; 1.25	0.65	0.46; 0.92	0.009 ^a 0.01 ^c
Marital Status	Married									0.01
H. Insurance	Single/ divorced No	0.62	0.36; 1.07	0.73	0.51;1.06	0.84	0.52; 1.36	0.81	0.55; 1.16	
msur ance	Yes	0.33+	0.1; 1.11	0.52**	0.32; 0.83	0.26*	0.09; 0.75	0.98	0.62; 1.59	

Soc- econ.Aid	yes	0.88	0.48; 1.61	0.57**	0.38;0.84	0.95	0.56; 1.62	0.84	0.57;1.23	0.005 ^a
Location	Rural Urban	0.76	0.46; 1.23	0.92	0.64;1.32	0.69+	0.45;1.01	1.16	0.83;1.62	0.08^{b}
Barriers seek care										
Ch. Conditions	yes	1.78	0.85; 3.69	2.25***	1.56;3.24	1.51	0.83; 2.72	1.64**	1.14;2.36	
Hypertension	y vs. n	0.52*	0.28; 0.95	0.84	0.60;1.17	0.81	0.49; 1.31	0.66*	0.47;0.2	
Diabetes	y vs. n	1.71	0.91; 3.18	1.15	0.89;1.65	1.27	0.77; 2.11	1.75**	1.23;2.5	
Heart problems	y vs. n	1.32	0.79; 2.18	1.56**	1.13;2.14	1.46+	0.93; 2.28	1.38*	1.1;1.91	
Stroke	y vs. n	2.36	0.31; 18.1	1.79	0.64;4.97	1.68	0.36; 7.71	4.36**	1.59;120	
Cancer	y vs. n	1	0	1.29	0.37;4.47	1	0	3.67*	1.14;11.8	
Respiratory diseases	y vs. n	1.01	0.41;2.46	0.82	0.45;1.49	1.17	0.51; 2.59	1.04	0.58;1.86	
Mental disorder	y vs. n	0.75	0.22; 2.47	2.06^{+}	0.97;4.36	0.81	0.29; 2.21	0.62	0.27;1.41	0.04^{a}
Nervous system	y vs. n	1.75	0.41; 7.41	2.09+	0.99;4.60	2.78	0.65;11.75	1.15	0.54;2.46	0.057^{a}
Rheumatism	y vs. n	1.33	0.79; 2.22	1.23	0.89;1.68	1.01	0.7; 1.69	1.30	0.95;1.78	

Insured people were less likely to make any OOP payments (OR: 0.33, 95% -CI; 0.1; 1.11) than those without insurance. Those suffering from hypertension had a lower odds of OOP payments than those without hypertension (OR: 0.52; 95% -CI: 0.28; 0.95). An increased odd of making any OOP was found among those with stroke (OR 2.36, 95% -CI; 0.31; 18.1), conditions related to nervous system (OR: 1.75; 95% -CI: 0.41; 7.41) and diabetes (OR 1.71; 95% -CI:0.91; 3.18).

Consultations: The odds of consultation payments were lower in the elderly (OR; 0.63; 95%-CI; 0.45; 0.89) compared to the younger adults, in the insured people (OR: 0.52; 95%-CI; 0.32; 0.83) compared to those without insurance and among those profiting from a socioeconomic aid scheme (OR; 0.57; 95%-CI; 0.38; 0.84).

On the other hand, odds of consultation payments were higher among patients with heart problems (OR 1.56; 95%-CI; 1.13; 2.14), mental disorders and disorders of the nervous system (see table 19).

Insured respondents were less likely to pay out of pocket on drugs (OR: 0.26; 95% -CI: 0.09; 0.75) and the same was observed among those living in urban as compared to rural areas. On the other hand, the respective odds were increased among patients with stroke (OR: 1.68; 95% -CI; 0.36; 7.71) and those with a chronic condition related to nervous system (OR; 2.78 95% -CI; 0.65;11.75). However, the respective confidence intervals were wide (see table 19).

Women were more likely to make OOP payments for tests compared to men (OR;1.41; 95%-CI; 1.1; 1.96). Moreover, suffering from diabetes, stroke and cancer, respectively, was associated with a higher odd of making OOP for tests. (see table 19). Elderly people and those suffering from hypertension were less likely to make OOP on tests than their counterparts, with odds ratios of 0.65 (95%-CI; 0.46; 0.92) and 0.66 (95%-CI; 0.47; 0.92), respectively.

When adding barriers as binary predictors (yes/no), we found that patients with barriers had an increased odds of OOP payments for consultations (OR; 2.25 95% -CI; 1.56; 3.24) and tests (OR; 1.64 95% -CI; 1.14; 2.36) compared to patients without barriers. Patients attending a PHC facility were less likely to make OOP payments for consultations and tests compared to those attending a hospital, while there was no significant difference for drugs.

7.5 Discussion

The main goal of this study was to obtain the self-reported information by respondents suffering from NCDs. The information included financial barriers they encountered while seeking service, and OOPs that followed. A high proportion of respondents typically made OOPs for consultations (33%), diagnostic tests (33%) and drugs (89%).

The two biggest difficulties for chronic patients were the unavailability of financial means (related to drugs costs) and transport. Rural residents were more likely to report financial barriers, especially regarding transportation. Overall, the evidence supports that transportation barriers have an impact on healthcare access, particularly for those with lower incomes. (Syed, Gerber, and Sharp 2013) Consistent to other studies, rural patients experience greater transportation barriers to access health facilities than the urban residents. (Brundisini et al. 2013, Probst et al. 2007)

In this study, the financial access barriers were more common among respondents with three or more conditions and were good predictors of OOPs. It is well-reported in the literature that individuals with multiple chronic conditions require more medical attention, including a higher number of visits to primary and specialist care, leading to more prescriptions and greater healthcare expenditures (and financial constraints) (Foo, Sundram, and Legido-Quigley 2020) compared to those with one or no chronic conditions. (Hajat and Stein 2018)

In line with these previous findings, the study results showed a very high percentage of drug prescriptions among those who received health service in the last 8 weeks (95%). While availability and accessibility to medicine was plausible, only 11% of respondents obtained their medication 'for free'. In fact, this is consistent to other findings stating that in most developing countries, the highest component of household health related expenditure is on medicines. (WHO 2021, WHO 2021a, Tesema et al. 2020)

This finding aligns to recent research in Albania, showing that catastrophic health spending is largely driven by out-of-pocket payments for outpatient medicines. (Tomini F, Tomini S 2020).

Indeed, the list of reimbursable drugs has expanded massively from 1996-2018 by almost 30%. Initially, the number of drugs included on the 'essential' list was quite low (278 medicines), but constantly grew over the years; 409 in 2008, 477 in 2014, and 540 in 2018. Percentage of copayments (coverage levels) range from 0% to 50% of a reference price. While the reimbursed

drugs rate has substantially increased, the high rate of respondents paying OOPs for medicine continues to be a heavy burden. In Albania, mechanisms to protect people from co-payments are considered inadequate. Although some people are exempt (pensioners, people with disabilities, those invalided through war, people with some conditions), there is no explicit exemption from co-payments for people with common chronic conditions or for people with low incomes. There is no overall annual cap (ceiling) on out-of-pocket payments arising from user charges for outpatient medicines or for other health services. This is especially worrying as co-payments for drugs or tests may accumulate over time. Although the health insurance system has been a relative success, some groups (including farmers and, to a lesser extent, other self-employed groups) are not making insurance contributions. (Tomini F, Tomini S 2020)

Regarding the phenomenon of high OOPs for drugs, this study suggests the following four explanations: (i) the high percentage of co-payments for outpatient prescribed medicines for people who are covered, (Tomini F, Tomini S 2020) normally leading to high OOPs; (ii) the prescription patterns from the doctors(over- prescribing and, as a consequence, over-consumption of drugs; (iii) prescription of more expensive drugs (although the Fund obliges physicians to prescribe the cheapest generic alternatives available; (iv) the populations' lack of awareness regarding their rights, entitlements and current health reforms. In summary, the current behaviours of patients might be driven by the doctors' prescription patterns, coupled with the low awareness of entitlements. (Tomini F, Tomini S 2020)

There is a need for the government to monitor the progress of the UHC commitment, in order to ensure that the drugs included in the essential medicine list are being correctly prescribed and dispensed. However, it should be stated that certain higher OOP expenditures for diabetes or cancer for example are also likely to be related to the nature of the disease requiring regularly laboratory diagnostics, rather than the all the above explanations.

Regarding drug expenditures, in most European countries, the 'product-specific eligibility', or so-called "positive reimbursable list", is the dominant scheme, complemented by specific rules that grant higher reimbursement to vulnerable groups of population (such as the elderly, low-income households, the disabled, etc.). The Baltic countries use a 'disease-specific eligibility scheme', meaning that the same medicine may require different co-payments, depending on the disease it is used to treat.(WHO 2018c)

Denmark and Sweden operate 'consumption-based reimbursement schemes', in which patients have to pay out-of-pocket for medicines, up to a specific threshold of expenses, after which they share payments with the public payer. In Switzerland, the share is 10% of the price from the lowest-priced medicine. In addition, payments from patients can be required if they refuse the lowest-priced medicine. There are only a few countries in which the price of reimbursable medicine in the public sector are **fully covered by the public payer** (with no percentage of reimbursement/co-payment applied), but other co-payments may apply. In addition to percentage of co-payment rates that are widespread in the WHO Region, 'fixed co-payments' are also common in several countries (e.g. Estonia, France, Poland). These usually take the form of a prescription fee. (WHO 2018c)

Albania should investigate and analyse which model (or combination of models) is considered to be the *best-practice model* and can ensure access to affordable medicines for the population.

Respondents with health insurance were less likely to encounter OOPs over the last 8 weeks. Nevertheless, 33% of respondents with valid cards reported OOPs for consultations, as compared to **52**% of those who were not insured. To some extent, these findings are in line with several other results and policy notes, arguing that health insurance is an optimal mean of combating OOP phenomenon. (Walley et al. 2012, WHO 2018, Elliott et al. 2018b, WHO 2020, UN 2015)

Out-of-pocket payments are occurring at all of the levels of health facilities, from health posts to hospitals. However, in lower -level facilities, such as PHC centers and health posts, respondents reported lower OOPs (30% at PHC compared to 51% in polyclinics, and 41% in hospitals). This is confirmed by previous studies conducted in Albania, recalling different periods of time...(Tomini F, Tomini S 2020)

Patients in urban areas had to pay less often for drugs and consultations. This might be related to (i) a better organization of PHC level at urban areas and (ii) higher awareness and literacy regarding patients' rights to obtain free generic drugs (from the essential reimbursed list); there is also the fact that urban residents can more easily access pharmacies. (Fondi i Sigurimit të Detyrueshëm të Kujdesit Shëndetësor 2019)

There were some slight regional differences in OOPs. For instance, respondents from the Diber region were less likely to report OOPs for tests compared to those from Fier (29% vs 37%). This difference could be attributed to the lack of public diagnostic centers in Diber.(Gabrani, Schindler, and Wyss 2020b)

The regression models showed that the elderly were less likely to make any OOPs. This could imply that the elderly are supported at the PHC level, are following the PHC referral system more correctly, and are also following the general rules of family doctors, related to referrals and drug prescriptions. This is consistent with a previous study where the elderly were more likely to initiate and follow up on their NCDs at the PHC level, as compared to adults. Moreover, pensioners are exempt from co-payment for the lowest-priced generic versions of covered medicines. Additional measures to provide full coverage of outpatient medicines for some chronic conditions (based on the lowest-priced option) were introduced in 2017. (Tomini F, Tomini S 2020)

The study results indicated that patients paid for tests, especially women. Indeed, most diagnostic tests and paramedical services are free of charge in public facilities for those people who follow the referral system and are covered by health insurance. Many people, however, tum to the private sector for these services due to the lack of well-functioning equipment in public hospitals; anecdotal evidence suggests this may also be related to purposive action from health staff who work part-time or are paid under the table by private facilities to refer people. (Tomini F, Tomini S 2020) These findings correlate with our previous observations: that people were geared to the private sector due to medical equipment (Gabrani, Schindler, and Wyss 2020b)

Policy measures and their effectiveness-what is missing?

The health system's dependence on private OOPs, including informal, under-the-table payments, has been a concern for the Albanian governments. Consequently, they have tried to tackle this problem by pledging 'free healthcare' and by removing the consultation fees at the PHC level and at higher levels for patients underlined by the referral mechanism. While various other studies have shown that informal payments are a major concern, the present one does not confirm that this remains a regular practice in Albania. However, since the consultations during the past 8

weeks were mostly done at PHC level, the findings cannot be generalized for the other settings (namely, hospitals).

The study findings suggest that despite the policy measures to ensure 'free basic healthcare' for the whole population, there is a trend of continuing OOPs by the households when interacting with the healthcare system, making payment for consultations, tests, and for drugs.

Without changing the population's knowledge of what their right to health and what their obligations to co-payments are, there is a two-fold risk. Firstly, reforms per se are undermined and the "Basic Package of Services" at PHC is wasted. Secondly, if households keep to their old practice of 'buying services of good quality' with money, despite their entitlements, they are put at risk of catastrophic health expenditures, especially in cases of multiple NCDs whose management requires more financial resources.

Thus, defining an explicit package of benefits can help to improve equity in access and increase accountability for the services specified in the package; as patients are aware of the services they are entitled to receive and the respective prices, the scope for payments is reduced. Information campaigns are needed to inform the population about this package and about their rights. (World Bank Group 2011)

Limitations of the Study

Our information on barriers encountered and on OOPs relies on self-reports of respondents and thus may reflect individual perceptions. Unfortunately, we could not identify any means to control for this bias. Additionally, we could not obtain any information about if drugs prescribed and paid for were on the essential medicine list or not. Consequently, the high out of pocket spending on drugs may include overprescribed, unnecessary drugs, such as vitamins, which are not on the essential list.

Further, financial information may be perceived as sensitive and there might be either over or under-reporting by any respondent (regardless of the sociodemographic characteristics).

The recall period of 8 weeks may have resulted in bias (underreporting of OOPs, especially for expenditures for drugs or diagnostic tests). The rural population were less reluctant to participate in the survey, hence the potential for there to be an overrepresentation of this population in the survey. The two regions chosen may not be representative for the whole country.

7.6 Conclusions

The two biggest barriers for chronic patients for seeking care remain expenditures for drugs and lack of transport. This happens irrespective of the type of residency. While respondents who are covered by a health insurance scheme are less likely to pay for consultations, this does not hold true for tests.

The OOPs largely concern the purchase of prescribed drugs; they are the most important cost driver (more than 60%) for NCD patients. Consequently, access and treatment costs remain a concern for many households and patients. Hence, reducing access barriers further and addressing issues of high costs of drugs will be important to improve the situation of NCD patients. At large, continuing efforts to build sustainable social protection schemes, alongside an integration of essential NCD services into PHC level, might address further OOPs and release financial constraints on the household budgets.

Here, it is of importance to raise the population's awareness on patients' rights, and knowledge on their entitlements from health insurance and on the current health reforms. Information should also be encouraged, putting emphasis on patient-centredness and patient involvement in the treatment process, contributing to handling their conditions with more adequate and transparent information.

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Supplement 2. Socio-economic characteristics of patients included the present study

Tabel manufation (n. 200)	Tota	Total			
Total population (n=898)	N 898	%			
Gender					
Male	330	37			
Female	568	63			
Age					
18-59 years	352	39			
≥60 years	546	61			
Education	844*				
none	11	1			
pre-school/ kindergarten	2	0			
primary (grade 1-5)	162	19			
secondary grade (grade 6-9)	408	48			
high school	208	25			
Technical/college	11	1			
university	42	5			
Source of Income	1670**				
Private business in Albania	113	7			
Salary	222	13			
Pension	588	35			
Social aid	169	10			
Farming/livestock	293	18			
Remitances	251	15			
Other	34	2			
Civic Status					

married	670	75
Single/divorced/alone	228	25
Health insurance		
Yes	786	88
No	112	12
Benefiting soc. Aid v22		
Yes	187	21
No	711	79

^{*54} missing-no answers, **respondents gave multiple answers

8	Updating Nursing Competencies in Primary Healthcare in Albania
Tr	ansforming Roles Through Tailored Education
	Int I Dublic Health 17 September 2021 https://doi.org/10.2290/iinb.2021.1604095
	Int J Public Health, 17 September 2021 https://doi.org/10.3389/ijph.2021.1604085
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Sw	itzerland

Patients are more satisfied and health care costs are lower if primary health care [PHC] nurses are competent. Increases in both the quality of public and private PHC service and public demand (PAHO and WHO 2018, Gabrani, Schindler, and Wyss 2020b) have sparked discussions about nurses' role in PCH. This essay argues that delivering holistic, patient-centred, integrated PHC services requires redefining the roles of nurses and strengthening their clinical and attitudinal competencies, including training in the social dimensions of care.

Countries such as the United States, Australia, and Canada have quickly updated their nursing profiles and introduced new competencies for nurses working in PHC. In the United States and Australia, PHC nurses are the first point of contact for patients and help prevent and manage chronic conditions. (PAHO and WHO 2018) In Canada, nurses autonomously diagnose, order, and interpret diagnostic tests and prescribe pharmaceuticals. (Donald et al. 2010) In other parts of the world, like the Western Balkan region, the transition to new nursing profiles has been slower (Bokonjic et al. 2019), but international agencies are offering support to nations that want to transform nursing health education to improve communication, teamwork, critical thinking, digital (Hamer and Cipriano 2013, Henly 2016), and social skills among PHC nurses (PAHO and WHO 2018), and to establish interprofessional PHC teams.

In Albania, a Western Balkan country, the post-communist system still relies heavily upon the ultimate authority of doctors. However, Albania needs competent PHC nurses who combine professional skills, knowledge, and values with clinical competencies. Nurses of this caliber are necessary to [i] combat the steady rise of non-communicable diseases [NCDs], [ii] address the needs of an aging population, and [iii] compensate for the shortage of doctors. In Serbia, there is still no nurse specialization in PHC and their role is limited to registering patients and assisting doctors with paperwork. Most are not trained to provide any counseling services for patients with NCDs. (WHO 2018b)

Even though the necessary competencies must be taught in educational institutions and through professional training, nursing education in Western Balkan colleges, universities, workplaces, and health systems has not yet been upgraded to meet the educational standards set by the European Union [EU]'s directive on regulated professions. (Hamer and Cipriano 2013) For example, in Albania, in the early 2000s, the 'Bologna system' was introduced at the university level, and students can now earn a Bachelor's degree in three academic years. New professional

specializations emerged, and Bachelor's programs now graduate speech therapists, physical therapists, and laboratory technicians, among others. Yet diplomas in 'general nursing' remain the most preferred.

Accredited public and private universities now offer a variety of curricula in nursing at the Bachelor's level, though the available modules may differ substantially between public and private universities. (Muca A. 2015) While the complexities of modern healthcare do create the need for diverse training programs for nurses and a variety of competency profiles, the lack of standardization at the Bachelor's level makes a transfer to other universities difficult, impeding students' mobility.

Basic nursing education in both the public and the private systems should be standardized in Albania and the rest of the region, meaning training and the educational process should be upgraded. (Bokonjic et al. 2019) At the Master's level, professional degrees should be tailored around real-world healthcare settings and the burden of disease. In 2020, the Faculty of Technical Medical Sciences collaborated with the "Health for All" project in Albania. "Health for All" supported their efforts to provide practice-focused training to nursing students in a new professional Master's program called Family Health Nurse. The effort was also funded by the Swiss Agency for Development and Cooperation and implemented through the Swiss Tropical and Public Health Institute. This initiative aligned with Albania's national health agenda [PHC strategy 2020–2025], and the population's growing need for high-quality public and private PHC services. (Gabrani, Schindler, and Wyss 2021b, Gabrani, Schindler, and Wyss 2020a)

However, developing competencies and skills is not enough. The roles and positions of nurses on the PHC team also need to be redefined. This redefinition may change PHC delivery models and raise the status of nurses in the health system. But new nursing models challenge current practice in Albania and the region, where nurses' roles remain traditional. (Bokonjic et al. 2019)

In Albania, some may resist the idea that nurses should take over tasks related to managing NCDs. Nurses might find it challenging to take on these new tasks until they receive more training and support from physicians.

Despite these potential obstacles, the benefits of tailoring and standardizing nursing education are clear. Better utilizing and integrating nurses in the PHC system is a prerequisite for meeting

current and future challenges to the health system. In addition to updating the current curricula, creating interesting job facets for nurses, and offering improved continuing education and training courses, we must ensure that the PHC system fosters teamwork and respectful relationships between all members.

9 General Discussion and Conclusions

9.1 Summary of the Key Findings

The quantitative data upon which this thesis is grounded provides new evidence for Albania and Western Balkan countries context, and contributes to a better understanding of the nonclinical quality perceptions, care-seeking behaviors, factors influencing public/private utilization of healthcare services, associated OOPs of adults and elderly people suffering from NCDs. This chapter includes an overview of the main findings and a discussion on how these can contribute to instill UHC, strengthen PHC and empower/educate patients on (i) their rights to 'entitlements and free healthcare' and thus decrease the OOPs, (ii) novel concepts such as 'autonomy' or involvement in decision-making in the healing process and confidentiality. Moreover, it deliberates the methodological reflections that limit or enforce conclusions and recommendations and possible areas for future research.

Until 2006, the Albanian health system could be seen as hospital-centered and lacked a strong foundation in primary care as a gateway to an integrated health system. Since 2007, a new reform program has been implemented, with the central strategy being the development of a strong primary care system. This thesis provides some evidence on the perceived access to and quality of care to PHC services as self-reported by patients and households, almost 15 years after the first attempts to implement such policy. (Hotchkiss, D.et.al 2005)

The aim of this thesis was to analyze the perceived non-clinical quality of care of PHC among private and governmental services and to investigate utilization patterns, health seeking behaviours and OOPs to NCD care by adults and elderly people suffering from an NCD. Four specific research objectives were posed, respectively 1) to analyse users' perspective of public and private PHC services pertaining to non-clinical quality of care (Chapter 4); 2) to investigate factors and motivators that influence on adults and elderly people' choices to utilize public or private outpatient facilities as their health care providing facility (Chapter 5); to assess the care seeking behaviours of adults (aged 18-59) who suffer from NCDs and compare them to the patterns of elderly people (aged >=60) and establish a possible relationship between sociodemographic

variables and care-seeking behaviours (Chapter 6); and 4) to assess the financial burden from NCDs as the main barrier to NCD care, or alternatively investigate the likelihood of making OOPs by different population categories (adults vs. elderly, urban vs. rural, insured vs. uninsured) and settings (PHC vs. hospital) (Chapter 7).

Snapshot of main findings

Chapter 4 explored non-clinical quality of care perceptions of patients attending public and private providers. It demonstrated that the perceived non-clinical quality of care for private and public providers is comparable (similar), also after sociodemographic adjustments. The highest rated domains were "communication" followed by "dignity', while the lowest mean scores were given for "choice" and "prompt attention". While the perception of non-clinical care quality was found to be high and similar for public and private providers, 'promptness' and 'coordination of care' require attention to meet patient's expectations on good quality of care. Also, it pointed out the need to raise the awareness on autonomy and the involvement of patients' aspects concerning their health. Chapter 5 analysed factors and motivators that influenced on adults and elderly people' choices to utilize public or private outpatient facilities as their health care providing facility. It depicted that the use of primary healthcare was strongly influenced by geographical and financial access for public facility users and availability of equipment for private users. This study found that aspects of acceptability and adequacy of services were equally valued. Chapter 6 portrayed the public facilities as the main providers for initiating care and the main providers used in the 8 weeks prior to the interview. While a majority of elderly people visited a PHC to initiate treatment (and follow up) on their chronic conditions, a substantial proportion of adults (aged 18– 59) initiated and sought regular NCD care at a hospital. Further, it pointed out the need to educate patients and caregivers on active participation in NCD prevention, management, and control through the PHC level, as a long-term effort, along with the establishment of well-structured referral mechanisms and integrated care systems. Meanwhile, Chapter 7 focused specifically on financial burden from NCDs as the main barrier to NCD care. On average, the financial barriers increased with each additional chronic disease. Elderly adults were less likely to experience financial barriers or multiple barriers than younger adults. Patients encountering any form of barrier when seeking care had an increased odds of OOP payments for consultations and tests.

Out-of-pocket payments occurred throughout the NCD treatment process, mostly for drugs purchased. Respondents with health insurance were less likely to pay for consultation and drugs. Those who lived in urban areas were less likely to pay for drugs and consultations. Patients attending a PHC facility were less likely to make OOP payments compared to those attending a hospital. The result section is concluded in **Chapter 8**, which provides an opinion piece that states that competent nurses are needed at Primary Healthcare in Albania, through transformed roles and through tailored education. The example of 'Family Nurse' master for PHC settings, could potentially lead to enforced and more skilled workforce dedicated to PHC level.

9.2 Insights and implications on the main findings from the (i) health facility survey and(ii) household survey

This thesis has established new (non-existent) insights into non-clinical quality aspects and contributed to evidence on access and utilizations patterns of public and private PHC services as well as OOPs phenomena in Albania, using quantitative data. These insights and their possible implications for Albania and other Western Balkan countries with comparable health systems are discussed in the subsequent sections.

9.2.1 Insights from the health facility survey (Objective 1 and Objective 2)

This thesis introduced a contextualized tool to measure the non-clinical quality of care attributes, simultaneously by measuring patients' experience and expectations of quality among public and private PHC providers, respectively (Chapter 4). There is a current and ongoing debate on quality of care between public and private providers. The private sector is often regarded as offering better timeliness and hospitality. (Berendes et al. 2011, Basu et al. 2012) A tool developed and validated for measuring and analysing the non-clinical quality aspects of care is the "health system responsiveness tool'. (Robone, Rice, and Smith 2011, Tille, Röttger, Gibis, et al. 2019, Mirzoev and Kane 2017, N. B. Valentine, Bonsel, and Murray 2007, Röttger et al. 2014)) Yet, no studies have applied this tool into the Albanian or Western Balkan context, and basically it has only been applied in Eastern Europe. (Mirzoev and Kane 2017) The research performed in this thesis (Chapter 4) indicates that patients self-report good non-clinical quality of care, as expressed by considerably high ratings. Contributing to a growing body of literature on non-clinical quality

aspects between public and private settings, we found that in Albania – urban public PHC services and private outpatient clinics do perform similarly in respect to attributes of non-clinical quality of care. Our thesis results showed that while the overall quality ratings were similar, private providers were better perceived on quality of basic amenities, confidentiality, and autonomy at a certain point. The thesis findings diverge somehow from the other findings. Respectively, from other researchers who (i) identified lower quality rates amongst private healthcare users compared to public counterparts in European Union countries (Bleich, Özaltin, and Murray 2009) and from findings of other studies indicating that (ii) private health facilities appear to be of higher interpersonal quality, or more patient-orientated as compared to public facilities. (Berendes et al. 2011, Rannan-Eliya, Wijemanne, Liyanage, et al. 2015, Basu et al. 2012)

Quality - Experiences versus Expectations: Among the non-clinical care attributes of quality, we found communication and dignity were rated the highest (in terms of good responsiveness-or satisfactory performance). However, holding opposite view on the domains 'choice of provider, prompt attention and coordination of care' by scoring them lowest (less satisfactory in terms of responsiveness/performance). Our thesis findings are consistent with previous research conducted in 5 central European countries. Such similarities when evaluating care quality can be explained by the mutual historical, cultural, and social context which shaped populations' expectations and belief of what is 'good' care for them. (Mirzoev and Kane 2017) Less than excepted, the 'prompt attention' domain was reported as not 'highly satisfactory' among the participants that received care from private outpatient clinics as well. This is not the general impression for the private health sector in urbanized centres/or especially in Tirana, the capital city of Albania. We assume that there might have been some specific regional conditions but also sociodemographic conditions. In addition, the resulting patient juggling and the possible unavailability of doctors for private PHC services (at any time) adversely affects good coordination, choice, and prompt attention.

This thesis indicates that rural and urban PHC experiences with non-clinical care quality were quite similar. However, the rural patients attending PHCs, were constantly less critical, corresponding to a higher level of agreement with quality of care domains. This result confirmed the outcomes of previous researches that rural patients are more positive about the care

environment compared to the urban patients. (Footman et al. 2013) In our opinion, the attitudes of rural patients might reflect two distinct patterns: (i) weak, underdeveloped patient centeredness concept characterized by lack of awareness of patient right, (ii) the past communism roles within communities with strong ties, whereby traditionally government-run facilities, including doctors, were the ultimate authority (hence what comes from the government is unquestionable).

Important versus not important domains (expectations): In terms of importance of domains (the theoretical point of view-what constitutes good quality of care), patients point 1) dignity, 2) communication, and 3) prompt attention as the most important attributes of non-clinical care quality (irrespective to the type of clinic attended). In order of importance, they placed dignity and communication ahead of prompt attention. This outcome differs from a previous study involving 41 countries where the participants indicated **prompt attention** as the most important domain, ahead of dignity and communication. (N. B. Valentine, Bonsel, and Murray 2007) Other than these three domains, this study further identified quality of basic amenities as the other important attribute of non-clinical quality of care (and it was poorly rated among the patients that used government medical services).

The thesis 'findings clearly indicate that 'autonomy' (active patients' involvement in healing process) and 'confidentiality' did not appear to be among the important domains in our study. In fact, it was frequently rated as one of the least important domains. This shows that these concepts are flourishing at a slow pace, especially in the governmental sector. It has been argued that low attention to autonomy can be explained by persistent paternalistic behaviours of both providers (who give clear 'orders' on how to proceed with a certain therapy) and patients (who try to obey without questioning).

In conclusion, through chapter 4 we found a high, general satisfaction with the non-clinical care quality of care in both regions, within public and private settings, urban and rural settings, with a few exceptions. Nevertheless, there is need for cautious in considering the high patients' ratings, as they may not be true reflective of the value of patients' satisfaction. This is because the rating may be subject to limited awareness, cultural beliefs, and lack of knowledge on the non-clinical quality aspects of healthcare services.

The research presented in **Chapter 5** (**Objective 2**) outlined factors motivating patients to use governmental PHC and outpatient private clinics and possible sociodemographic (individual) characteristics associated with the attendance of public PHC and private clinics, guided by the 'access framework'. First, the results of the chapter 5 reinforced the delineated findings of chapter 4, that 'quality of care', and 'healthcare professionals' attitudes (communication aspects) were found again the most important criteria influencing the choice of the type of health facility utilization (irrespective of the health facility type-public or private). The theses 'results align with previous studies as they indicate that quality aspects affect healthcare utilization. (Gage et al. 2018, Karim et al. 2016, Oladipo 2014, Okonofua et al. 2018) Additionally, the data analyzed in this thesis demonstrate a positive correlation between access to a facility near household and attending public PHC. Studies carried out previously indicated the same, positioning location or transportation as essential elements determining healthcare utilization. (Okonofua et al. 2018, Syed, Gerber, and Sharp 2013a, Dassah et al. 2018) Therefore, upgrading the geographical accessibility to PHCs in Albania may influence more patients to use the public healthcare facilities in peri-urban regions.

Conversely, private outpatient clinic users indicated that the facility's location was not crucial. A higher percentage of the private clinics' users considered medical devices availability a vital factor that motivates them to consult private health services. Further, this study conveyed that women were more likely to attend private treatments than men, possibly because of their health-related attributes and because of the availability of medical apparatus and diagnostics, such as equipment for gynaecological diagnosis. Hence, the theses results indicate that, accessibility of functioning and advanced medical apparatus and the accompanying care services may be one of the primary reasons patients choose private outpatient facilities. The results also confirm that most private clinics are well-equipped than public facilities regarding medical equipment. The results are consistent with previous research carried out in Albania, indicating a lack of efficient medical equipment in public PHCs.(WHO 2018, Arqimandriti M, Ivkoviç M, and Naskidashvili I, et al. 2014)

Further, it confirms the Chapter 4 findings that state that patients in public facilities consider basic amenities insufficient, while patients in the private clinics hold more positive views on this

aspect. This study established that patients suffering from two or more chronic conditions were more likely to use public PHC services. In our opinion, this could suggest that many non-communicable diseases are primarily treated in public health settings in Albania. Moreover, the findings may validate previous research that indicates that the public healthcare sector mainly treats and coordinates care for patients with chronic illnesses. Concluding, our thesis findings indicate a need to improve the conditions for public health facilities and equip them with the appropriate medical devices; this is especially in remote and rural areas.

9.2.2 Insights from the household survey; (Objective 3 and 4,)

Chapter 6 adds evidence to the care-seeking patterns and health service consultations among adults and elderly people suffering from NCDs in Albania and in the Western Balkan context, thus contributing to the international debate for moving toward Universal Health Coverage. The importance of an active and well-functioning public health sector in Albania has been stressed upon by this Chapter. Through this survey we found that over 90% of the households rely on public health for their NCD management, respectively PHC, then public hospitals and polyclinics. Only around 5% of those interviewed had consulted private health providers over the last 8 weeks. The **reasons** for their choice of public health care in treating NCD, included; low consultation and treatment costs, geographical proximity, quality services, and coverage by their health insurance. Other studies undertaken in different settings have shown results similar to the one done in our thesis. Such studies have been done in Serbia, Greece, Bosnia, and Hercegovina and outline the importance of PHC and the challenges these providers face. (Grustam et al. 2020, Janković et al. 2019, Lahana, Pappa, and Niakas 2011)

Our thesis findings showed a varying behaviour between the adult and elderly population concerning "the initial point of care". A considerable proportion of the adults (40%) seeking treatment for NCDs did not use PHC's referral services but instead went directly to the public hospitals. On the other hand, most elderly population consulted PHCs as their initial point of care where they would then be referred to the hospitals if need to be. By bypassing the PHCs and going directly to the hospitals, the adult patients incurred higher costs than the elderly. Previous studies conducted supports these findings where the elderly and less educated population are less likely to

bypass the Albanian health gatekeepers (PHC) and usually trust and follow the advice provided by these PHC health providers. (Victoor et al. 2012, Groenewoud 2008)

In our opinion, the logic behind a high number of adults starting their care at the hospital level in Albania can result from the differences in quality and operations between the low-level public health facilities/primary care (PHC) versus the high-level public hospitals. In general, the hospitals are well equipped with efficient and up-to-date equipment and better-trained personnel, which translates to high-quality care compared to the government PHC.

Concluding, the theses findings indicate that the elderly patients are more likely to attend PHC facilities instead of public hospitals than the adult population who refer to go directly to the public hospitals. The choice to consult public hospitals over PHC could be attributed to factors as availability of services, required tests availability and instant referrals, among others.

Chapter seven research findings highlighted that the two most significant challenges for chronic patients entailed transport and financial funds unavailability. There was a higher likelihood of rural residents reporting resource-related and financial barriers, especially relevant to transportation. The findings pertinent to rural patients encountering more significant transportation hindrances to access healthcare services than urban residents are consistent with other studies.(Brundisini et al. 2013, Probst et al. 2007)

Regardless of other studies illustrating the extent to which informal payments are a substantial concern, the current one does not confirm whether it remains a frequent occurrence/phenomenon in Albania. However, the generalization of the findings for other settings, such as hospitals is not possible, as most of the consultations over the past eight weeks were done at the PHC level.

In this study, respondents with three or more conditions had the highest prevalence of barriers associated with financial concerns; and the obstacles they encountered were viable OOP payment predictors. In our opinion and also based on numerous reports/research findings in literature, (Foo, Sundram, and Legido-Quigley 2020) people with many chronic conditions necessitate more attention, including a higher number of visits to a specialist, contributing thus to more prescriptions and higher financial constraints and healthcare expenditure.

There might be some indication for over-prescription and a high burden from the outof-pocket payments for drugs, (as 89% of the respondents confirmed making OOPs for drugs).

The Chapter seven findings align with previous findings, where regardless of the plausible accessibility and availability of medicines, the medication expenditure is the highest component pertinent to household health expenditures. The latest research in the field also confirms this, delineating that the highest driver of Albania's catastrophic health spending is out-of-pocket payments for outpatient medicines. (Tomini F, Tomini S 2020).

Through our theses we found a decreased likelihood of respondents with health insurance making OOPs throughout the health-seeking process. These findings align with other studies' policy reports/briefs and results to some extent, such that health insurance is an optimal strategy for overcoming the phenomenon of OOPs.(Walley et al. 2012, World Health Organization. 2018, Elliott et al. 2018b, World Health Organization. 2020) There were some minimal regional variations in out-of-pocket payments. For example, respondents from the Fier region were more likely to report OOPs for tests than those from the Diber. In our opinion, the lack of public and mainly private diagnostic centers in Diber was the reason for this difference. (The findings associate with a prior observation of ours, of individuals, propelled to the private sector because of medical equipment Chapter 5 and Chapter 4 that delineates the private providers are absent in the Diber region.)

The thesis findings indicated a lower likelihood of an elderly persons making any OOPs. The precise implications of the results are that the elderly receive PHC level support, correctly adhere to the PHC referral system, and adhere to the general family doctor rules related to drug prescriptions and referrals. This aligns with our prior study on chapter 6, on the increased likelihood of elderly compared to adults initiating and following up their NCDs at PHC levels (see chapter 6). In conclusion, treatment costs and access remain a burden for numerous patients and households. Therefore, addressing high-costs concerns and eliminating access barriers will be essential to enhance population health.

9.3 Methodological considerations

In order to analyze access, quality and utilization patterns (health seeking behaviors and OOPs) of PHC services in Albania as well as the use of private and governmental services, a mixed method approach, involving qualitative and quantitative surveys, and taking into consideration the framework that defines supply (health provider) and demand-side (individual) dimensions to access, was originally planned (see Framework, figure 1). In this approach, structured questionnaire data would first be collected and analyzed (phase 1), while the qualitative research would then help to interpret the results obtained in the quantitative survey and to get a deepened understanding of access and utilization of PHC services by adults and elderly people with a chronic condition(s) (phase 2). Moreover, the qualitative research would help to corroborate main findings from the quantitative analysis. However, the large volume of the two unrelated datasets (health facility survey and household survey) and limited financial resources made it impossible to achieve this goal. Thus, all the results presented and discussed in this thesis relate to quantitative findings only. Chapter 4 and Chapter 5 are devoted to the results of the health facility survey and chapter 6 and Chapter 7 to those of the household survey. Strengths and limitations of the methods applied in each survey have been addressed within the respective chapters, yet general reflections regarding the validity of our findings are elaborated below.

First, all data collected in the health facility and in the household survey are cross-sectional. Therefore, causality cannot be inferred from observed associations. This limitation must be kept in mind in what follows.

One of the main strengths of methods employed for this study was the strictness with which this quantitative data collection and cross-sectional survey was undertaken, by the Health for All Project (HAP). The household survey helped us understand the health seek behaviours, OOPs, and barriers to PHC utilization, faced by every household in the population sampled. The survey, conducted - go door to door — ask and record data through ODK, enabled this study to capture quantitative data from a large, randomly selected sample of adults and elderly people, covering majorly the largest rural areas of Fier and Diber regions.

One potential weakness. This study analysed access and quality to health care majorly from a demand rather than a supply side standpoint. Still, it should be noted that access to health care is a function of both pillars, demand and supply sides and that analysing this function by failing to uptake any of these factors could generate bias. Since both sides of supply and demand are interrelated, it is always best to add additional information simultaneously, expanding the analysis and include determinants of access to health care on the supply side. Consequently, it is not possible to obtain all the empirical data required and generate robust conclusions and alternative analyses can thus be conducted in the future to complement this limitation of access to health care from the present research.

The variables that were available on the supply side of access to care were indirectly obtained from the patients and households' self/reported data, but these variables do not appropriately represent the supply side of access to care. While the type of data that can be generalized through these quantitative methods is important in providing an overview of the factors influencing access to care in the respective regions, this study was unable to identify experiences and perspectives of service providers in the context of PHC access to the population (weaknesses).

Additionally, one area for improvement would have been to integrate a successive set of indepth interviews or focus group discussions of adults who initiated and followed up their care at hospital level (to better understand if the strongest motivators were self-referral or actual instant referral from the PHC doctors). With more time allocated to interviews on the groups of people who made for example OOPs and especially for drugs, we would have obtained additional insights if the OOPs were made to pay drugs from the essential list (reimbursed drugs) or for drugs not pertaining to this list. Thus, we could better understand if patients were overprescribed or prescribed with more expensive alternatives of drugs.

Applying the Conceptual Framework to the findings

The abovementioned limitation is somehow smoothed the by the framework that guided our research: Penchansky & Thomas (1981). The advantage of Penchansky and Thomas concept of access to health care is that the frame is not only about the entry or use of services but also considers the different dimensions of the patient-healthcare provider relationship. Hence, the

concept presented by Penchansky and Thomas reflects the measurable, recurring interaction between needs, requirements, and resources. From the literature review, the most popular access to care model is the 1973 Andersen & Newman model, which presents the use of health care services as the proof of access. It assumes that the predisposing characteristics of the population seeking health care and enabling resources in the environment are combined with the professional evaluation of the need to use health care. A critical analysis of the model proposed by Andersen & Newman (1973) shows that, while describing the factors that determine access to health care, it integrates more of the supply side factors, with income being the only factor on the demand side. It is also worth noting that all these models use facility utilisation as a proxy for access to health care, and can thus be considered as models that predict utilisation rather than access to health care. Having this in mind, we believe that the model used in this research is advantageous and provides insights from both demand and supply sides of the access to care.

Internal validity of the Findings

The validity of the findings is discussed in several consecutive paragraphs. The random selection of participants prevents one source of sampling bias which could resulted from a different sampling strategy. The random sample and large study population also improve the external validity of these results.

To quantify the overall quality of care, access to healthcare and related healthcare behaviors, access to healthcare services and related health seeking behaviors, medicines availability, and the associated OOPs of people suffering from NCDs, we relied on data from two different resources (i) the facility survey and the (ii) households' survey. Combining data from two independent datasets can lead to some bias and can weaken the generalization of the results. While the households responded to the survey questions based on their experiences that happened 8 weeks prior to the interview, the patients exiting the health facilities might have been more up to date with their health events.

The Internal validity of the research instruments was ensured through the use of well-designed questionnaires. Some of the questionnaires have been the questionnaires had been used and

validated before. **A pre-test study** was done to assess the understandability of the study aims and the questions. Moreover, research assistants were thoroughly selected and trained, engaging them in a pretest-study, and they were then supervised during the entire data collection process. Completed questionnaires were checked daily and errors were corrected.

Moreover, in the 'non-clinical quality' study we assessed the internal consistency of the standardized questionnaire using Cronbach's alpha and found some items which didn't fit into the respective subscales. This may reflect a lack of previous experience with these concepts among Albanian patients. However, similar inconsistencies have also been reported previously.

We did not assess repeatability in a subsample of patients, as some responses would have naturally changed. Moreover, most of the information obtained from the patients was related to a recent time window (8 weeks).

Bias

Three types of bias need to be considered as potential threats to the internal validity of the results of the current thesis, namely 1) selection bias, 2) response bias and 3) confounding.

Selection bias occurs when the study population available for analysis is not representative of the population of eligible participants (Choi et al., 2016). In the household survey, participation was very high, so that we were certainly close to having a representative sample of users of public facilities and private settings. Selection bias should have played a minor role in this survey. As regards the health facility survey, all public facilities of the two regions agreed to participate. In contrast, there were no registered (licensed) private health settings in the Diber region, and 3 out of 8 private out-patient clinics in the Fier region did not consent to participate in the study. Moreover, all participating private outpatient clinics were located in urban areas. This may have limited the validity and generalizability of the results from the facility survey.

Response bias: Experts in public health reviewed and evaluated the readability, clarity, and relevance of each item. Moreover, the survey was pre-tested through cognitive interviews with patients in non-study settings.

Survey response bias may occur if respondents' desire to 'look good' or fear negative repercussions (Althubaiti, 2016). Such bias should have been mitigated in both surveys by

underlining the confidentiality and anonymity of the information obtained. Social desirability bias may have more strongly affected the data from the facility survey than those from the household survey. In fact, high positive ratings of quality perceptions were observed in the 'non-clinical quality survey' (Chapter 4).

The study was conducted applying a widely accepted and validated tool. However, this tool entirely relies on self-reported perceptions rather than on perceptions by impartial observers; therefore, some variations in the patients' perceived non-clinical quality may not fully reflect true differences in provider practice across different groups of patients.

Confounding is an essential issue to be considered in all analyses. We cannot exclude that some unmeasured predictor variables (such as household income or local resources) may have biased our results. We tried to mitigate such confounding by including region as fixed factor, community as random factor and education level and other personal characteristics in our regression models. However, this does not preclude the presence of some residual confounding. Future studies may reduce the risk of confounding by including more regions, trying to get more information on household resources, and by also considering predictor variables defined at the level of regions (e.g., poverty rate, number of health facilities per population), (Rothman et al., 2008)

Situational factors: The data collection took place during July and August. This may have limited the generalizability of the results from the facility survey, while the results from the household survey which were restricted to data from patients with chronic diseases were likely less affected.

Exclusion criteria: Participants of the health facility survey had to benefit from some of outpatient care on the day of the interview; thus, people consulting PHC for other reasons such as for reimbursement of drug prescription, receiving a medical certificate or medical clearance for driving license were not included in the survey. This limits the generalizability of the results of this survey to patients having sought treatment at the facility.

• External validity (findings translated into another context)

The two regions covered by the study make up around 16% of the territory of Albania and demographically represent around 15.7% of the population. There are some evident variations between regions in Albania. Generally, the Northern Regions are more deprived compared with the Southern Regions in terms of resources (human, material and financial), and they experience tougher physical conditions (i.e. cold temperatures, snow during winter, poor road networks, higher poverty rates etc.). One region (Diber) represents the mountainous relatively poor part of the country, while the second (Fier) is characteristic for the coastal, partially industrial settings in the country. Thus, the two regions reflect two opposite settings of Albania and cannot fully represent the socio-cultural and economic diversity of the country. Consequently, we cannot exclude the possibility that the results would systematically differ if the surveys were conducted in other regions, for instance in the urban context of the capital city Tirana.

However, across all districts of Albania, the public (governmental) facilities operate by similar national protocols and fall under the same managerial operations. Hence, as all public PHC and hospital settings in Albania are subordinate under the same agencies, namely Regional Directories and and respective directories at Ministry of Health and Social Protection level, and are regulated by the same policies and structures, findings may also apply to other regions in Albania.

Moreover, in both surveys, the study sample represented respondents across different socio-economic categories (i.e. urban vs. rural, several chronic conditions, education level, marital status, health insurance status, etc.). Thus, the findings might largely also be valid for other regions beyond Albania, with similar contextual, socio-cultural, and political features.

9.4 Recommendations

Albania has put into implementation initial step towards universal coverage, such as free accessibility to preventive services for the entire population at PHC, and those following referral system, regardless of insurance status (introduced in 2015 and extended in 2017). Thus, positive feedback on the accessibility and quality of public health services, might be attributable to the policy changes introduced during this time span. This is an important achievement in strengthening the PHC system and to remove access barriers. It is of utmost importance that the PHC facilities are further strengthened in providing high quality of care, which also includes infrastructure and equipment, and active patients' involvements and awareness on their rights and entitlements.

The recommendations on table 20, as detailed below, are principally of relevance to decision-makers in Albania. However, they may also apply to other countries with similarly characteristics of the health systems, in which PHC is playing a fundamental role in the operation of national and regional health system.

Table 20. Recommendations

Recommendations field	Aspects to consider
	- Make the PHC physician the central part of the NCD treatment plan.
Availability	-Provide essential diagnostic tools.
	- Provide skilful health workforce at PHC level who are able to manage and coordinate NCD care.
	-Improve coordination of care at public and private sector through a better use of Skilled allied health workforcespecially Family Nurses.
Accessibility	Tackle prompt attention
	- Strengthen home care models for the elderly with NCDs.
	-Increase awareness on entitlements.
	- Monitor Health Insurance Coverage.
Affordability	Address OOP for drugs
	-Raise public investment in the health system and a greater focus on PHC and preventive services.
	- Use of low fixed co-payments rather than percentage co-payments for the NCD drugs.
	-Exempt co-payments for low-income households.
	- Introduce a nnual income-related cap covering all co-payments.
	Build a well-established referral patterns and update protocols
Adequacy	-Increase referral support.
	Updated protocols, a long with mechanisms ensuring their effective use (e.g., electronic decision support system
	-Appoint a Coordinator for NCDs at PHC level.

	Educate patients on Quality (rights) and Autonomy
Acceptability	-Establish programs/schools for patient groups to improve disease self-management and active involvement in decision-making process.
	-Change population mindset on health seek behaviour and prescription patterns.
	-Monitor. Physicians must adhere to generic prescribing.

• Recommendation 1. Educate patients on Quality (rights) and Autonomy

Patients' voice in healthcare delivery process and community involvement on quality of care improvement initiatives are latent in Albania and have yet to be actively developed in the health system to support health policymaking. The schools for people with noncommunicable diseases are absent, and the individual motivational counselling services of the visited PHC facilities are limited to short single counselling sessions carried out by nurses. In order to foster Autonomy, and instill the right to quality of care, programs/schools for patient groups to improve disease self-management and active involvement in decision-making process should be introduced. Additionally, regulations on prescribing medicines require frequent referrals to narrow specialists for decisions regarding the treatment plan (thus leaving the PHC doctors outside this treatment plan); Considering a lack of trust of PHC personnel by specialists and the population; and a weak communication between PHC doctors and narrow specialists (WHO 2018), there is need to make the PHC physician central the part of the NCD treatment plan so to optimise patient's involvement in healing process.

• Recommendation 2. Tackle prompt attention

Given the aging population and concomitant rise of chronic health conditions, home care models, should take more time from the current time-motion to reach out into communities and raise promptness of response of services.

• Recommendation 3. Improve Coordination of care at public and private sector through a better use of skilled allied health workforce

Members of the allied health workforce such as nurses could act as a point of continuity of care between patient, family and provider, improving thus coordination of care. Hence, for example the recent initiative on 'Family Health Nurse' is a good example responding to the country's national health agenda, (PHC strategy 2020-2025) and the growing populations' (needs) utilization of PHC services, offered both from the public and private system. New nursing models are challenging ones for the current practice in Albania and the region, where nurses' roles are narrow practice-closely related to doctors' assistance or administrative-paperwork. In addition, for nurses to uptake these new tasks, there are a double challenge due to the (i) lack of training on how to manage these conditions and (ii) lack of perceived support from physicians.

• Recommendation 4. Make improvements on availability of basic equipment

Although there is a commitment to upgrade PHC in terms of infrastructure and equipment was made through health policy in cooperation with several partners operating in the health sector, there is need for substantial improvements on availability of basic equipment and transparency and public accountability. The PHC centres have a considerable shortage of diagnostic and treatment equipment and no standard list of equipment. Each PHC centre therefore has different equipment (WHO, 2018). Our results might imply that patients used the private sector because of diagnostic services. But here there is a clear burden for the patients. The governmental health insurance fund does not contract all private outpatient clinics, except with few selected private hospitals. As a result, they are not accessible to poor people or members of other marginalised and vulnerable groups who lack the money to pay for them.

• Recommendation 5. Patients' electronic health records-build an integrated national information system (accessing-coordinating data from public and private providers)

The private providers who provide care for patients who have previously consulted public facilities before (PHC or hospitals) cannot fully access patients' public electronic health records as the public sector is currently not equipped with a well-developed, central national electronic patient record system, pooling information both from public and private healthcare providers. This raises concerns about potentially excessive procedures and medical tests that patients have to go through once they visit private practitioners or outpatient clinics of the private hospitals. Indeed, an electronic prescribing system is in place. GPs have noted that this has reduced the administrative burden and increased patients' access to medicines. There is no integrated national information system nor electronic medical records. PHC data are collected and transferred to government agencies on paper. Even though information technology has started to be rolled out in the country, initiatives are still scattered and uncoordinated. As Albania moves toward a better coordinated health system it will be of importance to build up an electronic medical record system so that different providers can share and exchange relevant patient information. In the absence of a consolidated health information system, lack of timely exchange of patients' medical records, within and between public and private healthcare providers, there is good chance of overlapping procedures and excessive diagnostic tests/services.

Recommendation Nr.6 Build a well-established referral patterns and update protocols

These findings indicate an opportunity to provide specific NCD screening and management programs in primary healthcare facilities. Thus, having well-established referral patterns and integrated service models where both specialists at polyclinics or hospitals, and also family doctors at PHCs, hold a role and are related through well-structured systems to each other, would increase the effectiveness and efficiency to manage chronic conditions. In order to foster and scale management of chronically ill patients in primary care settings in Albania, there is a need for updated protocols, along with mechanisms ensuring their effective use (e.g., electronic decision support systems), may tackle both the high referral rate and the bypassing of the PHC system, thereby increasing the potential for primary health care to better contribute to NCD follow-up.

Recommendation Nr. 7 Coverage and co-payment policy for outpatient prescriptions

The study findings suggest that despite the policy measures to ensure 'free basic healthcare' for the whole population, there is a trend of continuing OOP payments by the households when interacting with the healthcare system, making payment for consultations, tests and specifically for drugs (89%). Outpatient medicines are the main driver of financial hardship, reflecting gaps in coverage. The growing role of outpatient medicines in driving financial hardship is worrying because of the lack of mechanisms to protect poor people. Many people are not entitled to publicly financed outpatient medicines because they are not covered by the Fund. In addition, the outpatient medicines covered by the Fund are subject to high percentage co-payments and there are no exemptions explicitly targeting poor households, nor is there any annual cap on co-payments. (Tomini F, Tomini S 2020)

The following protective features of coverage and co-payment policy for outpatient prescriptions are considered optional:

- a. the use of low fixed co-payments rather than percentage co-payments for the NCD drugs;
- b. exemption from co-payments for low-income households;
- c. an annual income-related cap covering all co-payments. (Tomini F, Tomini S 2020)

Recommendation Nr. 8 Changing providers and population mindset

There is need to change the population's knowledge/awareness of what their rights to health and what their obligations to co-payments are. In case this is not done, there is a two-fold risk. Firstly, reforms per se are undermined and the Basic Package of Services at PHC is wasted. Secondly, if households keep to their old practice of 'buying services of good quality' with money despite their entitlements, they are put at risk of catastrophic health expenditures, especially in cases of multiple NCDs whose management requires more financial resources.

Thus, defining an explicit package of benefits can help to improve equity in access and increase accountability for the services specified in the package; as patients are aware of the services they are entitled to receive and the respective prices, the scope for payments is reduced. Information campaigns are needed to inform the population about this package and about their rights. In parallel with the above, increase awareness of the population on the potential risks of having no health insurance. Monitor and possibly counterbalance tendencies of decreasing health insurance coverage due to the UHC introduction, specifically as costs for drugs are not covered. The health insurance system has been a relative success, with the fund showing a surplus in its initial years of operation. However, some groups, including farmers and, to a lesser extent, other self-employed groups, are not making insurance contributions, which impairs the equity of health care financing. The lack of a broad contribution base and difficulties in collecting payroll taxes (which include insurance contributions) may impede Albania plans to finance more health care through insurance. In addition, the growing proportion of private expenditures for health care through out-of-pocket payments further detracts from health care equity and access.

Recommendation Nr.9 Commitment of all stakeholders, especially s local decision makers, professional associations to support and to invest into public PHC

Low public spending on health (just under 3% of GDP), high reliance on out-of-pocket payments (58% of current spending on health), significant gaps in coverage are the main factors undermining financial protection. In the light of the new administrative and territorial reform in Albania (2015), where municipalities have the possibility to do assessment of local service, rehabilitation and maintenance of facilities, and evaluation of educational and promotional activity at a local level, there is need for a strong commitment of all stakeholders, such as local decision

makers, professional associations to support and to invest into public PHC. The current role of local and municipal authorities in health needs assessment and in mobilizing the efforts of the health system to address the priority health needs of the population need to be better defined. Local authorities have limited involvement in health needs assessment, policy decisions and health services.

9.5 Future research

While carrying out research related to current thesis, a number of ideas for future research to quality/access and PHC utilization patterns stood out. These include:

- 1. There is need to undertake qualitative research to ascertain and corroborate the quantitative findings. Complementary qualitative research may be conducted in the future, including in-depth interviews or focus group discussions. This could aid in the investigation of:
- a) quality issues/perception and test if the high rankings of quality and satisfaction with the providers/services persist, despite the other applied methodology.
- b) health seeking pathways; identify reasons why chronically ill patients choose to by-pass PHC services and consult directly at hospital level.
- c) OOP payments issues, specifically; try to understand the (i) patient-doctor and ii) patient-doctor -pharmacist relationship and see (or measure) the impact of such relationship in the health expenditure patterns.
- 2. This study was carried out in two settlements settings (Fier and Diber city and villages), therefore there is need to undertake similar research in other urban and peri-urban settings for comparison (namely other larger cities such as the capital city of Tirana or Durres or Vlora/Shkodra and beyond).
- **3.** In order to measure access/barriers and quality perceptions there are plenty validated and largely applied instruments, as seen in the literature; guided by several frameworks. Yet there is still no standardized, validated and universal method for assessing access and quality to PHC

public health system in Albania (to whom researcher can rely and investigate time to time and inform policy). PHC 25 Vital Signs indicators, collected through globally recognized surveys that are comparable across countries have recently been developed as a resource to provide a snapshot of countries' PHC system performance (The Primary Health Care Performance Initiative 2018). This may lay the ground for developing a comprehensive PHC performance assessment – that potentially could be embedded within the existing PHC performance system in Albania.

4. All PHC centres collect and report data that can be used for assessing health needs and setting priorities. The PHC centres report data on resources, morbidity and mortality monthly through district public health authorities to the Ministry of Health and Social Protection. Detailed assessment is needed on how the data collected are used for PHC-related decisions at the local, regional and national levels. PHC and public health professionals do not discuss data jointly for defining priority health problems in the community and for planning joint actions to address them. (WHO 2018)

Thus, one possible area for research is also the analyzation of the PHC data and realization of annual policy briefs, on national or regional data.

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