Master's Thesis

Community-Oriented Primary Care in Austria: Status Quo and Prospects for the Future

Submitted by

Dr. med. univ. Sebastian Huter

to obtain the degree

Master of Public Health (MPH)

at the

Medical University of Graz,
Postgraduate Master's Programme in Public Health

Supervisors:

Prof. em. Jan de Maeseneer, MD PhD
DDr. Florian Stigler, MPH

Vienna, September 2020

Gefördert aus den Mitteln des Fonds Gesundes Österreich

BUNDESMINISTERIUM FÜR GESUNDHEIT

Gesundheit Österreich GmbH

Geschäftsbereich Fonds Gesundes Österreich

Sworn declaration

I hereby declare that this Master's thesis is my independent work. I have not used any other sources than those indicated in the thesis. All passages taken from published and unpublished sources have been indicated and mentioned as such at the corresponding places in the thesis.

Vienna, 31 August 2020

Eidesstattliche Erklärung

Ich erkläre ehrenwörtlich, dass ich die vorliegende Arbeit selbstständig und ohne fremde Hilfe verfasst habe, andere als die angegebenen Quellen nicht verwendet habe und die den benutzten Quellen wörtlich oder inhaltlich entnommenen Stellen als solche kenntlich gemacht habe.

e.h.

Wien, 31. August 2020

Inhalt

Table of abbreviations 5

Zusammenfassung 6

Abstract 7

Background 8

Integrating public health into primary care 8

Community-oriented primary care (COPC) 10

History of COPC 10

Definition of COPC 11

What do we mean by community? 12

What is community orientation? 13

Effectiveness of COPC 14

The Austrian context 14

Skills and vocational training 15

Community orientation in primary care 16

Community orientation in health promotion 17

Community orientation in health care reform 18

Research questions 18

Methods 20

Scoping Review 20

Legislation and policy screening 21

Qualitative interviews 24

Interview guide 24

Recruitment 25

Performance of interviews 25

Coding and thematic analysis 26

Ethical considerations 28

Results 29

Scoping review 29

Screening of policy papers and legislation 31
Interview results 35
The many roles of GPs 35
Working in a team 38
Financial and structural issues 40
Volunteerism 43
Discussion 45
Strengths and limitations 45
Conclusion 46
Financing and institutional support 46
Strengthening the team 47
Implications for research 49
Recommendations for providers 49
Recommendations for policy makers 50
References 51
Appendix 59
Consent form - german 59
Consent form - english 60
Search strategy for scoping review 61
Scoping review result 62
Code list 65

Table of abbreviations

in alphabetic order

AKSAustria	Forum of Austrian Working Groups on Health (Forum Österreichischer Gesundheitsarbeitskreise)
CO	Community orientation
COPC	Community-oriented primary care
EFPC	European Forum for Primary Care
FGÖ	Austrian Health Promotion Fund (Fonds Gesundes Österreich)
GP	General practitioner
GÖG	Austrian Public Health Institute (Gesundheit Österreich GesmbH)
NCDs	Non-communicable diseases
OEFOP	Austrian Forum for Primary Care (Österreichisches Forum Primärversorgung)
PC	Primary care
PH	Public health
PHC	Primary health care

Zusammenfassung

Hintergrund: Die stärkere Integration des Public Health-Ansatzes in die Primärversorgung erlebt derzeit wieder mehr internationale Aufmerksamkeit. Gemeinde-orientiere Primärversorgung (COPC) ist ein bekannter Ansatz, um dies zu erreichen. Diese Arbeit soll analysieren, inwieweit COPC bereits in der Primärversorgung in Österreich etabliert ist und welche wesentlichen Barrieren und Ressourcen für eine Stärkung dieses Ansatzes bestehen.

Methoden: Es wurde ein Scoping Review von wissenschaftlicher Literatur zu COPC in Österreich durchgeführt und primärversorgungsrelevante Grundsatzpapiere und Gesetze auf Gemeinde-Orientierung hin durchsucht. Zudem wurden 13 semi-strukturierte Interviews mit Primärversorger*innen, Projektmanager*innen und Wissenschaftler*innen geführt und mittels thematischer Inhaltsanalyse untersucht, um gemeinde-orientierte Aspekte in existierenden Projekten sowie relevante Barrieren und Ressourcen für COPC zu identifizieren.

Ergebnisse: Es findet sich kaum österreich-spezifische, peer-reviewte Literatur zu COPC und kaum gezielte Erwähnungen von Gemeinde-orientierung in den untersuchten Dokumenten. Zwar existieren gemeinde-orientierte Projekte in Österreich, diese vermissen jedoch meist wesentliche Elemente von COPC. Hausärzt*innen können einen wesentlichen Beitrag zum Gelingen solcher Projekte leisten. Jedoch fehlt ihnen oft das notwendige Team sowie der einfache Zugang zu nachhaltiger Finanzierung. Zudem basieren viele Projekte auf Ehrenamtlichkeit.

Schlussfolgerungen: Gemeinde-orientierung der Primärversorgung ist in Österreich nicht systematisch implementiert. Um diesen Ansatz zu stärken braucht es daher systemische Anstrengungen, zum Beispiel durch die Einbindung von Gemeinde-orientierung in den Versorgungsauftrag und die Erleichterung der Bildung von lokalen Primärversorgungsteams. Eine strukturierte Anbindung an das bereits gut etablierte Netzwerk der “Gesunden Gemeinden” wäre ein rasch umsetzbarer erster Schritt.

Abstract

Background: Better integration of public health into primary care is seen as an important strategy for improvement of population health. Various countries promote community-oriented primary care (COPC) as an approach to achieve this, but international assessments have described the community orientation (CO) of primary care in Austria as weak. This thesis aims to review the situation of COPC in Austria, to identify which aspects of community orientation exist, and to describe the barriers and resources that need to be considered in order to strengthen COPC.

Methods: A scoping review of peer-reviewed literature was performed and primary care-relevant policy papers were screened for aspects of CO. Thirteen semi-structured interviews with primary care providers, project managers and researchers were conducted and transcribed. Thematic analysis was used to identify aspects of community orientation in ongoing projects as well as relevant factors that hinder or facilitate the implementation COPC projects.

Results: There is a lack of literature concerning COPC approaches in Austria and only sporadic mentions of community orientation in the screened documents. While community-oriented projects exist, many lack essential aspects of COPC. General practitioners (GPs) can play an important part in CO projects but often lack the necessary primary care team as well as sustainable and accessible funding. Furthermore, many projects are based on volunteerism.

Conclusion: COPC is not systematically implemented in Austria. Systematic efforts are needed to facilitate the building of local primary health care teams and the integration COPC into the service profile of primary care. Improving connections between the well-established “healthy communities” network and local primary care providers is a potential first step that could be rapidly implemented.

Background

Integrating public health into primary care

International declarations of the World Health Organization (WHO) such as Alma-Ata in 1978 and the Astana declaration of 2018 have called for a strengthening of primary health care (PHC) (1,2). PHC is a "*whole-of-society approach towards health that includes health promotion, disease prevention, treatment, rehabilitation and palliative care*" (3). *Primary care* (PC) is an essential element of PHC. It describes the first level of the formal health care system that provides accessible, continuous, comprehensive and coordinated health services for the majority of the health needs of a population (4). This includes preventative as well as curative, rehabilitative and palliative care.

Public health (PH), on the other hand, can be described as "*what we do together as a society to ensure the conditions in which everyone can be healthy*" (5). The US Center for Disease Control (CDC) states on its website that PH is "*concerned with protecting the health of entire populations. These populations can be as small as a local neighborhood, or as big as an entire country or region of the world.*" and explains the difference between public health professionals, who focus more on prevention through educational programs, policy recommendations, administering services, and research, while clinical professionals focus on the treatment of individuals (6). Looking at primary care, this might be slightly different, since prevention does play an important role there. Nevertheless, also in primary care it is usually aimed towards the individual, not the population.

In a model proposed in 2007, Stevenson Rowan et al describe a set of functions for primary care and public health in the Canadian context, namely population health assessment, health protection, health surveillance, health promotion, disease and injury prevention, and disease management. They assigned these function to three categories, where interventions are either primarily the

responsibility 1) of public health, 2) of primary care, 3) or are a joint function of both (7), as shown in Table 1.

Table 1: Responsibilities of public health and primary care. Excerpt adapted from Stevenson Rowan et al. (7)

Primary responsibility of public health	**Joint functions of public health and primary care**	**Primary responsibility of primary care**
Population health assessment	Health surveillance	Disease management
Health protection	Health promotion	
	Disease and injury prevention	

Countries like the United Kingdom (UK) and the United States (US) have aimed at better integrating some public health functions into primary care (8–10). Bradley and McKelvey argue, that there are four key areas why integrating public health and primary care would be beneficial in the UK:

1. local knowledge and data
2. service delivery
3. advocacy and collaboration and
4. public health approach (11).

One reasoning for this lies in the shift in the burden of disease towards the so called “big four” of non-communicable diseases (NCDs): cardiovascular disease, cancer, type two diabetes and chronic respiratory disease. A significant proportion of these problems is potentially preventable, if the underlying social, economic, environmental, and political determinants of health are adequately addressed. As these issues go beyond the individual behavioral level, an isolated individual approach is often neither efficient nor effective. For example the factors contributing to obesity are so complex, that prevention of obesity necessitates community-based interventions (12). That is probably not only true for obesity, but also for other NCD risk factors. This has lead Allen and Fried to call for a “reframing” of NCDs as “socially transmittable conditions” (STCs) (13).

Population health is another term broadly mentioned in this context. Although there is some discussion about whether population health is really different from

public health, it is used to emphasize health outcomes and health determinants and their distribution within a population, thereby also explicitly looking at inequalities (8,14,15).

All of this highlights the need for a more proactive approach to health and to better address population health needs at the community level (10).

An long known concept to integrate the population-based thinking of public health into the individualized realm of primary care is community-oriented primary care (COPC).

Community-oriented primary care (COPC)

History of COPC

COPC is nothing new. Individual GPs have long used public health methods like morbidity registers to analyze the community they work in. A famous example is the story of William Norman Pickles (1885-1969), who was a GP in Wensleydale (Aysgarth, UK) from 1913 to 1964. He used his meticulous patient records to study infectious diseases in his district, which allowed him to demonstrate the relationship between chickenpox and shingles, calculate the incubation period of Hepatitis A and postulate the infectious nature of Bornholm disease (16,17). As a defined term however, COPC has its' roots in the 1940s, when Sidney and Emily Kark, a married doctor couple, used a comprehensive, multidisciplinary approach to care for the rural community of Pholela in South Africa (18–20). With their team of two medical officers, several health assistants, a nurse, and local nurses' aides, they put a significant effort into health education and prevention at the community level. This enabled them to achieve major health outcome improvements, i.e. decreasing malnutrition and mortality rates. Between 1942 and 1950, they reported a reduction of the mortality rate per 1 000 population from 38 to 13 (21). Having emigrated from South Africa for political reasons, they moved to Israel. There they could further develop and publish their thoughts on COPC and inspired the way primary care is delivered in Israel (22). Connections to the US and Spain also led to initiatives in those countries to implement COPC

(23,24). While many countries try to implement a COPC approach, it is not always named as such. Iliffe and Lenihan noted in 2003 that a UK health care reform initiated in 1998, which tried to integrate public health into primary care, was in principle identical to COPC (25).

Definition of COPC

There are a variety of definitions for COPC. In a comprehensive report from 1984, the United States' Institute of Medicine (IOM) defined COPC as "*the provision of primary care services to a defined community, coupled with systematic efforts to identify and address the major health problems of that community through effective modifications in both the primary care services and other appropriate community health programs*" (26).

In this definition, COPC has three components:

- a primary care practice
- an involved and defined community
- a set of activities that systematically address the major health issues of the community.

In a Kings Fund handbook on training practices in COPC, the aspect of integrating public health and primary care is mentioned more explicitly. There, COPC is "*a continuous process by which primary health care is provided to a defined community on the basis of its assessed health needs by the planned integration of public health with primary care practice*" (27).

Both definitions underline the process-based nature of COPC, which is represented in the COPC cycle (see Figure 1). The COPC cycle is a visualization of the approach, analogous with other cycles such as the policy cycle or the plan-do-see-act (PDSA) cycle used in quality improvement (28).

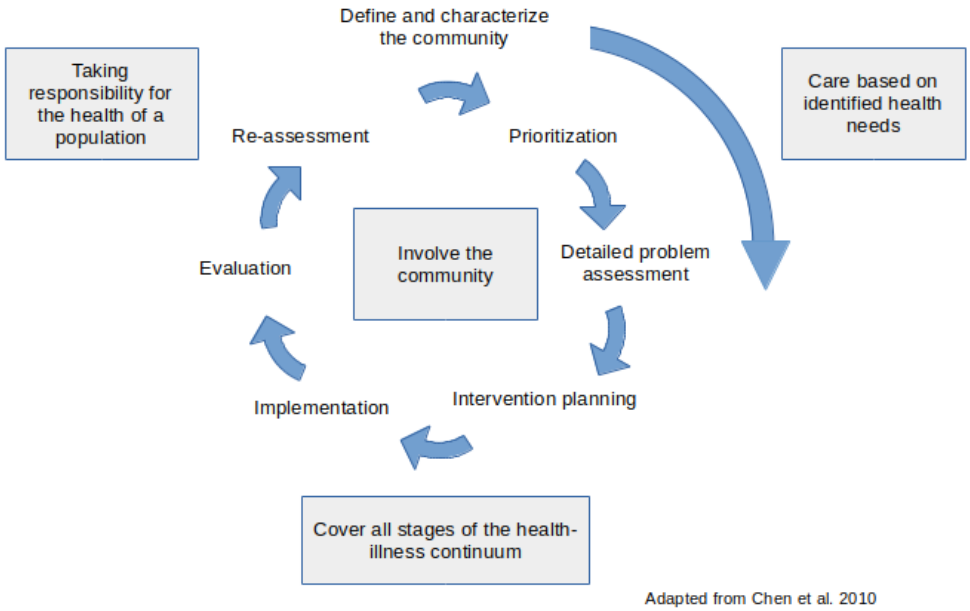


Figure 1: COPC cycle adapted from Chen et al 2010 (29)

What do we mean by community?

The term “community” is used in various different contexts in health care. In the context of disease and care provision, it is often used a separator between the institutional (e.g. hospitals) and the non-institutional (=community) setting. Terms like “community-acquired pneumonia” or “community-based care” focus on the fact, that the disease was not acquired in a health care institution or that long term care is not provided in an elderly home (30). It is not used to distinguish between different communities.

In the context of primary care, “community” is used for a group of individuals and institutions and a distinction is drawn between different communities. Within the CanMEDS physician competency framework of the Royal College of Physicians and Surgeons of Canada, a community is defined as group of people or patients who are connected to the practice, distinct from a “population”, which is defined as a group of people or patients with a shared issue or characteristic (31).

In the context of participatory research, community is defined as *those who are affected by the research results*. Participatory research is an approach often used in public health, where knowledge is generated in a partnership between

scientists and others, to ensure that the evidence created *addresses real needs and will really be used* (32).

In this study, a pragmatic definition of community is used in the style of the Institute of Medicine's (IOM) definition of 1994, where the community refers to

> *"the population potentially served, whether its members are patients or not" (33).*

In this sense, community will most often refer to a social group residing within a defined geopolitical unit, for example a district.

The translation of "community" from German ("Gemeinde") into english is not trivial. For example it can mean the people, living in a municipality but at the same time is used as a term for the administrative unit and the governing body of the municipality. In this study, when translating German text passages containing "Gemeinde", the term "municipality" is used if the administrative or governing level is addressed, while "community" is used if it refers to a group of people.

What is community orientation?

For GPs, it is important to know what is going on "outside" of the practice and whether there are health needs in the community that need to be addressed. According to the WONCA Europe definition of general practice and family medicine, the aspect of community orientation (CO) includes the ability

> *"to reconcile the health needs of individual patients and the health needs of the community in which they live in balance with available resources." (34)*

This definition is reflected in the Core Curriculum for general practitioners in the UK:

> *"GPs have a responsibility for the community in which they work, which extends beyond the consultation with an individual patient. The work of family doctors is determined by the makeup of the community and therefore they must understand the potentials and limitations of the community in*

which they work and its character in terms of socio-economic and health features. The GP is in a position to consider many of the issues and how they interrelate, and the importance of this within the community. In all societies healthcare systems are being rationed, and doctors are being involved in the rationing decisions; they have an ethical and moral duty to influence health policy in the community" (35).

This paragraph sets high expectations of the GP in the role as an advocate. It implicates a certain set of skills in both public health and advocacy. The doctors role as an advocate is also mentioned in the CanMEDS competency framework mentioned above. There, Muldoon et al defined CO as

"care providers' knowledge of community needs and involvement in the community" (36).

Effectiveness of COPC

In a systematic review from 2008, Gavagan found little evidence for or against the effectiveness of the COPC methodology. This is not surprising, since obvious improvements in health outcomes may have been possible to show in underserved populations, as seen in the early reports by Kark (21) or also in later applications (37), but are probably much harder to show in other settings. Furthermore, there are barriers to implement the complete COPC methodology in an existing primary care practice, like time and financial resources or skills. Therefore, many projects only contain selected aspects of COPC that might as well fall under the definition of a different approach, like community based health promotion or community medicine, which makes comparability difficult. This study nevertheless uses the COPC approach as a "gold-standard", since it provides a comprehensive model of many important aspects, that are also elements in other approaches.

The Austrian context

Primary care in Austria is traditionally provided by general practitioners in self-owned, single-handed practices. The GPs are contracted by social health

insurance providers, which provide almost universal population coverage (99%) and make care free-of-charge at the point of use for most patients (38). As of 2017, there was an average of 2313 inhabitants per contracted GP (39). Practice staff typically consists of the GP, practice assistants and sometimes a registered nurse or other health care professionals (63).

There is no formal list system for primary care (40). Patients do not formally need to choose one GP they usually go to but can consult another GP every three months without notice. GPs therefore do not have a list of patients, that they are officially responsible for, since they do not know, if a patient who does not visit the practice for a year, did not need care or has sought care elsewhere (41).

GPs are also not the formal gatekeepers for the more specialized health care system, since access to secondary care (outpatient specialist clinics) and hospital care is free at the point of use and usually does not require referral by a GP, except for diagnostic testing. However, referral for other primary care services like physiotherapy or psychotherapy is usually required for legal reasons and for reimbursement by health insurance. Remuneration of primary care consists mostly of a per-case flat rate and fee-for-service (38,42).

The usual range of services provided by GPs includes preventative services like health checks for children and adults, cardiovascular screenings, cancer screenings and vaccinations. Population-oriented prevention or health promotion is not usually part of the mandatory service profile for GP practices, even though new contracts in recent years have started to include such mandates for primary care units that operate under the new Austrian Primary Care Act (“Primärversorgungsgesetz”) of 2017, which is further discussed below (43).

Skills and vocational training

Vocational training for GPs is mostly hospital-based (36 months in-hospital-training vs. 6 months in primary care). The applicable regulations regarding vocational training may be found in in the Austrian Physicians Act (“Ärztegesetz”) and the specialty-specific training regulations (“Ärzteausbildungsordnung”), which

include rotation-specific logbooks (44,45). While they do acknowledge the social surroundings as a relevant aspect for the care of the individual patient, none of these explicitly name population-oriented or community-oriented approaches as a learning goal.

Community orientation in primary care

There have been attempts to measure community orientation and develop indicators. Two examples are the primary care assessment tools (PCAT) by Shi and Starfield and the Quality and Costs of Primary Care in Europe (QUALICOPC) study by Kringos and Schäfer (46,47). Both aim for an assessment of primary care systems on a national level and include practice and patient surveys that include items for CO.

Using the QUALICOPC dataset, Vermeulen et al. looked at the community orientation of primary care in 34 countries. Austria was classified as medium (48). In the QUALICOPC study, the items used to assess CO focused on whether GPs would take action if they noticed repeated accidents in an industrial setting, frequent respiratory problems in patients living near a certain industry, or repeated cases of food poisoning in the local community. These items represent classical public health and occupational health issues and, in Austria, partially fall under the competencies of occupational doctors and district medical officers (“Sprengelärzte”). While the items are certainly related to problems in the community and might be useful for an international comparison, they only represent reactions to problems that are actively brought into the practice by patients. If we take CO as defined above and consider the fact that a community does not only mean “patients” and that the approach should be proactive rather than only reactive, it has considerable shortcomings.

In comparison, the items used in the PCAT to assess CO are questions about the provision of home visits, whether patients feel like the provider knows about important health problems in the community or whether the provider seeks input from patients and the community to provide better health care. This broader approach might be better suited to assess community-orientation in the context

of COPC but is not suitable to provide a comprehensive. The application of the PCAT in Austria showed a low score for CO (40).

The above-mentioned district medical officers are worth mentioning explicitly in the context of community orientation, since they take on some of the tasks of the public health services in the districts, they work in. This includes tasks like death certificates, compulsory hospitalizations, or environmental health issues. Especially in rural areas, this is often done by contracted GPs in addition to their normal GP duties and therefore constitutes an integration of “old” public health models into primary care. However, the problem of recruiting enough GPs for rural areas has also had its effects on the system of district medical officers (49,50).

Community orientation in health promotion

Health promotion is *the process of enabling people to increase control over, and to improve, their health* (51). The “healthy communities” network is a widely established example for health promotion on a community level in accordance with the Ottawa Charter (52). It contains an initial community health needs assessment and builds on a participatory approach using local health working groups. It has been applied to some rural as well as urban districts in at least 7 out of 9 Austrian states (53). The networks are usually organized on a state level, which might also lead to some degree of variation in the approach used, the available resources, or the proportion of communities being covered. While Reis-Klingspiegl described a strong focus on the development of common health goals within each community for the network in the state of Styria (52), a case study in 2009 in the state of Upper Austria saw the need to increase community participation and involvement and called for a stronger orientation towards health goals on a community level (54). While some descriptions claim that local primary care providers participate in the working groups (53), it is not clear to what extent this actually happens and what the role of the GPs is.

Community orientation in health care reform

Austria is in the middle of a reform of primary care structures. Recent health reform efforts have started a shift towards new primary care units, organized as networks between practices or as primary care centers (55). In 2015 the first primary care unit officially opened in Vienna, with 21 units established in August 2020 and nine additional units preparing to open soon, according to the official website of the social health insurance (56). This process takes longer than what was aimed for, as the target of providing primary care for 1% of the Austrian population through new primary care units by 2016 could not be reached and the new target to establish 75 primary care units by 21 will be difficult to achieve as well (57).

These new primary care units also have, for the first time, a defined set of services they have to offer and tasks they should fulfill, including some population-based services for health promotion, prevention, chronic disease management and vulnerable groups (58). However, there is currently no defined way as to how this will be achieved. Remuneration systems for primary care units vary between regions and different pilot projects. So far the contracts between social health insurance and the chamber of physicians concerning primary care units is only finalized in two of the nine states.

Arguably, the extension of individual care towards a population-based or even community-oriented care approach might be a paradigm shift for providers. At first glance, there is no visible strategy to achieve this change. It is also questionable whether the skills and resources for this kind of care are easily available in primary care.

Research questions

Community-oriented primary care is an extension of established, person-centered primary care with public health methods that may have the potential to further improve population health outcomes. Two international assessments of community orientation in Austria have shown room for improvement, but do not

provide a detailed insight into the status quo. This shows the need for a comprehensive situation analysis of COPC in Austria.

1. What aspects of community orientation can already be found in Austrian primary care?
2. How is community orientation in primary care implemented in terms of legislation and health policy?
3. What barriers and resources for community orientation in primary care exist in Austria?

Methods

The problem was approached with a mixed-methods approach. Firstly, a scoping review of the literature was performed to identify examples or mentions of COPC in peer-reviewed and grey literature. Secondly, relevant policy documents, recommendations and reports around the topic of primary care in Austria were screened for aspects of community orientation. Thirdly, expert interviews from different levels provided direct insights into the current status of the topic.

Scoping Review

In addition to the usual background literature review, covering national and international literature about COPC, a more structured scoping review was carried out. The review had the primary aim of identifying literature that had a direct link to community-orientation in primary care in Austria.

A search strategy was developed with the use of probing searches, to ensure that enough results are obtained from the searches but are also not beyond the scope of workload for a thesis. Therefore, a combination of “primary care”, “communit*”, and “Austria” was chosen. To detect publications in English as well as in German, the search was carried out in both languages. The search strings had to be adapted for every database. The search strings used and the total number of results for each search are shown in Table 8 in the Appendix.

Articles, that include community-based approaches for general health promotion and prevention or for treatment and rehabilitation of primary care relevant chronic diseases were included. Literature that either did not had cover to aspects of community orientation in primary care or did not specifically cover Austria was excluded.

For peer-reviewed literature the MEDLINE database and the Web of Science Core Collection were used. To obtain relevant reports or theses that are not listed in above-mentioned databases, an additional search was conducted in the database of the Austrian Library Network (59), which has a large collection of

diploma and Master's theses from Austrian universities. The online library of the Austrian Forum for Primary Care (OEFOP) (60) was also included. The results were complemented with results from the search engine Google Scholar.

The resulting records were imported and organized in Zotero™ for the screening process. Automatic screening for duplicate entries was performed and duplicate entries were removed. Afterwards, all results were screened by their title for relevance. Results where the title indicated possible relevance to the topic where examined more closely by reading the abstract. In the case of reports or theses, the table of contents was analyzed if a full-text was readily available. The remaining results were then assessed on their full text, if available. If the full text was not available online, the author was contacted directly. If no full text could be obtained, the publication was excluded for that reason.

All relevant records were then read and summarized into a qualitative synthesis of the literature.

Legislation and policy screening

Legislation and policy documents with respect to primary care were retrieved in full text from the Austrian federal legal information system (RIS) (61) and official websites of the social health insurance funds and other institutions. The documents cover three major areas:

1. health care system, health care services, planning and health care reform
2. primary care workforce, i.e. the service profile and training of GPs, nurses and practice receptionists
3. health promotion and prevention in primary care.

Most documents from the first category were selected as they were listed under the legal framework on the website for team-based primary care (62). The three above named professions were chosen, as they constitute the "core team" of every primary care unit and are also the predominant workforce in primary care (55,63). The documents concerning training regulations were referenced on the

websites of the respective professional organization: the Austrian Medical Chamber (Österreichische Ärztekammer), the Austrian Nurses Association (Österreichischer Gesundheits- und Krankenpflegeverband), and the Association of practice receptionists (Berufsverband der ArztassistentInnen).

Lastly, policies concerning health promotion and prevention in the context of primary care were searched for in the digital archive of the Austrian National Public Health Institute (64). A list of all documents is shown in Table 2.

Table 2: Documents screened for containing directly COPC relevant policies or regulations.

German document title	English translation	Source
Ärztegesetz	Physicians Act	(44)
Ärzteausbildungsordnung	Medical Training Regulation	(45)
Rasterzeugnis Allgemeinmedizin	Logbook for trainees in general practice	(45)
Gesundheits- und Krankenpflegegesetz	Nursing Act	(65)
Gesundheits- und Krankenpflege-Ausbildungsverordnung,	Nursing Training Decree	(66)
Regierungsprogramm 2020-2024	Government Program 2020-2024	(67)
Österreichischer Strukturplan Gesundheit (ÖSG)	Austrian Structural Plan for Health Care	(58)
Rahmenvertrag Primärversorgung	Framework Agreement for Primary Care Units	(68)
Primärversorgungsvertrag Wien	Vienna - Regional Agreement for Primary Care Units	(69)
Primärversorgungsvertrag Niederösterreich	Lower Austria - Regional Agreement for Primary Care Units	(70)
Primärversorgungsvertrag Salzburg	Salzburg - Regional Agreement for Primary Care Units	(71)
Primärversorgungsgesetz	Primary Health Care Act 2017	(43)
Bundes-Zielsteuerungsvertrag 2013-2016	Federal Target-Based Governance Agreement 2013-2016	(57)
Bundes-Zielsteuerungsvertrag 2017-2021	Federal Target-Based Governance Agreement 2017-2021	(72)
Das Team rund um den Hausarzt	Concept for an interdisciplinary and multiprofessional primary health care	(55)
Medizinische Assistenzberufe-Gesetz	Medical Assistents Act	(73)
Medizinische Assistenzberufe-	Medical Assistents Training Regulation	(74)

Ausbildungsverordnung		

All documents were downloaded and saved as a searchable PDF (portable document format) or text file. For document #10, the text was not available in a searchable format and had to be converted using optical character recognition software (OCR). The documents were screened automatically using the integrated search function of the document viewer, with the case-sensitivity and whole-expression option deactivated, using a list of five keywords (see Table 3).

The keywords were chosen as they are either part of technical terms used in the context of COPC that are also mentioned above ("community", "population") or are equivalent to their German translation ("Gemeinde", "Bevölkerung"). The term "Einwohner" (inhabitants) was chosen in addition, as a presumably more broadly used term for inhabitants that could occur in a COPC relevant context that does not use technical terms. The text passages, where the words occurred, were read and their significance for this study was assessed. They were seemed as relevant, if they occured in a context relevant to COPC (e.g. community definition, community involvement, identification of health needs, population-oriented interventions). Keywords that appeared in a context other than health care were excluded, as well as if they were used for planning purposes or indicators, that are used on a health system level but not on the community level. The relevant and the overall occurrences of each keyword were counted for each document and the context further explained in a narrative summary.

Table 3: Keywords searched in policy documents.

Keyword	Comment
Community	Expected to be used in technical terms
Gemeinde	German translation of 'community'
Population	Expected to be used in technical terms or as a synonym for 'Bevölkerung'
Bevölkerung	German translation of 'population'
Einwohner	German translation of 'inhabitants'

Qualitative interviews

To get a more in-depth understanding of the current situation of COPC in practice, as well as on a system level, semi-structured, qualitative interviews with practicing GPs, project managers of community-oriented projects, and experts familiar with the topic were conducted. The interviews were transcribed and analyzed using applied thematic analysis (75).

Interview guide

An interview guide was developed, covering the basic structure of the interview as well as key questions related to research questions with a focus on what already exists, the possible barriers and resources and prospects for the future. The first interview guide was reviewed by a sociologist to assess the formal quality of the interview guide and redrafted to incorporate this feedback. As an opening question, researchers were asked to describe projects known to them. Providers and project managers were asked to describe their respective projects. A list of additional questions that were included in the guide are listed in Table 4.

Table 4: Questions that were included in the interview guides for providers / managers and researchers respectively.

Providers/Managers	Researchers
What was your initial motivation to start this project?	In your opinion, why are these projects initiated?
What factor or events triggered you to start this project?	What are the trigger events or factors?
What role does the community play in your project?	What role does the community play in these projects?
What distinguishes your project from standard care?	In your opinion, what distinguishes these projects from the usual way care is delivered?
What kind of support was there for this project?	
What kind of resistance did you encounter?	What kind of resistance did these projects encounter?
What are the perspectives for your project in the future?	What are the perspectives for these projects in the future?
If you could have done something differently, what would it be?	

In your opinion, what would have to change to enable more projects like these in Austria?	Generally speaking, what could encourage the initiation of such projects?
	Generally speaking, what could discourage the initiation of such projects?

Recruitment

The researchers selected were experts known to the author as familiar with the topic of COPC in general and with the Austrian situation in particular. Providers and project managers were identified through expert recommendations, word-of-mouth and a circular email ('call') sent to the mailing list of the Austrian Forum for Primary Care (OEFOP). The provider interviews targeted providers that have already started or tried to start their own community-oriented primary care initiatives or are actively engaged in such a project. Landmark projects and possible interview partners were identified through publications found during the literature review, the email sent to the OEFOP mailing list and through snowballing during the interviews, where recommendations for further interview partners arose.

From seven interview partners that were actively asked to participate, five initially agreed to do an interview of which one consent was withdrawn before the interview. Two did not respond to the interview requests. Five additional persons were recommended by interview partners, of which four agreed to participate and were interviewed. Five answered to the email call send out to the OEFOP mailing list. In total, 13 interviews were conducted. Table 7 provides an overview of the interviewees' characteristics. While half of the interview partners are female, there was only one woman among the GPs interviewed. Seven out of 13 interviewees were full-time GPs. The other interviewees are involved in research or project management.

Performance of interviews

All interviews were conducted by the author. Interview partners were contacted primarily via a semi-standardized email or by telephone, describing the aim of the study and the conditions for the interview. If they agreed to participate, they were

sent a consent form before the interview (see also section 6.3.5). Participants could choose whether they would be named in the publication or not and were asked to confirm their consent for the recording of the interview at the beginning of the interview. They were informed about the beginning and end of recording.

Initially, the aim was to perform the interviews face-to-face. Since the majority of the interviews were conducted during the COVID-19 lockdown measures, only three could be conducted face-to-face, while seven interviews were performed online and three via telephone.

Face-to-face interviews were recorded using a Sony™ ICD-UX200 digital recording device. Online interviews were done with Skype™ or similar software and were recorded with the integrated recording function or using audio capturing software. Telephone interviews were recorded using the app “Audio Recorder” for Android.

The audio records were used for full verbatim transcription by the author and supported by a sociologist using the transcription software f4transkript™. All interviews that were primarily transcribed by the sociologist were re-checked by the author for any misunderstandings. Interview #5 was not recorded for technical reasons and therefore could not be transcribed. The interviewer took notes in keywords during the interview that were completed from memory immediately after conclusion of the interview.

Coding and thematic analysis

The transcripts were coded using the RQDA package for the software environment R (76). The approaches described by Braun and Clarke (77) and Guest et al. (75) were used for the analysis process. Braun and Clarke suggest a basic process in six phases towards thematic analysis (see Table 5), which was taken as the basis for the analysis.

A realist approach was chosen, focusing on the semantic level of meaning in the data during coding and analysis and using primarily an inductive approach. Familiarization was achieved by conducting the interviews, transcriptions, proof-

reading of transcriptions with listening again to the audio recordings and re-reading the transcripts. Already during the interviews and the subsequent familiarization process, passages that were deemed relevant were marked.

Table 5: Phases of thematic analysis, adapted from (77)

Step	Description
1. Familiarizing yourself with your data:	Transcribing data, reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story that the analysis tells, generating clear definitions and names for each theme.
6. Producing the report:	Selection of extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature.

The original German transcript was used for the analysis. In the first round of coding, 128 first-level codes were created and manually assigned. Of these, 17 codes were deleted as they did not meet the criteria for an independent code or were not relevant to the research questions. 63 codes were merged with another existing code, leading to a total of 58 codes. Those codes were clustered into emergent categories, which were then structured and grouped to form overarching themes. In relation to research question three, which concerns barriers and resources, the themes that emerged from the data related to the many roles of the GPs in projects, the importance of the team, the issue of funding and structural support and volunteerism. 51 codes were connected to

one of these themes. Another theme category was created to connect codes that relate to research aspects of community orientation (research question two). The final code structure is shown in Table 10 in the Appendix.

Only the quotes selected for the results section were translated into English by the author and sent to the interviewees before publication.

Ethical considerations

Ethical standards and legal requirements were followed concerning confidentiality, anonymity, data protection, and informed consent.

As this study does not include patients or vulnerable groups, no ethical approval by an institutional review board was sought.

A written consent form was provided ahead of the interview in all cases except for interview #5 (see below). The consent form used can be found in both German and English in the Appendix (11.1 and 11.2. Written and/or oral consent was obtained from all participants beforehand and oral consent was confirmed immediately before or at the beginning of the recording.

Audio-files and transcripts were exchanged over a self-hosted and encrypted Nextcloud™ collaboration platform that was set up for this purpose. Interview recordings and transcripts were not sent via email or other electronic means of communication. The sociologist involved in transcribing the interviews signed a confidentiality agreement before beginning transcription.

Before publication, each participant received their respective quotes used in the final version of this thesis. They were provided in the original verbatim German transcript as well as in the English translation used in this document.

Results

Scoping review

A database search identified 1619 records to screen. Of those 23 were considered as potentially relevant after screening the title. After examination of the abstract and/or the full-text, nine records were considered relevant. Two of those were master theses, where the full text could not be obtained and which were therefore excluded. A list of all 23 titles and their reason for in- or exclusion is shown in Table 9 in the Appendix. The review process is shown in Figure 2.

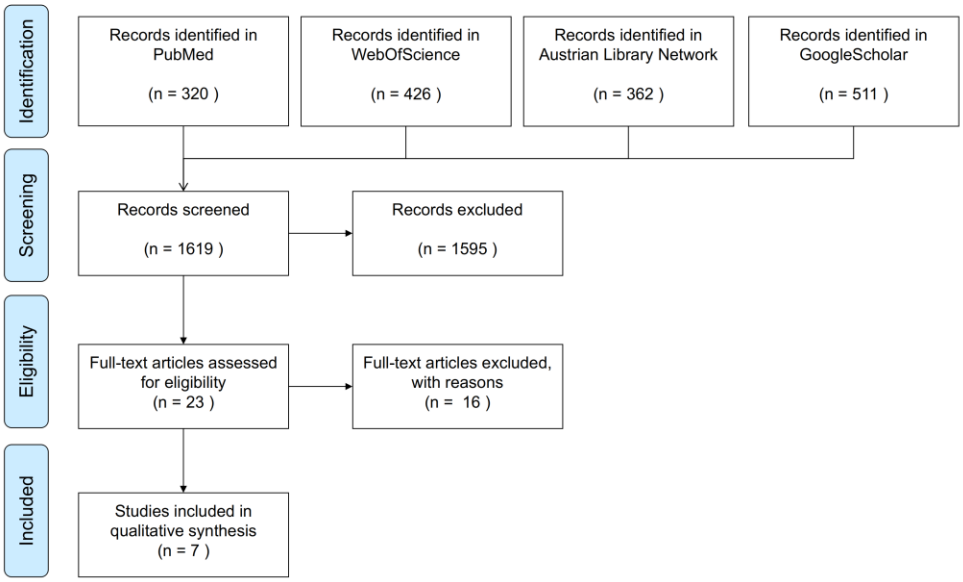


Figure 2: Flow chart of the literature review process. Adapted from Moher D et al., The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097

Hoffmann et al. describe the structure of primary care teams in Austria, which often do not go beyond the GP, a medical receptionist and a nurse. Their article was already cited in the introduction (63). The role of social workers is such teams is discussed in the thesis of Fritz, where she focuses on the model of bio-psycho-social work. Although the focus is on the work with individual clients, it

opens an important discussion about the professional mix that a modern primary care team needs in order to meet the health needs of their patients (77a).

De Brún et al. report about a European project, where in Austria and other countries, an inter-stakeholder dialogue between primary care providers, migrants, interpreters and other key stakeholders was conducted (78). This is not directly a COPC project, but is an example of how providers and a community (in that case a specific group of patients) get in contact and discuss aspects of care, which can be a valuable tool as part of COPC. In his masters thesis, Hofmann discusses the importance of access to care for people without formal access to health insurance in Austria. In his work, he also mentions how important it is, to identify possible barriers to access for and with the target group, which again requires a step towards the community (78a).

Three titles discussed specific projects: One article described a community-based health promotion project with a specific target group (turkish immigrant women), that was not associated directly with primary care (79). In a conference workshop abstract, Plunger and Rojatz mention a project that specifically uses a COPC approach in Upper Austria (80). Brunner describes another project, that would more than fulfill the criteria for COPC, the SMZ Liebenau (Sozialmedizinisches Zentrum Liebenau)(81). With their multidisciplinary team, that includes GPs, physiotherapie, psychotherapy, social work and social services for families, they have also from the beginning set a focus on health promotion and participation of the community. For many, the SMZ Liebenau has been the first implemented example for primary health care in Austria.

In summary, the literature review suggests, that the primary care team might be a “weak spot” when it comes to community orientation. The integration of social workers may be a valuable expansion of the team. Some projects with elements, that could be usefull in COPC exist, but only two projects that seem to follow a COPC approach become apparent in the literature.

Screening of policy papers and legislation

The results of the keywords search is shown in Table 6.

Table 6: Number of mentions of each keyword in the context of COPC within the respective document. Numbers in brackets represent the total number of mentions.

Document	Keyword					Source
	Community (ger)	Community (en)	Population (ger)	Population (en)	Inhabitants (ger)	
Physicians' Act	0 (6)[2]	0	0 (2)[4]	0	0	(44)
Medical Training Regulation	0	0	0	0 (2)[1]	0	(45)
Logbook for trainees in general practice	0	0	0	0	0	(45)
Nursing Act	1 (1)	0	2 (2)	0	0	(65)
Nursing Training Decree	0	0	0	0	0	(66)
Government Program 2020-2024	0 (66)[*]	5 (6)[*]	0 (31)[*]	1 (1)	0 (2)	(67)
Austrian Structural Plan for Health Care	2 (5) [3, 6]	0	0 (58)[3,4,7]	2 (2)	0 (24)[4]	(58)
Framework Agreement for Primary Care Units	1[2] (3)	0	0 (1)[4]	1 (1)	0	(68)
Vienna - Regional Agreement for Primary Care Units	0	0	0 (1)	0	0	(69)
Lower Austria - Regional Agreement for Primary Care Units	1 (4)	0	0	1 (2)	0	(70)
Salzburg - Regional Agreement for Primary Care Units	0 (3)[3]	0	0	0	0	(71)
Primary Health Care Act 2017	0	0	0	0	0	(43)
Federal Target-Based Governance Agreement 2013-2016	0	0 (3)	0	15 (21)	0 (4)	(57)
Federal Target-Based Governance Agreement 2017-	1[2] (1)	0	0 (42)[4]	0 (1)[4]	0 (7)[4]	(72)

2021						
Concept for an interdisciplinary and multiprofessional primary health care	2 (2)	0	6 (11)*	2 (2)[7]	0	(55)
Medical Assistents Act	0	0	0	0	0	(73)
Medical Assistents Training Regulation	0	0	0	0	0	(74)

Mentions in the context of:
[1]: other medical specialties
[2]: district medical officers
[3]: service regions / regional planning
[4]: planning, targets or indicators
[5]: definition of terms
[6]: community-based care (i.e. out-of-hospital)
[7]: remuneration systems based on population
*: other

One of the first major papers of the ongoing health care reform was the "*Concept for multiprofessional and interdisciplinary primary care in Austria*" (55). It basically introduced the term "primary health care" into mainstream discussion in Austria. The document describes the introduction of new primary care structures with interdisciplinary primary care teams and a defined service profile. The latter includes public health tasks that fall under the remit of district medical officers, but also explicitly includes a "population orientation", with the population they serve being proactively approached, especially in relation to health promotion. The municipalities/communities are named as possible partners of the primary care units. Another aspect that may be relevant to COPC is the aim to "*continuously contribute to knowledge generation about the health needs and demands of the population*".

The Federal Target-Based Governance Agreement ("Bundes-Zielsteuerungsvertrag") is a contract between the federal government and the nine Austrian states, that also includes the primary care sector. It defines a common vision for the health system by the stakeholders involved and how they plan to achieve it within their respective competencies. The agreement that covers 2013 to 2016 does include some references towards the Austrian Health

Targets but does not contain specific community-oriented targets or measures (57). The recent version from 2017 to 2021 includes a paragraph about the possibility to shift tasks from district medical officers to other physicians or health professionals, thereby implying a possible reorganization of certain public health services (72).

The Primary Care Act of 2017 is based upon the above mentioned concept paper. It does not include any reference towards population or community orientation, but explicitly defines health promotion and prevention as a task for the new “primary care units” (43). The Austrian structural plan for health care 2017 (ÖSG) more specifically mentions the “*participation in population-oriented and target-group specific regional health promotion and prevention programs*” as a mandatory part of the service profile of primary care units (58), and requires that primary care units provide a service to people in a defined catchment area (58).

Consequently, COPC is explicitly mentioned in the health promotion and prevention manual for developing a care concept for a primary care unit (82).

In the Framework Agreement for Primary Care Units again, only the *participation in population-oriented screening and health-promotion programs* is mentioned (68). At the date of analysis, there were three published agreements on a state level between social health insurance funds and the Medical Chamber of the respective state. In the agreement for Lower-Austria includes a detailed mandatory service profile for primary care units, which includes again the *participation in population-oriented screening and health-promotion programs* but also lists specific examples, where the only one relevant in the context of COPC is *cooperation with the “healthy community”*. Other examples include, asking for and documenting tobacco use, referral to existing services like weight reduction programs or the smoke-free-hotline, and others. Those examples do not require any additional activity apart from advising individual patients in the practice, especially in or with the community (70). In the other two agreements, no relevant mentions were found (69,71)

The document on competency profiles for health care providers in primary care from 2019 also includes the competency "*contributing to health promotion programs close to the community*" for GPs, nurses and health assistants (receptionists) (83). The description of this point is rather vague, but the importance of settings (school, family, community) for health promotion is emphasized. Furthermore, primary care units could use their existing competencies to participate in the process. The paper calls for the use of international best-practice models and regional pilot projects to collect more experiences and define the necessary competencies for the primary care team.

The training regulations for physicians in general and GPs in particular do not mention any of the keywords used. Manual screening did reveal the explicit mentioning of health promotion and prevention as an educational objective for GPs, but no remarks towards a population or community approach. The more specific logbook for trainee GPs in primary care also mentions health promotion and prevention, but does not include a community oriented approach. Only the point *connecting health promotion programs* could carefully be interpreted in such a way (45). The Nurses Act mentions the area of *community- and population-oriented nursing* as part of the professional profile, but does not specify its meaning (65). The regulations for medical assistants did not contain any mentions of the keywords.

The government program for 2020-2024 of the current Austrian federal government explicitly includes *population health management*, but lacks specificity. It also introduces *community nurses* (sic) in various subchapters, both in the context of long term care (prevention) and also in the context of primary care, where a better integration of community nurses in "basic health care" is mentioned (67)

Overall, the first concept for primary health care in 2014 had some promising aspects concerning a population or community-oriented approach. However, these aspects do not seem to have a very high priority in the overall strategy, as they are only sporadically mentioned in subsequent documents, sometimes not

at all. Furthermore, within the core primary care team, only nurses explicitly a population-oriented approach in their service profile.

Interview results

The 13 interviews lasted between 21 and 52 minutes with a median duration of 36 minutes. The age of the interviewed GPs ranges from 45 to 67 years, with a median age of 60 years.

Table 7: Summary of interview partner characteristics

Items	**Result**
Interviewees	13
Sex (Female)	7
Primary occupation	NA
Primarily GP	7
Project Management	4
Researcher	2
Mean Age GPs	58
Age range GPs	45-67
Sex (male) GPs	6
Mean interview duration	0:35:44
Duration range	21 - 52 min.

Interview partners were from Upper Austria (n=4), Styria (n=4), Vienna (n=2), Burgenland, Salzburg and Tyrol (each n=1).

The many roles of GPs

It became clear that GPs can play multiple roles in a project. They can be initiators, developers, promoters, or contribute as experts.

GPs as initiators

GPs and other local primary care providers can be the ones who take the lead in starting a project or motivating the community to focus more on health promotion and prevention.

R: “There are some municipalities, where the initiative comes from the local doctors. They don’t necessarily have to be GPs, we recently had a case were a pediatrician initiated it, that the municipality becomes a”healthy community" and talked to the mayor. Of course, that always helps us a lot, when a doctor has this request, than the mayors listen quite carefully." PM2, female [5814:6250]

GPs can have multiple roles in their community, apart from the main role as a family doctor. They can be district medical officers in a public health role, emergency doctors, school doctors, and more. These roles can facilitate the start of a project, when e.g. GPs start a health promotion initiative in a school, where they are also the school doctor. Through their additional roles, they have a broader network and better access to different stakeholders, e.g. the school directors or local mayors.

When starting a project on their own, individual interests can play an important role. For doctors who are interested in sports, for example, starting a physical activity group seems the obvious choice.

R: “The background was, I myself did races fifty years ago, all my life I liked doing sports and I just had a connection to excercise. [..] what I did as a GP was, I offered a sports medicine introduction into nordic walking [..]” GP5, male [876, 21447]

R: “Erm, the, for example the heart society, that you can clearly, that was our runners phase, all doctors were runners and did sports and somehow it was completely clear for us, that physical activity is the best prevention, the best therapy for coronary heart disease, so we do it, yeah?” GP7, male [13402:13813]

Statistics or data may also ignite ideas and lead to new projects, for example through a review of regional health indicators. However, such examples have not been mentioned explicitly. One unexpected trigger was instead from a TV commercial:

R: “Okay, we developed a (.) basically a questionnaire suitable for children, about sugar. Because as you know, Austria is, and funnily enough thats even has a positive conotation from the sugar industry, we are world champions or one of the leading countries in sugar consumption. Yes, I know where I have seen it, it was in an commercial, a toothbrushing commercial, they bring it. Yes and since we all know, how raffined carbohydrates, that they are acutally not really good for

our bodies, and so we used that as a topic and we developed a questionnaire suitable for children." GP6, male [6192:6514]

R: It just arose out of this TV commercial, that I saw, and said no, is that really true, we are leading in sugar consumption and also I want to do something for the community and it has been spooking around in my head for quite some time, I want to do something." GP6, male [8403:8729]

GPs as promoters

In smaller communities, the opinion and recommendation of doctors is highly valued. GPs have frequent and direct contact with individuals who are within the target group of health promotion and prevention efforts. GPs can therefore play an important role in recruiting and motivating people to participate in such activities.

R: "And how important it is, maybe an example, how important it is or what kind of difference it makes, whether the doctor stands behind the healthy community and supports us, we see that at events. We had a community, where the doctor changed and a new very committed young doctor, who really stood up for health promotion. And we had never succeeded in putting up a non-smoker-course, over three years, because we never had enough applications. And after the doctor engaged in this, within a short time we had three events, which were all booked up. So this cleary showed, how important the doctors are and how the people listen to the doctor. PM2, female [8386:9175]

GPs as experts

Community leaders like mayors often use their local GPs as a resource for health-related issues. Health promotion projects run by lay persons also rely on doctors' expertise to ensure that measures are evidence-based. One interview partner has emphasized this as a topic of increasing relevance, as providers of non-evidence-based and even esoteric methods often actively approach working groups with offers. GPs can also provide health information, for example in the form of presentations about specific or general health topics.

In summary, GPs can have a positive influence on community-oriented projects in many different ways and can fulfill different roles in such projects. They can encourage local decision makers like the municipal council or the mayor to join the healthy district network, offer their expertise to new initiatives or motivate

patients to participate in existing activities. GPs can therefore strengthen community orientation without having to lead.

Working in a team

Multiple respondents mentioned the aspects of cooperation and teamwork as important prerequisites when starting and maintaining a project. A team increases the resources available for a project and can increase the chances of success, especially in the long run. Yet finding a team seems to be a barrier for many GPs, especially in single-handed practices.

"I want to do something for the.. ahm.. communtiy and ahm.. it has been going through my head for some time, I want to do something, either a vaccination program, but I have… if I have to do this alone, I have to tell you, I don't have the ressources. [..]" GP6, male [I10]

I: "We are only 1600 people in the municipality, especially here community-oriented primary care would be great, because we have so many ressources. We would have so much here in town, just the team is missing." GP2, female [1513:1713]

I: "..what do you think, what would have to change in Austria, so more practices could participate in such projects or develop their own projects?"
R: "Um, from my perspective, it is, I think the first step is just more cooperation. As long, as long as you are a single-handed, as a single person you need a lot of dedication and and at the same time endurance, to keep something like that running, yeah?" GP7, male [16956:19542]

R: "So if people that have competencies in different fields, agree to do something together, because that (.) it is about having fun when you sit together and think about it, [..] so this personal element is very important (.) if you stand there alone or you want to implement something, but you don't have the friends that support you with that, it is very difficult." GP1, male [10399:10906]

Teams are mentioned in a monodisciplinary (e.g. a team of multiple GPs) as well as in an interdisciplinary way. Social workers in particular were named in the context of community-orientation, but other health professions were also mentioned, which broaden the spectrum of activities that are offered.

R: "Yess, we have a mandatory service profile. Thats our service profile and there it says 'prevention', but now the possibilities are completely different than previously in the [single-handed] practice. So, with us every therapiest has thought about, what can she do, plain and simple the physiotherapists do nordic walking groups or back pain prevention. The psychotherapists do resilience training at the moment, but they have already done other things as

well, and we see how does it fit together or we ask, they always first ask us, can we do it like that, and we ask them back, what do you need for that, who would you like to join, would you like a doctor to be there, would you like other therapists." GP3, male [4077:4882]

Different strategies were mentioned regarding how to establish a team to start a project. Some GPs involve students or trainees to participate in a project:

"And since I have a GP trainee since January I thought - exactly. Thats her assignment, that's what she can do, and we make a beautiful project out of it." (GP, male) [I10]

Or they actively try to build partnerships with other GP practices, for example by forming a primary care unit (network or group practice). However, it seems that the necessary conditions for these concepts have not yet been established everywhere.

B: "And so we found the primary care networks. And then it was clear, yes this could be possible. We talked with the GPs in [other town] and [other town] if they were interested in founding a primary care network. And they were not completely reluctant. [..] It then so happend that the GPs have in [other town] declined and said no, it is not mature enough yet that you could implement it. And I do agree with them, because we have just misjudged, that the network per se is not planned yet in [state]." PM4, female [3139:4852]

Of particular interest is that two of the interviewed GPs had started cooperations with social workers. Social workers were mentioned repeatedly in different contexts and seem to be one of the most important professions in connection with community-oriented projects. They are involved in project management and funding applications, they initiate community outreach projects, and they connect primary care patients with existing community-based initiatives.

In summary, when starting a new project, establishing a team is essential. While all health professionals can provide valuable contributions to a project, social workers may be in particularly suited to setting up community-oriented projects. If collaboration between different providers or practices - e.g. in a primary care unit or network - is not feasible, the inclusion of students or trainees may be an option.

Financial and structural issues

THe financing of prevention and health improvement projects was a very prevalent issue. The responsibility and the ability to finance projects for health promotion and prevention lies within multiple stakeholders and is sometimes unclear. This can increase complexity for applicants.

“Preventive activities are always difficult from a financing standpoint. You don’t have one contact, there are always at least two contacts, the health insurance and the state. If the health insurance says yes and the state says no, than together it’s always a no. And because the health insurance says, ‘I pay only if the state pays’ and the state says ‘I pay only when the health insurance pays’, you are caught between two stools.” [GP1, male 38284:39043]

Even though the funding sources are often not on the level of the municipality, the support of the municipality is important to get access to funding.

R:“Well, if I do a project and need a funding from the state, then (.) this works only if the municipality wants to do the project and contacts the state and they, and (.)they create a common funding from the state and the municipality.” I: “Mhm.” B: “Municipality alone is not financially strong, it can not lift something like that. This is only possible if municipality and state work together. If you as a doctor work in a municipality, which does not support you in that, than you can go to the state and say, you have a great idea (.) they will appreciate you (.) but you won’t get the funds for that’.” GP1, male [25713:26548]

It was mentioned repeatedly that municipalities are not able to financially support local health initiatives by themselves, especially in rural settings.

R:“I would have so many ideas. I then contacted to municipality and they didn’t know in which funds to tap into…” GP2, female [3978:4108]

“Mayors are on that level very approachable, but of course they do not have their own financial ressources for that, or only small, yes minimal ressources. They support you organisationally, they print everything and write community newsletters and so on, thats okay. But when it comes to ‘okay, now we need material, we need this and that’, than it is difficult to get that funded.” GP4, male [29787:30530]

Various interviewees mentioned that projects whihc are not part of an established program (like patient groups for chronic diseases or the “healthy community” initiative) are typically financed only for a very short period of time (e.g. one year, but also up to five years). Smaller communities have difficulties providing funding

for these projects on their own. Additional financing from state or federal sources, like the Austrian Health Promotion Fund (FGÖ) typically require a high amount of additional time and resources spent in meetings, preparing project proposals and on project management. This can be unfeasible for smaller projects which often lack professional support.

"Writing proposals, I do not want to do this at all, because I have so much work, that I do not have time for anything else." (GP, female) [GP2, female [3860:3977]

"Although the smaller projects, the"healthy together in …", I think that are about 10 to 20 000 Euros of funding, they are less complex. But still complex enough, from what I have heard. That are those bureaucratic barriers, yes from the FGÖ. And they know it, but yes, that is, they want to change it, but their mills grind slowly." (social worker, female) [PM3, female [21065:21879]]

The uncertainty about the financial future of a project can be a major problem for developing a sustainable, long-term initiative.

I: "So perspectives for the future? (2) You would see as rather positive?" R: "Uh-huh, with the single question mark: what about funding in one year, then we have the fith project year and we do not know how this will be. But we assume, that nothing serious will change - comma, except if the state bails out, I don't know, how it is in times like these. (2) Uum, because then we have to.. so once the funding changes, we have to change or adapt. That would hurt us." GP3, male [11219:11820]

R: "..what hinders [community oriented projects] is that there is no stable funding, a writing down of 'this should happen' but on an exploitative, volunteer base. Or in (.) small projects somehow." R1, female [36814:37348]

One way for projects to tackle this issue is by proactively incorporating this into their strategy.

"[..] and so it is also again and again necessary sometimes, that I have to make my position clear, that (2) now it is like, I have to tell them 'I am only here for three years, okay?' We try, all those initiatives (.), umm, to organize, that they always are connected to some structure, that is already there. So it can last so to say and exist and not everything falls apart once I am gone." 04_transkript [31369:31861]

Some funding mechanisms, like the project funding from the FGÖ, require extensive application procedures, which can be a significant barrier.

I: ".. but if you think about Austria in general, is there anything, that would have to change in Austria in general, so that such projects could be better implemented?" R: "Yes, @(.)@ I would wish, although the FGÖ is really a great thing and very supportive, I would wish for the procedures to be a little easier. Erm, I would wish for the decision about projects not to happen one or two times per year and then I would wish for that I would not be that complex and what I think is a big topic, because what I have said at the FGÖ, that all those those hours, that you write an application, that you don't get funding for that. That I find, I have heard that from many others, doesn't matter from the healthy communities in [name removed] or [name removed], they don't apply anymore, because they don't have anybody for that. And if they don't, if it is basically rejected the application, than they don't have any ressources. That is also the problem form what I see, if you say in health promotion in general, you give more value to projects, if you also fund these hours for application or project developement, than it would probably work better." PM3, female [17943:20830]

Funding mechanisms vary. Funding can be project-specific, or it can be provided as part of a global budget of a primary care unit. Establishing a primary care unit can also provide an opportunity to secure additional funding.

R: "So concerning our health promotion projects, I see the developement positive in general, because in our primary care network we have a dedicated budget for health promotion. And (.) if this is there continuosly, then we can (.) use this budget for further health promotion projects." GP1, male [29179:29794]

I: "The funding is a global budget, so there is not a certain sum for a project, it is just inside the global budget. We, we deliver the proof of service, what we do. Erm, (2) which external (2) yes there are always anyway the specific associations, we have mentaly ill oder assisted living, where the specific carrier contacts us." GP3, male [7962:8379]

Community-oriented activities are sometimes cross-funded with income from other parts of medical care, especially if there is a dispensary in the GP practice, which generates additional income from sales of prescription drugs and over-the-counter medicines in rural areas.

Apart from financing, the most important resource seems to be the network of "healthy communities". Many GPs and projects have relied on this initiative as a link to the community. However, the participation of local primary care providers varies greatly and happens only on a voluntary basis.

“However, it depends very much from doctor to doctor, how much they participate. Ahm, that maybe because of different motivation, the time factor, whatever plays a role. We have many communities, were doctors are working very actively in the working party and are participating on a regular base, (.) ahm, also giving input on a regular base, but we also have communities, where, I would say they are a hard nut to crack and ahm (.) it is difficult up to impossible to get in contact with the doctors.” (project manager, female) PM2, female [6691:7270]

The FGÖ, the Austrian Public Health Institute, universities or the member organizations of the Forum of Austrian Working Groups on Health are named as institutions that are or can provide support for projects. As mentioned above, the FGÖ provides partial funding, but is also involved in consulting and capacity building. Other institutions provide more specialized expertise e.g. concerning project evaluation.

R: “And so also this evaluation structure I find quite supportive. [..] It is a concomitant evaluation, a developement evaluation or something, I believe thats the correct wording. Yes, where they don’t just evaluate the results in the end, but evaluate also the process. Yes, thats just good, because than you always document, summarize, get to the point through reflecting all the time you get new ideas.” PM1, female [36074:36987]

Volunteerism

Most projects are based on volunteer work and individual initiatives. Only one primary care unit mentioned that they had applied for a project call. The role of volunteer work has been mentioned in different contexts. On the one hand, volunteerism is a core element of community-work, as one respondents describes it:

R: “um, (.) well die acivation of the population, so it lives from participation, the project, or it should live from it. It is a big bone to achieve that. There are those typical, acitve people in the community, that were quickly excited about the project idea and (.) but since they already have a lot of positions in the community and are everywhere, in all committees, they say ’I think it’s good, but I don’t want to take over any additional volunteer duties and oversee some kind of activity.” PM1, female [3693:4515]

One major issue is the lack of time, especially for contracted GPs.

R: “Since (3) in the GP practice with health insurance contract the time has run shorter, so volunteer (.) volunteer work is less and less possible.” GP1, male [22281:22451]

Some respondents mentioned that volunteer work is not appreciated enough, regardless of who volunteers.

R: “And [a colleague] told me, he doesn’t do any projects where he approaches the municipality, yes, because that is not appreciated anyway. Yes, if the municiplaity approaches him, than he has a price, and then there is just through the price alone a certain appreciation. It’s as simple as that, if you offer yourself for free, than that doesn’t have a value.” GP5, male [17042:17458]

R: “What I would wish for, is a stronger support or appreciation for volunteers. (.) Erm, we struggle with this again and again. They do it out of enthusiasm, at some point the spark is out if they don’t receive a certain appreciation, or and maybe also one or the other contribution. We also have that in our new community concept, that we are just developing, a scoring system where the municipality finances a training course.” PM2, female [22066:23133]

On the other hand, volunteer projects may experience less resistance.

R: “As long as I do it on a voluntary base, just for fun, I don’t get any pushback, because nobody needs to do anything, that he doesn’t do anyway.” GP1, male [20658:20828]

Having a team is an important support for motivation, ressources and skills, especially since other surrounding conditions, like the access to funding, are difficult.

Discussion

The ongoing international debate about how to integrate public health and primary care increases the need for concepts like COPC. Therefore, the current situation of COPC in Austria was assessed in a mixed-method approach.

This thesis consists of three parts,

1. identifying COPC relevant publications in the Austrian context
2. estimate the presence and priority of COPC aspects in primary care related policy
3. identifying the major barriers and resources to strengthen COPC in Austria.

Strengths and limitations

Concerning the literature review, it is possible that the search focus was too narrow and a choosing of different or more search terms would have yielded additional results. Limiting the screening process to titles might have led to an exclusion of relevant articles, where the relevance for this study did not become apparent in the title. Nevertheless, considering the number of articles screened and the combination of four inherently different databases, it seems unlikely that a major contribution was missed.

Concerning the policy screening, a major limitation is that almost exclusively federal legislation and policies have been screened. Since some responsibilities for health care lie with the states, some state policy could be relevant for COPC. However, state policies still must follow federal framework agreements, the most relevant were included in this screening process.

Concerning the interviews, one limitation surely is the sample size and sample composition. From the data analysis, it cannot be safely assumed that saturation of data has been achieved. A larger sample size could have provided additional

insights. Furthermore, a control group of GPs that are not active in COPC related projects could have provided different insights especially about barriers.

Given that COPC has yet received little attention in Austria, the strength of this study probably is the combination of the three methods that are although not sufficient to provide enough information on their own, together provide a vivid picture about the situation of COPC in Austria.

Conclusion

Financing and institutional support

Financing structures seem to be a major barrier for sustainable long-term initiatives. The current system of financing health and social care has been criticized before (90). Current structures are project-based. Health promotion and prevention is not the official legal mandate of social health insurance providers, even though some projects have been initiated by health insurance providers to promote physical activity. However, these are usually community-based, but do not aim at community involvement.

There is almost no peer-reviewed literature concerning project or interventions, that combine community-oriented elements and primary care. The obvious explanation for the lack of publications concerning COPC in Austria would be that there is nothing to publish. Yet the broad range of initiatives from the “healthy community” program would suggest otherwise. A reason for the lack of publication could be, that primary care and health promotion are, in comparison to other fields of medicine, have less academic support structures that are often needed for the creation of publications. Health promotion and prevention programs are often obligated to produce evaluation reports for funding. However, these reports are not usually published in a centralized database and might therefore evade a structured literature search. Analyzing evaluation reports of such projects could give further insights into the question as to how strongly primary care and community-oriented health promotion and prevention programs are linked.

Looking back at the definition of COPC and the three main components necessary (a primary care practice, a defined community, a set of activities), it can be said that these three components are usually not connected with each other. In the “health community” program, Austria has a solid foundation for community-oriented health promotion and prevention programs. However, the participation of local primary care providers in this program depends on individual motivation, interest and resources, with almost no incentive. Many programs rely on volunteer work, which can be an important resource but is not sufficient to systematically ensure a roll-out of COPC. Including the collaboration with healthy community projects into the service profile of new primary care units, as can be seen in the example of Lower Austria, is a first step in the direction of a structured collaboration between healthy communities and primary care and should be further promoted, also for existing GP contracts.

Strengthening the team

Teams are essential to make COPC work. This came out clearly in the interviews but can also be seen in international examples. Team-based primary care is an international trend (84) and health systems that embrace COPC often also have strong primary care teams that consist of various professions and disciplines. This is not only true for low and middle-income countries (e.g. South Africa), but also for high-income countries like Spain or the UK (85–87). The first mentions of community-orientation include the important role of teams of different disciplines.

In Austria, multidisciplinary primary health care teams with more than two professions in the practices are not well established compared to other countries in Europe (63,88). This can explain the lack of intradisciplinary as well as interdisciplinary support mentioned in the interviews. Recent developments with the promotion of primary care units and the newly permitted employment of GPs in GP practices could improve the situation but the progress is slower than anticipated, with only a handful of primary care units established and significant barriers in the process (89).

Community-oriented primary care in Austria is in its early days, but there are important foundations that can be used to strengthen this approach on a systematic basis. The “healthy community” initiative is a widespread health promotion and prevention program, targeting mostly rural communities, and is established in most Austrian communities, with ongoing initiatives to increase coverage. The “healthy communities” include important community-oriented foundations, like a health needs assessment at the start and a participatory approach including citizens, community leaders and local health care providers. On the other hand, there are primary care providers with a high intrinsic motivation to think outside of traditional health care patterns and take a more holistic approach to health and care. However, there are significant barriers in terms of resources and primary care structures to be overcome.

In a WHO report from 2018, Salman Rawaf proposed five possible ways to better integrate public health into primary care (10):

1. Integrating public health professionals into primary care
2. Incorporating public health functions within primary care settings
3. Incorporating primary care services within public health settings
4. Building public health incentives into primary care
5. Training primary care staff in public health.

Applied to the Austrian context, feasible strategies could be to build public health incentives into primary care and train primary care staff in public health or (re-) integrate more public health functions into primary care. Many functions, like prevention and vaccinations, are already integrated into primary care. This makes the option of integrating public health professionals into primary care or incorporating primary care services into public health less appropriate in the Austrian system.

As discussed in the introduction, Austria had a well-developed system of local GPs acting as district doctors and fulfill public health tasks in that context. Although these tasks are not currently the focus of population health, they could

provide an initial starting point to better connect public health services and primary care. However, the skills needed for this would need to be developed and the necessary resources provided. The latter would require a shift in funding mechanisms, as the prevalent system of per-case flat rates and fee-for-service is not suitable for health promotion and prevention on a population basis.

Implications for research

While this study provides a first glance into the topic of COPC in Austria, there is still much that remains unknown. A quantitative overview of the involvement of GPs and primary care teams in community-oriented projects would provide a valuable insight into the landscape of COPC in Austria and could bring possible regional differences to light and thereby hint towards regional differences in policy or available support structures. COPC would also provide a rich field for action research, where actively involving providers into the project could create real-life evidence and at the same time build up new skills within the teams.

Recommendations for providers

While the study was not primarily designed to provide direct advice on the provider level, the results do give some insights that may be helpful for GPs aiming to start a community-oriented project.

- **Don’t do everything by yourself:** GPs do not need to do everything alone and everything by themselves. Chose the role that best fits your interests, skills and resources.
- **Build a team:** Having a team is an important factor for long-term success. Forming a team can happen within a practice, between practices or also with different stakeholders.
- **Aim for long-term impact:** to achieve a sustainable effect, new initiatives could be tied to existing associations and other community resources, since long term financing might not be available.

- **Ensure active participation of the community from the beginning:** participation is one of the key elements of COPC and is essential for success.

Recommendations for policy makers

There is currently no visible strategy to effectively strengthen a population approach or community orientation in primary care.

- **Create a visible strategy to implement community-orientation in primary care:** While some keywords of COPC can be found in policies, there is no
- **Create ways to sustainably finance COPC projects:** Time-limited project financing seems to be the biggest obstacle to new initiatives and long-term success, with a shift to regular long-term financing required instead.
- **Facilitate teamwork:** The current effort to strengthen team-based primary care should be continued and further improved, to provide more flexible solutions for teams in rural settings. The inclusion of different professions like social workers could especially contribute to the development of COPC.
- **Train the workforce for community orientation:** Since population health and community orientation require different skill sets, vocational training for health care professionals should be reviewed and adapted accordingly.

References

1. World Health Organization, editor. Declaration of Alma-Ata. WHO chronicle [Internet]. 1978;32(11):428–30. Available from: http://www.who.int/publications/almaata_declaration_en.pdf

2. Organization WH. Astana declaration on primary health care. [Internet]. 2018 [cited 2019 May 20]. Available from: https://www.who.int/docs/default-source/primary-health/declaration/gcphc-declaration.pdf

3. World Health Organization. Primary health care [Internet]. 2020 [cited 2020 Jul 31]. Available from: https://www.who.int/westernpacific/health-topics/primary-health-care

4. Starfield B. Primary care: Balancing health needs, services, and technology [Internet]. books.google.com; 1998. Available from: https://books.google.com/books?hl=en\&lr=\&id=QMm17oCEjrEC\&oi=fnd\&pg=PA3\&dq=austria+\%22community+oriented\%22\%7C\%22community+oriented\%22+\%22primary+care\%22\&ots=1mLyxHJFMa\&sig=VKuvfWdnAylsedj1VEup7aEODNc

5. DeSalvo KB, Wang YC, Harris A, Auerbach J, Koo D, O'Carroll P. Public Health 3.0: A Call to Action for Public Health to Meet the Challenges of the 21st Century. NAM Perspectives [Internet]. 2017 Sep [cited 2020 Aug 24]; Available from: https://nam.edu/public-health-3-0-call-action-public-health-meet-challenges-21st-century/

6. CDC Foundation. What is Public Health? [Internet]. [cited 2020 Aug 31]. Available from: http://www.cdcfoundation.org/what-public-health

7. Margo Stevenson Rowan, Hogg W, Huston P. Integrating Public Health and Primary Care. Healthcare Policy [Internet]. 2007 Aug [cited 2020 Aug 31];3(1):e160–81. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2645118/

8. Buck D, Baylis A, Dougall D, Robertson R. A vision for population health [Internet]. 2018 Nov [cited 2020 Aug 24]. Available from: https://www.kingsfund.org.uk/publications/vision-population-health

9. Institute of Medicine. Primary Care and Public Health: Exploring Integration to Improve Population Health [Internet]. Washington, D.C.: National Academies Press; 2012 [cited 2017 Oct 31]. Available from: http://www.nap.edu/catalog/13381

10. World Health Organization. Primary health care: Closing the gap between public health and primary care through integration. 2018 [cited 2020 Aug 14];(WHO/HIS/SDS/2018.49). Available from: https://apps.who.int/iris/handle/10665/326458

11. Bradley S, McKelvey SD. General practitioners with a special interest in public health; at last a way to deliver public health in primary care. Journal of Epidemiology & Community Health [Internet]. 2005 Nov [cited 2020 Aug 31];59(11):920–3. Available from: https://jech.bmj.com/content/59/11/920

12. Allender S, Owen B, Kuhlberg J, Lowe J, Nagorcka-Smith P, Whelan J, et al. A Community Based Systems Diagram of Obesity Causes. PLOS ONE [Internet]. 2015 Jul [cited 2018 Jun 23];10(7):e0129683. Available from: http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0129683

13. Allen L, Feigl AB. Reframing non-communicable diseases as socially transmitted conditions. Lancet Global Health [Internet]. 2016 [cited 2019 Nov 17];5(7). Available from: https://ora.ox.ac.uk/objects/uuid:e67ea4d0-4f62-4559-a5b4-738c70144e74

14. Kindig D, Stoddart G. What Is Population Health? American Journal of Public Health [Internet]. 2003 Mar [cited 2020 Aug 24];93(3):380–3. Available from: https://ajph.aphapublications.org/doi/full/10.2105/ajph.93.3.380

15. Kindig DA. Understanding Population Health Terminology. The Milbank Quarterly [Internet]. 2007 [cited 2020 Aug 24];85(1):139–61. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-0009.2007.00479.x

16. Longlett SK, Kruse JE, Wesley RM. Community-oriented primary care: Historical perspective. The Journal of the American Board of Family Practice [Internet]. 14(1):54–63. Available from: https://pubmed.ncbi.nlm.nih.gov/11206694/

17. Metcalfe N. 100 Notable Names from General Practice [Internet]. First. Metcalfe N, editor. CRC Press; 2018 [cited 2020 Aug 15]. Available from: https://www.taylorfrancis.com/books/9781498751995

18. Gofin J, Gofin R. Community-oriented Primary Care and Primary Health Care. American Journal of Public Health [Internet]. 2005 May [cited 2017 Nov 22];95(5):757. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1449247/

19. Geiger HJ. Community-Oriented Primary Care: A Path to Community Development. American Journal of Public Health [Internet]. 2002 Nov [cited 2017 Nov 22];92(11):1713–6. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3221474/

20. Mullan F, Epstein L. Community-Oriented Primary Care: New Relevance in a Changing World. American Journal of Public Health [Internet]. 2002 Nov [cited 2017 Nov 22];92(11):1748–55. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3221479/

21. Kark SL, Kark E. An alternative strategy in community health care: Community-oriented primary health care. Israel Journal of Medical Sciences. 1983 Aug;19(8):707–13.

22. Gofin J, Gofin R. Community-oriented primary care: a public health model in primary care. Revista Panamericana De Salud Pública = Pan American Journal of Public Health. 21(2-3):177–84.

23. Nutting PA, Connor EM. Community-oriented primary care: An examination of the US experience. American Journal of Public Health [Internet]. 1986 Mar [cited 2020 Aug 16];76(3):279–81. Available from: https://ajph.aphapublications.org/doi/10.2105/AJPH.76.3.279

24. Gofin J, Foz G. Training and application of community-oriented primary care (COPC) through family medicine in Catalonia, Spain. Family Medicine. 2008 Mar;40(3):196–202.

25. Iliffe S, Lenihan P. Integrating primary care and public health: Learning from the community-oriented primary care model. International Journal of Health Services: Planning, Administration, Evaluation. 2003;33(1):85–98.

26. Institute of Medicine (US) Division of Health Care Services. Community Oriented Primary Care: A Practical Assessment: Volume I: The Committee Report [Internet]. Washington (DC): National Academies Press (US); 1984 [cited 2018 Jun 23]. Available from: http://www.ncbi.nlm.nih.gov/books/NBK217633/

27. King's Fund, Hadassah Medical Organisation and Hebrew University Department of Social Medicine (Hadassah School of Public Health and Community Medicine, Epstein L, Harries J, McClenahan J, Gillam S, et al. Community-oriented primary care : A resource for developers [Internet]. King's Fund, editor. London; 1994. Available from: https://archive.kingsfund.org.uk/concern/published_works/000011394\#?c=0\&m=0\&s=0\&cv=5\&xywh=-2484\%2C-14\%2C6790\%2C3040

28. Taylor MJ, McNicholas C, Nicolay C, Darzi A, Bell D, Reed JE. Systematic review of the application of the planDoStudyAct method to improve quality in healthcare. BMJ Quality & Safety [Internet]. 2014 Apr [cited 2020 Aug 14];23(4):290–8. Available from: https://qualitysafety.bmj.com/content/23/4/290

29. Chen C, Lichtenstein C, Northrip KD, Horn I. Community-Oriented Primary Care: An Often Overlooked Option for Community Pediatrics Practice and Training. Pediatric Annals [Internet]. 2010 Feb [cited 2018 Jul 16];39(2):100–5. Available from: https://www.healio.com/pediatrics/journals/pedann/2010-2-39-2/\%7B5214bc87-649c-4d83-8160-723c137f1cad\%7D/community-oriented-primary-care-an-often-overlooked-option-for-community-pediatrics-practice-and-training\#divReadThis

30. Higgins J. Defining Community Care: Realities and myths. Social Policy & Administration [Internet]. 1989 [cited 2019 May 12];23(1):3–16. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-9515.1989.tb00492.x

31. Frank JR, Snell L, Sherbino J, Royal College of Physicians and Surgeons of Canada. CanMEDS 2015: Physician competency framework. 2015.

32. MacQueen KM, McLellan E, Metzger DS, Kegeles S, Strauss RP, Scotti R, et al. What is community? An evidence-based definition for participatory public health. American Journal of Public Health [Internet]. 2001 Dec;91(12):1929–38. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1446907/

33. Institute of Medicine, editor. The new definition and explanation of terms. In: Defining Primary Care: An Interim Report [Internet]. Washington, DC: The National Academies Press; 1994 [cited 2020 Aug 11]. Available from: https://www.nap.edu/read/9153/chapter/5

34. WONCA Europe. The European definition of general practice/family medicine [Internet]. WONCA Europe; 2011 pp. 1–33. Available from: http://woncaeurope.org/sites/default/files/documents/Definition 3rd ed 2011 with revised wonca tree.pdf

35. Gillam S. What we mean by community orientationand how do we teach it? Education for Primary Care [Internet]. 2010 Jan [cited 2017 Jan 7];21(2):68–71. Available from: http://dx.doi.org/10.1080/14739879.2010.11493882

36. Muldoon L, Dahrouge S, Hogg W, Geneau R, Russell G, Shortt M. Community orientation in primary care practices: Results from the Comparison of Models of Primary Health Care in Ontario Study. Canadian Family Physician Medecin De Famille Canadien [Internet]. 2010 Jul;56(7):676–83. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2922817/

37. Irfaeya M. The application of Community Oriented Primary Care (COPC) approach on assessing psychological stress among Arab migrant women in the city of Cologne/Germany - (Corrected version) - [Internet] [PhD thesis]. 2006 [cited 2018 Jun 27]. Available from: https://pub.uni-bielefeld.de/publication/2303695

38. Hofmarcher MM, Quentin W. Austria: Health system review. Health systems in transition [Internet]. 2013 Sep;15(7):1–292. Available from: http://www.ncbi.nlm.nih.gov/pubmed/24334772

39. Stigler F. Prävention eines allgemeinmedizinischen Landärztemangels [Internet]. Institut für Allgemeinmedizin und evidenzbasierte Versorgungsforschung; 2017 [cited 2017 Oct 5] p. 116. Available from: http://allgemeinmedizin.medunigraz.at/fileadmin/institute-oes/allgemeinmedizin/Publikationen/Berichte/2017/IAMEV_Praevention-AM-Landaerztemangel_final.pdf

40. Stigler FL, Starfield B, Sprenger M, Salzer HJF, Campbell SM. Assessing primary care in Austria: Room for improvement. Family practice [Internet]. 2013 Apr;30(2):185–9. Available from: http://www.ncbi.nlm.nih.gov/pubmed/23148121

41. ÖSterreichische Gesundheitskasse. Ärztliche Hilfe - Wien [Internet]. [cited 2020 Sep 2]. Available from: https://www.gesundheitskasse.at/cdscontent/?contentid=10007.837661

42. Bachner F, Bobek J, Habimana K, Ladurner J, Lepuschütz L, Ostermann H, et al. Health System Review 2018. Health Systems in Transition [Internet]. 2018;20(3):292. Available from: https://www.euro.who.int/en/about-us/partners/observatory/publications/health-system-reviews-hits/full-list-of-country-hits/austria-hit-2018

43. Österreichisches Parlament. Bundesgesetz über die Primärversorgung in Primärversorgungseinheiten (Primärversorgungsgesetz PrimVG) [Internet]. 2017 [cited 2020 Aug 12]. Available from: https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen\&Gesetzesnummer=20009948

44. Österreichisches Parlament. Ärztegesetz 1998 [Internet]. 1998 [cited 2017 Apr 13]. Available from: https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen\&Gesetzesnummer=10011138

45. Österreichische Ärztekammer. Verordnung der Österreichischen Ärztekammer über Kenntnisse, Erfahrungen und Fertigkeiten in der Ausbildung zur Ärztin für Allgemeinmedizin/zum Arzt für Allgemeinmedizin und zur Fachärztin/zum Facharzt, sowie über die Ausgestaltung und Form der Rasterzeugnisse, Prüfungszertifikate und Ausbildungsbücher (KEF und RZ-V2015) [Internet]. 2016 [cited 2019 May 19]. Available from: https://www.aerztekammer.at/documents/20152/86090/KEF_RZ_VO+2015+2016_2016-12-16+konsolidiert_inkl+Anlagen.pdf/905f7c0c-cfb6-a5d4-19e0-0faa1a733c7e

46. Starfield B, Shi L. Manual for the Primary Care Assessement Tools [Internet]. Baltimore; 2009. Available from: https://web.archive.org/web/20091003034800/http://www.jhsph.edu/pcpc/PCAT_PDFs/PCAT_Manual.pdf

47. Kringos D, Boerma W, Bourgueil Y, Cartier T, Dedeu T, Hasvold T, et al. The strength of primary care in Europe: An international comparative study. The British journal of general practice : the journal of the Royal College of General Practitioners [Internet]. 2013 Nov;63(616):e742–50. Available from: http://www.ncbi.nlm.nih.gov/pubmed/24267857

48. Vermeulen L, Schäfer W, Pavlic DR, Groenewegen P. Community orientation of general practitioners in 34 countries. Health Policy [Internet]. 2018 Oct [cited 2019 May 12];122(10):1070–7. Available from: http://www.sciencedirect.com/science/article/pii/S0168851018301970

49. Mayrhofer R. Sprengelärzte in Tirol. Österreichische Ärztezeitung [Internet]. 2010 Feb [cited 2020 Aug 24];(4/2010). Available from: https://www.aerztezeitung.at/archiv/oeaez-2010/oeaez-4-25022010/sprengelaerzte-in-tirol-unattraktive-rahmenbedingungen.html

50. Mühlgassner A. Landärzte: Dringend gesucht! Österreichische Ärztezeitung [Internet]. 2013 Mar [cited 2020 Aug 24];(5/2013). Available from: https://www.aerztezeitung.at/archiv/oeaez-2013/oeaez-5-10032013/landaerzte-aerztemangel-sprengelaerzte-allgemeimediziner.html

51. World Health Organization. Ottawa Charter for Health Promotion. In: First international conference on health promotion [Internet]. 1986. pp. 17–21. Available from: https://www.euro.who.int/__data/assets/pdf_file/0004/129532/Ottawa_Charter.pdf

52. Reis-Klingspiegl K. Das steirische Netzwerk der Gesunden Gemeinden. Prävention und Gesundheitsförderung [Internet]. 2009 Aug [cited 2020 Aug 6];4(3):175–83. Available from: https://doi.org/10.1007/s11553-009-0179-8

53. gesundheit.gv.at. Gesunde Gemeinden Österreich [Internet]. Öffentliches Gesundheitsportal Österreich. 2020 [cited 2020 Aug 12]. Available from: https://www.gesundheit.gv.at/gesundheitsleistungen/gesundheitsfoerderung/gesunde-gemeinden

54. Spatzier A, Jachs U.,,Gesunde GemeindeNoch immer ein Projekt zum Lernen für Gesundheit? Eine qualitative kommunikationswissenschaftliche Studie “. Lernen für Gesundheit, Tagungsband der. 2011;13:159–68.

55. Bundeszielsteuerungskommission. Konzept zur multiprofessionellen und interdisziplinären Primärversorgung in Österreich [Internet]. 2014 [cited 2017 Apr 16]. Available from: http://www.bmgf.gv.at/cms/home/attachments/1/2/6/CH1443/CMS1404305722379/primaerversorgung.pdf

56. SV-Primärversorgung [Internet]. [cited 2020 Sep 1]. Available from: https://www.sv-primaerversorgung.at/cdscontent/?contentid=10007.796740\&viewmode=content

57. Bundesministerium für Gesundheit. Bundes-Zielsteuerungsvertrag - Zielsteuerung Gesundheit 2013-2016 [Internet]. 2013. Available from: http://www.hauptverband.at/mediaDB/986167_B-ZV_26062013_Letztfassung_Unterschrieben.pdf

58. Karin Eglau, Gerhard Fülöp, Stephan Mildschuh, Petra Paretta. Österreichischer Strukturplan Gesundheit 2017 - Textband [Internet]. Gesundheit Österreich GmbH, editor. 2019 [cited 2020 Jul 29]. Available from: https://www.sozialministerium.at/dam/jcr:cc75332a-e259-4077-956f-9eab1d9e433d/oesg_2017_-_textband,_stand_27.09.2019.pdf

59. Austrian Library Network. OBSVG - search engine [Internet]. [cited 2020 Jul 30]. Available from: https://search.obvsg.at/primo-explore/search?vid=OBV

60. Austrian Forum for Primary Care (OEFOP). Online Library of the Austrian Forum for Primary Care [Internet]. Available from: https://primaerversorgung.org/bibliothek/

61. Federal Ministry for Digital and Economic Affairs. Legal Information System of the Republic of Austria (RIS) [Internet]. [cited 2020 Jul 30]. Available from: https://www.ris.bka.gv.at/

62. Rechtliche Rahmenbedingungen [Internet]. [cited 2020 Sep 1]. Available from: https://www.sv-primaerversorgung.at/cdscontent/?contentid=10007.796822\&portal=esvportal

63. Hoffmann K, George A, Dorner TE, Süß K, Schäfer WLA, Maier M. Primary health care teams put to the test a cross-sectional study from Austria within the QUALICOPC project. BMC family practice [Internet]. 2015 Nov;16:168. Available from: https://bmcfampract.biomedcentral.com/articles/10.1186/s12875-015-0384-9

64. Austrian National Public Health Institute. Suche | Gesundheit Österreich GmbH [Internet]. [cited 2020 Jul 30]. Available from: https://goeg.at/search

65. Österreichisches Parlament. Bundesgesetz über Gesundheits- und Krankenpflegeberufe (GuKG) [Internet]. 1997. Available from: https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen\&Gesetzesnummer=10011026

66. Bundesministerium für Gesundheit. Gesundheits- und Krankenpflege-Ausbildungsverordnung [Internet]. [cited 2020 Aug 16]. Available from:

https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen\&Gesetzesnummer=10011179

67. Die neue Volkspartei, Die Grünen - Die Grüne Alternative, editors. Regierungsprogramm 2020-2024 [Internet]. 2020. Available from: https://www.dieneuevolkspartei.at/Download/Regierungsprogramm_2020.pdf

68. Hauptverband der Österreichischen Sovialversicherungsträger. Gesamtvertrag für Primärversorgungseinheiten (Primärversorgungs-Gesamtvertrag) [Internet]. 2019. Available from: https://www.gesundheitskasse.at/cdscontent/load?contentid=10008.737381\&version=1594380583

69. Österreichische Gesundheitskasse. Gesamtvertragliche Vereinbarung gemäß 342b Abs 4 und 5 ASVG “Regionaler Primärversorgungsvertrag Wien” [Internet]. 2019. Available from: https://www.gesundheitskasse.at/cdscontent/load?contentid=10008.731505\&version=1581509447

70. Österreichische Gesundheitskasse. Gesamtvertragliche Honorarvereinbarungen für Primärversorgungseinheiten in Niederösterreich [Internet]. 2019. Available from: https://www.gesundheitskasse.at/cdscontent/load?contentid=10008.731505\&version=1581509447

71. Österreichische Gesundheitskasse. Gesamtvertragliche Vereinbarung gemäß 342b Abs 4 und 5 ASVG zur Primärversorgung im Bundesland Salzburg [Internet]. 2019. Available from: https://www.gesundheitskasse.at/cdscontent/load?contentid=10008.731505\&version=1581509447

72. Bundesministerium für Gesundheit, editor. Bundes-Zielsteuerungsvertrag - Zielsteuerung Gesundheit 2017-2021 [Internet]. 2017. Available from: http://www.hauptverband.at/mediaDB/986167_B-ZV_26062013_Letztfassung_Unterschrieben.pdf

73. Österreichisches Parlament. Bundesgesetz über medizinische Assistenzberufe und die Ausübung der Trainingstherapie (Medizinische Assistenzberufe-Gesetz MABG) [Internet]. 2012. Available from: https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen\&Gesetzesnummer=20007997

74. Bundesministerium für Gesundheit. Verordnung des Bundesministers für Gesundheit über Ausbildung und Qualifikationsprofile der medizinischen Assistenzberufe (MAB-Ausbildungsverordnung MAB-AV) [Internet]. Available from: https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen\&Gesetzesnummer=20008592

75. Guest G, MacQueen KM, Namey EE. Applied thematic analysis. Los Angeles: Sage Publications; 2012.

76. Ronggui Huang. RQDA [Internet]. [cited 2019 Dec 3]. Available from: http://rqda.r-forge.r-project.org/

77. Braun V, Clarke V. Using thematic analysis in psychology. Qualitative Research in Psychology [Internet]. 2006 Jan [cited 2019 Nov 12];3(2):77–101. Available from: https://www.tandfonline.com/doi/abs/10.1191/1478088706qp063oa

77a. Fritz G. Biopsychosoziale Arbeit in der Primärversorgung. Ansätze und Potentiale für einen interdisziplinären und interprofessionellen Umgang mit Gesundheit und Krankheit. [Internet]. [2018, Wien]: Hochschulort; 2018 [cited 2020 Apr 21]. Available from: https://resolver.obvsg.at/urn:nbn:at:at-fhcw:1-4877

78. de Brún T, O'Reilly-de Brún M, Van Weel-Baumgarten E, Burns N, Dowrick C, Lionis C, et al. Using Participatory Learning & Action (PLA) research techniques for inter-stakeholder dialogue in primary healthcare: An analysis of stakeholders' experiences. Research involvement and engagement. 2017;3:28.

78a. Brunner A. Sozialmedizinsiches Zentrum Liebenau - gelebtes Konzept gesundheitsförderlicher, interdisziplinärer Primärversorgung im kummunalen Setting: ein Modell für die gesundheitlichen und sozialen Herausforderungen des 21. Jahrhunderts. [Graz]: Medizinische Universität, Universitätslehrgang Public Health; 2013.

79. Hochleitner M. Primary prevention in Turkish immigrant women. In: Kimchi, A, editor. Advances in Heart Failure [Internet]. VIA MASERATI 5, 40128 BOLOGNA, 00000, ITALY: MEDIMOND S R L; 2002. pp. 321–4. Available from: https://link.springer.com/article/10.1007\%2Fs00508-006-0587-0

80. Plunger P, Rojatz D. Workshop der ÖGPH-Kompetenzgruppe Partizipation. In: Das Gesundheitswesen [Internet]. Georg Thieme Verlag KG; 2020 [cited 2020 Sep 2]. Available from: http://www.thieme-connect.de/DOI/DOI?10.1055/s-0040-1709059

81. Brunner A. Sozialmedizinisches Zentrum Liebenau - gelebtes Konzept gesundheitsförderlicher, interdisziplinärer Primärversorgung im kommunalen Setting [Internet] [Masters thesis]. [Graz]: Medizinische Universität Graz/Universitätslehrgang Public Health; 2013. Available from: http://public-health.medunigraz.at/archiv/Mastersarbeiten/Masterarbeit_10/Masterthesis\%20Brunner.pdf

82. Sprenger M, Stigler F, Rojatz D, Nowak P. Krankheitsprävention, Gesundheitsförderung, Gesundheitskompetenz in der Primärversorgung. Ausfüllhilfe für PVE-Gründerinnen/-Gründer zum Muster-Versorgungskonzept [Internet]. Wien: Gesundheit Österreich GmbH; 2019 Mar. Available from: https://www.sozialversicherung.at/cdscontent/?contentid=10007.845207\&portal=svportal

83. Bundes-Zielsteuerungskommission. Primärversorgung - Berufsgruppen und Kompetenzprofile [Internet]. Bundes-Zielsteuerungskommission; 2019 Apr. Available from: https://jasmin.goeg.at/1018/

84. Freund T, Everett C, Griffiths P, Hudon C, Naccarella L, Laurant M. Skill mix, roles and remuneration in the primary care workforce: Who are the healthcare professionals in the primary care teams across the world? International Journal of Nursing Studies [Internet]. 2015 Mar [cited 2020 Aug 23];52(3):727–43. Available from: http://www.sciencedirect.com/science/article/pii/S0020748914003307

85. Primary Health Care Systems (PRIMASYS): Case study from South Africa [Internet]. Geneva: World Health Organization; 2017 [cited 2020 Aug 23]. Available from: http://www.who.int/alliance-hpsr/projects/primasys/en/

86. Borkan J, Eaton CB, Novillo-Ortiz D, Rivero Corte P, Jadad AR. Renewing Primary Care: Lessons Learned From The Spanish Health Care System. Health Affairs [Internet]. 2010 Aug [cited 2020 Aug 23];29(8):1432–41. Available from: https://www.healthaffairs.org/doi/10.1377/hlthaff.2010.0023

87. Gillam S, Schamroth A. The Community-Oriented Primary Care Experience in the United Kingdom. American Journal of Public Health [Internet]. 2002 Nov [cited 2018 Jul 10];92(11):1721–5. Available from: https://ajph.aphapublications.org/doi/full/10.2105/AJPH.92.11.1721

88. Groenewegen P, Heinemann S, Greß S, Schäfer W. Primary care practice composition in 34 countries. Health Policy [Internet]. 2015; Available from: https://www.sciencedirect.com/science/article/pii/S016885101500192X

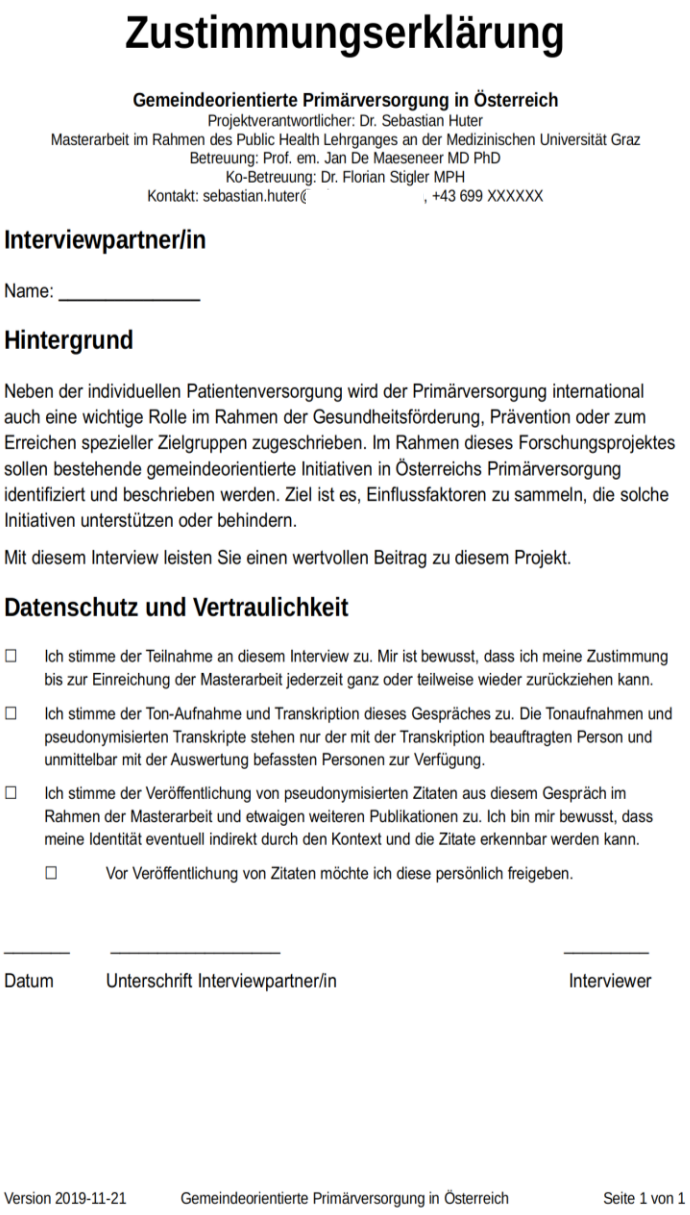
89. Winkler N. The Future Concept of Primary Health Care Expectations for an Difficulties of Implementing Primary Healthcare Centers and Networks in Austria: A qualitative study [PhD thesis]. [Innsbruck]: Management Center Innsbruck; 2020.

90. Zechmeister I, Oesterle A, Denk P, Katschnig H. Incentives in financing mental health care in Austria. The journal of mental health policy and economics. 2002 Sep;5(3):121–9.

91. Crampton P, Davis P, Lay-Yee R. Primary care teams: New Zealand's experience with community-governed non-profit primary care. Health Policy [Internet]. 2005 May [cited 2020 Aug 23];72(2):233–43. Available from: http://www.sciencedirect.com/science/article/pii/S0168851004001782

Appendix

Consent form - german



Zustimmungserklärung

Gemeindeorientierte Primärversorgung in Österreich
Projektverantwortlicher: Dr. Sebastian Huter
Masterarbeit im Rahmen des Public Health Lehrganges an der Medizinischen Universität Graz
Betreuung: Prof. em. Jan De Maeseneer MD PhD
Ko-Betreuung: Dr. Florian Stigler MPH
Kontakt: sebastian.huter@ , +43 699 XXXXXX

Interviewpartner/in

Name: _____

Hintergrund

Neben der individuellen Patientenversorgung wird der Primärversorgung international auch eine wichtige Rolle im Rahmen der Gesundheitsförderung, Prävention oder zum Erreichen spezieller Zielgruppen zugeschrieben. Im Rahmen dieses Forschungsprojektes sollen bestehende gemeindeorientierte Initiativen in Österreichs Primärversorgung identifiziert und beschrieben werden. Ziel ist es, Einflussfaktoren zu sammeln, die solche Initiativen unterstützen oder behindern.

Mit diesem Interview leisten Sie einen wertvollen Beitrag zu diesem Projekt.

Datenschutz und Vertraulichkeit

☐ Ich stimme der Teilnahme an diesem Interview zu. Mir ist bewusst, dass ich meine Zustimmung bis zur Einreichung der Masterarbeit jederzeit ganz oder teilweise wieder zurückziehen kann.

☐ Ich stimme der Ton-Aufnahme und Transkription dieses Gespräches zu. Die Tonaufnahmen und pseudonymisierten Transkripte stehen nur der mit der Transkription beauftragten Person und unmittelbar mit der Auswertung befassten Personen zur Verfügung.

☐ Ich stimme der Veröffentlichung von pseudonymisierten Zitaten aus diesem Gespräch im Rahmen der Masterarbeit und etwaigen weiteren Publikationen zu. Ich bin mir bewusst, dass meine Identität eventuell indirekt durch den Kontext und die Zitate erkennbar werden kann.

☐ Vor Veröffentlichung von Zitaten möchte ich diese persönlich freigeben.

_____ _____ _____

Datum Unterschrift Interviewpartner/in Interviewer

Version 2019-11-21 Gemeindeorientierte Primärversorgung in Österreich Seite 1 von 1

Figure 3: Consent form used to aquire and document written informed consent from interview partners.

Consent form - english

Consent form

Community Oriented Primary Care in Austria

Principal researcher: Dr. Sebastian Huter
Master's project as part of the postgraduate public health course at the Medical University Graz
Supervisor: Prof. em. Jan De Maeseneer, MD, PhD
Co-Supervisor: Dr. Florian Stigler, MPH
Contact: sebastian.huter@p[illegible], +43 699 XXXXXX

Interview partner

Name: _____

Background

Apart from providing health care for individual patients, primary care has an important role in health promotion, prevention and reaching vulnerable populations. This project aims at identifiying and decribing existing projects with a community orientation in primary care in Austria.

With participating in this interview, you are providing an important contribution to this project.

Data protection and confidentiality

□ I agree to participate in this interview. I am aware, that I can withdraw this consent completely or in part at any time up until the submission of the masters theis.

□ I agree to the recording and transcription of this interview. The recordings and pseudonomized transcripts are only available researchers involved or transcribers under a confidentiality agreement.

□ I agree to the publication of pseudonymized quotes of this interview. I am aware, that my identity could theoretically be revealed indirectly through the quotes and the context.

□ Before publication of quotes I would like to personally authorise them.

_____	_____	_____
Date	Signature Interviewee	Interviewer

Figure 4: English version of the consent form used to aquire and document written informed consent from interview partners. Since all interview partners were German native speakers, only the german version was used.

Search strategy for scoping review

Table 8: Search strings used for the scoping review for each database and the respective results.

Search	Database	Keywords	Search.string	Results
1	PMC	community, primary care, Austria	((austria[MeSH Terms] OR austria[All Fields]) OR austria s[All Fields]) AND ((((primary health care[MeSH Terms] OR ((primary[All Fields] AND health[All Fields]) AND care[All Fields])) OR primary health care[All Fields]) OR (primary[All Fields] AND care[All Fields])) OR primary care[All Fields]) AND communit*[All Fields]	320
2	GoogleScholar	community oriented, primary care, Austria	Austria community oriented OR community * oriented primary care	521
3	OBSVG	Primärversorgung, Gemeinde	“Primärversorgung*" AND "Gemeinde*”	96
4	OBSVG		“Primary Care” AND "Communit*"	280*
5	Web Of SCience		ALL=(Austria AND Communit* AND Primary Care)	426
**14 duplicates with search 3*				

Scoping review result

Table 9: The resulting 23 items after the first screening of titles.

	Publication	Included	Comment
1.	Hochleitner M. Primary prevention in Turkish immigrant women [Internet]. Kimchi, A, Herausgeber. Advances in Heart Failure. VIA MASERATI 5, 40128 BOLOGNA, 00000, ITALY: MEDIMOND S R L; 2002. S. 321-4. Verfügbar unter: https://link.springer.com/article/10.1007%2Fs00508-006-0587-0	Yes	Community-based health promotion and prevention, not connected to primary care
2.	Priebe S, Sandhu S, Dias S, Gaddini A, Greacen T, Ioannidis E, u.Â a. Good practice in health care for migrants: views and experiences of care professionals in 16 European countries. Bd. 11, BMC Public Health. 236 GRAYS INN RD, FLOOR 6, LONDON WC1X 8HL, ENGLAND: BIOMED CENTRAL LTD; 2011.	No	No Austria specific data provided
3.	Brotons C, Bulc M, Sammut MR, Sheehan M, da Silva Martins CM, Bjorkelund C, u.Â a. Attitudes toward preventive services and lifestyle: the views of primary care patients in Europe. The EUROPREVIEW patient study. Bd. 29, Family Practice. GREAT CLARENDON ST, OXFORD OX2 6DP, ENGLAND: OXFORD UNIV PRESS; 2012. S. i168-76.	No	No Austria specific data provided
4.	Pollard RQ Jr, Betts WR, Carroll JK, Waxmonsky JA, Barnett S, deGruy FV III, u.a. Integrating Primary Care and Behavioral Health With Four Special Populations Children With Special Needs, People With Serious Mental Illness, Refugees, and Deaf People. Bd. 69, American Psychologist. 750 FIRST ST NE, WASHINGTON, DC 20002-4242 USA: AMER PSYCHOLOGICAL ASSOC; 2014. S. 377-87.	No	Not relevant to primary care in Austria
5.	Verstappen W, Gaal S, Bowie P, Parker D, Lainer M, Valderas JM, u.Â a. A research agenda on patient safety in primary care. Recommendations by the LINNEAUS collaboration on patient safety in primary care. Bd. 21, European Journal of General Practice. 2-4 PARK SQUARE, MILTON PARK, ABINGDON OR14 4RN, OXON, ENGLAND: TAYLOR & FRANCIS LTD; 2015. S. 72-7.	No	Patient-involvment in safety is mentioned, but no Austria specifc data or recommendati ons
6.	Hoffmann K, George A, Dorner TE, Suess K, Schaefer WLA, Maier M. Primary health care teams put to the test a cross-sectional study from Austria within the QUALICOPC project. Bd. 16, BMC Family Practice. 236 GRAYS INN RD, FLOOR 6, LONDON WC1X 8HL, ENGLAND: BIOMED CENTRAL LTD; 2015.	Yes	Composition of primary care workforce in Austria
7.	Davies MJ, Gray LJ, Troughton J, Gray A, Tuomilehto J,	No	Study done in

	Farooqi A, u.Â a. A community based primary prevention programme for type 2 diabetes integrating identification and lifestyle intervention for prevention: the Let's Prevent Diabetes cluster randomised controlled trial. Prev Med. März 2016;84:48-56.		UK
8.	van Loenen T, van den Muijsenbergh M, Hofmeester M, Dowrick C, van Ginneken N, Mechili EA, u.Â a. Primary care for refugees and newly arrived migrants in Europe: a qualitative study on health needs, barriers and wishes. Eur J Public Health. 1. Februar 2018;28(1):82-7.	No	Not Austria specific
9.	Imre R, Robert KL, Aarendonk D, Angelaki A, Ajdukovic D, Dowrick C, u.Â a. Primary care of refugees and migrants Lesson learnt from the EUR-HUMAN project. Bd. 159, Orvosi Hetilap. BUDAFOKI UT 187-189-A-3, H-1117 BUDAPEST, HUNGARY: AKADEMIAI KIADO ZRT; 2018. S. 1414-22.	No	Article not in English/German
10.	Halbreich U, Schulze T, Botbol M, Javed A, Kallivayalil RA, Ghuloum S, u.Â a. Partnerships for interdisciplinary collaborative global well-being. Bd. 11, Asia-Pacific Psychiatry. 111 RIVER ST, HOBOKEN 07030-5774, NJ USA: WILEY; 2019.	No	Not relevant
11.	Bauernberger, Martin. Klassifikation der Einflussfaktoren der Zufriedenheit von PatientInnen mit ihrer Hausarztpraxis / Martin Bauernberger [Internet]. 2010 [zitiert 3. August 2020]. Verfügbar unter: http://netlibrary.aau.at/obvuklhs/2411302	No	Not relevant for CO/COPC
12.	Nowak B. Gesundheitsförderung für Kinder im ersten Lebensjahr: eine Analyse der Angebote in der Stadt Graz / vorgelegt von Bibiane Nowak, Bakk.a. phil. [Internet]. 2017 [zitiert 3. August 2020]. VerfÃ¼gbar unter: http://unipub.uni-graz.at/obvugrhs/2268501	No	No primary care specific information
13.	Platt S, Niederkrotenthaler T. Suicide Prevention Programs. Crisis. März 2020;41(Suppl 1):S99-124.	No	Community-based interventions mentioned, but not connected to primary care
14.	de Brut, de-Brún MO, van Weel-Baumgarten E, van Weel C, Dowrick C, Lionis C, u.Â a. Guidelines and training initiatives that support communication in cross-culturalÂ primary-care settings: appraising their implementability using Normalization ProcessÂ Theory. Fam Pract. August 2015;32(4):420-5.	No	No Austria specific data provided
15.	de Brún T, O'Reilly-de Brun M, Van Weel-Baumgarten E, Burns N, Dowrick C, Lionis C, u.Â a. Using Participatory Learning & Action (PLA) research techniques for inter-stakeholder dialogue in primary healthcare: an analysis of stakeholdersâ€™Â experiences. Res Involv	Yes	Austria specific data provided, interaction between PCP and (a specific)

	Engagem. 2017;3:28.		community
16.	Vukan S. Sozialarbeit in der interdisziplinÃ¤ren Zusammenarbeit zur Umsetzung von Gesundheitsförderung und Krankheitsprävention: eine Studie zu zukünftigen Primärversorgungseinrichtungen am Beispiel “Gesundes Mureck” [Internet]. GrazAugust 2016, Graz: Hochschulort, GrÃ¤tz; 29. VerfÃ¼gbar unter: https://permalink.obvsg.at/AC13428430	No	No full text available
17.	Hofmann E. Wie (un)erreichbar ist Gesundheit? Niederschwellige Gesundheitsversorgung am Beispiel des Ambulatoriums Caritas Marienambulanz in Graz [Internet]. 2014; 2014 [zitiert 21. April 2020]. VerfÃ¼gbar unter: https://resolver.obvsg.at/urn:nbn:at:at-ubg:1-57505	Yes	Discusses accessability of health care in general with the example of primary care for uninsured.
18.	Fritz G. Biopsychosoziale Arbeit in der Primärversorgung. Ansätze und Potentiale für einen interdisziplinären und interprofessionellen Umgang mit Gesundheit und Krankheit. [Internet]. [2018, Wien]: Hochschulort; 2018 [zitiert 21. April 2020]. Verfügbar unter: https://resolver.obvsg.at/urn:nbn:at:at-fhcw:1-4877	Yes	Discusses the role of social workers in primary care in Austria, but without a focus on community-orientation
19.	Etzer C. Gesundheitsförderung im Alter: Möglichkeiten der Sozialen Arbeit [Internet]. Graz, Graz: Hochschulort, Graz; 2017 [zitiert 21. April 2020]. Verfügbar unter: https://resolver.obvsg.at/urn:nbn:at:at-ubg:1-112898	No	Health promotion but no connection to primary care
20.	Bauernfeind-Rogner VM. Gemeindenahe Gesundheits- und Pflegeedukation als Handlungsfeld von Advanced Practice Nurses. Graz, Graz: Hochschulort, GrÃ¤tz; 2019.	No	No full text available
21.	Abholz H-H, Brunnett R. Primary health care: InterdisziplinaritÃ¤t, Partizipation, Gemeindeorientierung. 1. Aufl. Hamburg: Argument-Verl; 2014. 193 S. ((AT-OBV)AC08175604 50).	No	Not specific to Austria
22.	Plunger, P., und D. Rojatz. “Workshop der ÖGPH-Kompetenzgruppe Partizipation”. In Das Gesundheitswesen, Bd. 82. Â© Georg Thieme Verlag KG, 2020. https://doi.org/10.1055/s-0040-1709059.	Yes	Describes a COPC project in Austria
23.	Brunner, A. Sozialmedizinisches Zentrum Liebenau - gelebtes Konzept gesundheitsförderlicher, interdisziplinärer Primärversorgung im kommunalen Setting. Masters thesis. Graz: Medizinische UniversitÃ¤t Graz/UniversitÃ¤tslehrgang Public Health, 2013. http://public-health.medunigraz.at/archiv/Mastersarbeiten/Masterarbeit_10/Masterthesis%20Brunner.pdf.	Yes	Describes a COPC project in Austria

Code list

Table 10: Final structure of the codes extracted from the interviews.

Theme	Code	Description
roles of GP	doctors_dont_participate	Doctors don't participate
	doctors_as_community_doctor	GPs as community doctors
	doctors_as_data_source	GPs as data source
	doctors_as_driving_force	Doctors as driving force
	doctors_as_experts	Doctors as experts
	doctors_career	Doctors career as an influence
	doctors_role	How doctors see their role
	doctors_standing	The standing of doctors in the community
	personal_interests_as_driver	Personal interests/hobbies as driver for initiative
	doctors_training	Influence of professional training
financial barriers	FIN_availability	Availability of funds
	FIN_conflicts	Conflicts due to financing
	FIN_cross_financing	Cross financing of CO activities
	FIN_duration	Duration of funding
	FIN_structure	Structure of funding
	sustainable_implementation	Sustainable implementation of projects
structural aspects	necessary_skills_and_information	Necessary skills and information for a project
	political_support	Political support for a project / initiative
	healthy_community_initiative	The healthy community program as a

		ressource
	implement_established_programs	Implementation of established programs
	health_promotion_as_role	Who is responsible for health promotion
	professional_support_structures	Professional support structures for community projects
	project_structure	Project structure
	bureaucracy	Bureaucracy as a barrier
	care_and_prevention_competing_for_ressources	Care and prevention / health promotion competing for ressources
team	professional_network	Professional networks as a ressource
	projects_are_fun	Having fun in projects as a motivator
	involving_trainees_or_students	Involving trainees and students in projects
	social_worker_in_team	Having a social worker on the team
	team_player	Beeing a team player
	time_limited	Limitations of individual time ressources
	cooperation	Cooperation between different providers
volunteerism	volunteerism	The role of volunteering for CO projects
	volunteers_from_community	Volunteers from the community
	volunteer_providers	Providers volunteering their time
aspects of community orientation	co_activities	Community-oriented activities
	communicating_activities	Communicating activities
	community	Role of community
	defined_population	Defined population

	evaluation_and_impact_assessment	Evaluation and impact assessment
	health_coordinator	Health coordinator
	health_impact_assessement	Health impact assessment
	health_needs_assessment	Health needs assessment
	holistic_approach	Holistic approach
	outreach	Community outreach
	participation	Participation
	projects	Project details
	reaching_target_group	Reaching target group
	see_the_need	See the need in the community
	setting_priorities	Setting priorities
	social_prescribing	Social prescribing
other	beeing_part_of_the_community	Being part of the community
	practical_considerations_in_implementation	Practical considerations in implementation
	exchange_between_services	Exchange between different service providers
	international_experience	International experience of providers as influence
	intrinsic_motivation	Intrinsic motivation as driver for projects
	mindset_for_prevention	Mindset for prevention and health promotion
	patience_and_endurance	Beeing patient and having the endurance for long term initiatives