



Clinical skills and nursing management in community health nursing – A qualitative study

Klinische Skills und Pflegemanagement im Rahmen von Community Health Nursing – Eine qualitative Studie

Harald Lidauer^{1*}, Chiara Messina^{2*}, Gerhard Müller²,
Bettina Wandl², Harald Stummer¹

¹UMIT TIROL – Private University for Health Sciences and Health Technology, Department of Public Health, Health Services Research and Health Technology Assessment, Institute for Management and Economics in Healthcare, 6060 Hall in Tyrol, Austria

²UMIT TIROL – Private University of Health Sciences and Health Technology, Department of Nursing Science and Gerontology, Institute of Nursing Science, 6060 Hall in Tyrol, Austria

* chiara.messina@hotmail.com

Received 27 May 2024, accepted 6 May 2025

Abstract

Background: Community Health Nursing plays a crucial role in primary care across Europe, with each country adopting distinct approaches. In Austria, the increasing healthcare demands necessitate a reevaluation of Community Health Nurses (CHNs) competencies, skills, and roles. The current descriptions of these aspects for CHNs in Austria lack comprehensiveness, posing a challenge to effectively meet these demands.

Objective: The aim of the present study is to explore the clinical skills, health management, and nursing management competencies among CHNs.

Methods: A qualitative study was conducted using problem-centered interviews with experts from various healthcare and nursing sectors (n=15). In the study, both narrative and structured interviewing techniques were employed to explore the required competencies, skills, and roles of CHNs.

Results: Findings underscore the importance of clinical and healthcare management skills for CHNs. Key competencies highlighted include navigating healthcare systems, gatekeeping, and case management, which are vital for effective primary care. Discussions also covered the potential expansion of CHN roles to include prescribing and performing clinical tasks.

Conclusion: CHNs can be pivotal in Austria's healthcare system, facilitating access to care, managing patient pathways, and possibly assuming extended responsibilities. Enhanced training and clearer role definitions are crucial for meeting future healthcare challenges.

Abstract

Hintergrund: Community Health Nursing nimmt eine entscheidende Rolle in der Primärversorgung in ganz Europa ein, wobei jedes Land eigene Ansätze verfolgt. In Österreich machen die steigenden Anforderungen im Gesundheitswesen eine Neubewertung der Kompetenzen, Fähigkeiten und Rollen der Community Health Nurses (CHNs) notwendig. Die gegenwärtigen Darstellungen dieser Aspekte für CHNs in Österreich sind unzureichend, was die effektive Bewältigung dieser Anforderungen erschwert.

Ziel der vorliegenden Studie ist es, die klinischen Fertigkeiten, die Gesundheits- und Pflegemanagementkompetenzen von CHNs zu untersuchen.

Methodik: In der Studie wurden qualitative, problemzentrierte Interviews mit Expert*innen aus verschiedenen Sektoren des Gesundheits- und Sozialwesens (n=15) durchgeführt. Dabei wurden sowohl narrative als auch strukturierte Interviewtechniken angewandt, um die benötigten Kompetenzen, Fähigkeiten und Rollen für CHNs zu erheben.

Ergebnisse: Die Ergebnisse unterstreichen die Bedeutung von klinischen Fähigkeiten und Kompetenzen im Gesundheits- und Pflegemanagement für CHNs. Hervorgehobene Schlüsselkompetenzen umfassen das Navigieren durch Gesundheitssysteme, Gatekeeping und Case Management, die für eine effektive Primärversorgung entscheidend sind. Es wurden auch Diskussionen über die potenzielle Erweiterung der Rollen von CHNs geführt, einschließlich der Verschreibung und Durchführung klinischer Aufgaben.

Schlussfolgerung: CHNs können einen zentralen Bestandteil des österreichischen Gesundheitssystems bilden, indem sie den Zugang zur Versorgung erleichtern, Patient*innenwege verwalten und potenziell erweiterte Verantwortlichkeiten übernehmen. Verbesserte Schulungen und klarere Rollendefinitionen sind entscheidend, um zukünftigen Herausforderungen im Gesundheitswesen begegnen zu können.

Keywords

Community Health Nursing – Primary Care – Public Health – Competencies – Qualitative Study

Keywords

Community Health Nursing – Primärversorgung – Public Health – Kompetenzen – Qualitative Studie



INTRODUCTION

Primary care is deemed essential by the World Health Organization (WHO) for both the health system and the overall societal and economic growth (WHO, 1978). Across Europe and globally, various primary care models are implemented. For instance, in Austria, primary care is predominantly provided by general practitioners (Hofmarcher, 2013), whereas in countries like Norway, Finland, and Ireland, nursing professionals play a significant role in primary care (Kringos et al., 2015). The Community Health Nursing model is a vital element of primary care frameworks, prompting considerations about its implementation and the roles Community Health Nurses (CHNs) should assume based on existing primary care structures in each country.

Community Nursing and Community Health Nursing (CHN), though often used interchangeably, should be distinguished. Community nurses are recognized for their role in professional home care nursing. In Austria, this type of nursing is an integral part of mobile care and support available in nearly all federal states, ensuring accessibility across diverse regions (Wild, 2020; Dimmel & Schmid, 2013). In contrast, CHN extends far beyond the scope of traditional home care nursing, encompassing a broader spectrum of services. This framework includes extensive counseling tailored to the needs of individuals requiring care, their families, and the broader community. It places significant emphasis on preventive measures and health advocacy, signifying a transition towards a more holistic nursing approach (Lengauer, 2020).

CHN and 'Public Health Nursing' are widely used synonymously to describe a distinct field where nursing expertise is combined with public health practices and social care elements. This integration is crucial in a broader public health initiative aimed at not only promoting health but also enhancing both social and physical environments and supporting the recovery of those affected by illness and disability (WHO, 2017). This expansive definition fosters academic exploration of these roles and situates Public Health Nursing within the wider scope of the nursing profession's contributions to addressing public health challenges (Brieskorn-Zinke, 2007).

Countries like Finland and Canada have long recognized the benefits of the CHN model, leveraging it to significantly enhance the health of their communities (Schaffer & Strohschein, 2019; Horak & Haubitzer, 2021). Although the development of systems is still emerging in some countries, Austria has made notable progress. The Austrian Federal Government's 2020-2024 program underscores the importance of prevention and rehabilitation with the aim of increasing the number of healthy years of life for its citizens. This initiative not only supports the decentralized delivery of health services but also fosters the integration of local resources

to build a more responsive and sustainable health system. In line with this, the government launched the 'Community Nurses in 500 Municipalities' project throughout Austria (Bundeskansleramt Österreich, 2020). Its current implementation process involves a two-stage structure. The initial phase, funded by the European Union's NextGenerationEU as part of Austria's recovery and resilience plan, has implemented pilot projects on Community Nursing between early 2022 and the end of 2024. These projects enable qualified health and nursing professionals to operate at the community level, taking on roles as advisors, connectors, and networkers within the existing professional legal framework. Following this phase, a comprehensive evaluation will be conducted to inform the subsequent steps aimed at further developing the profession's profile and scope of tasks. This stage will also ensure the continuation, rollout, and transition to standard funding (BMSGPK, 2021).

There are 116 projects involving approximately 270 community nurses, which equals about 180 full-time equivalents, that are currently being implemented as of June 2023 (GÖG, 2023) and evaluated since then. GÖG oversees the implementation and coordination of these pilot projects, manages the funding, supports project and performance documentation, and provides necessary applications and tools. While the initial pilot projects focus on community nursing only, the inclusion of CHNs in phase two is planned, depending on the evaluation results from the first phase (GÖG, 2021).

In line with these efforts, there is a key focus on identifying the necessary skills and competencies for CHNs in Austria. This involves defining the "the specific knowledge, skills and personal attributes required for a nurse practitioner to practice safely and ethically in a designated role and setting" (Canadian Nurses Association, 2010, p. 15). Establishing these standards is crucial for informing educational institutions like universities and nursing schools about the required levels of knowledge and skills. Additionally, it provides employers with tools to evaluate job performance (Polivka & Chaudry, 2014; Harmon et al., 2020).

Current publications include a narrative literature analysis on the dimensions of CHN (Scheydt & Hegedüs, 2022) and a scoping review on the skills and competencies of CHNs (Lidauer et al., 2022). These studies emphasize management competencies as crucial for efficiently organizing and leading health facilities, as well as clinical skills essential for direct patient care. However, a comprehensive empirical study covering the necessary skills and competencies in health and nursing management combined with clinical skills needed for CHN within the Austrian health and social system is still lacking. This research aims to fill that gap by analyzing the required competencies, thus advancing the theoretical-conceptual discourse on CHN.



RESEARCH AIM

This study aimed to explore the clinical skills, as well as health management and nursing management competencies among CHNs.

METHODS

A problem-centered qualitative research design was employed, conducting expert interviews as outlined by Witzel (2000). This approach is primarily exploratory, aimed at exploring unfamiliar thematic areas to structurally organize the study field and generate hypotheses (Bogner & Menz, 2002).

Sampling

The expert interviews were conducted with participants selected according to specific inclusion criteria relevant to the Austrian health care context:

- Expertise: We aimed to include experts from the political, educational, healthcare, consultancy, and practice-based sectors, all with specialized knowledge in CHN. Participants were supposed to cover professional functions as different as government employees involved in health regulations, educators and directors of nursing programs, as well as leaders in healthcare advocacy and operational management within the nursing field.
- Experience: Candidates required at least three years of experience in their respective fields.

The selection of interview participants was conducted using theoretical sampling as described by Strauss and Corbin (1996) and Glaser and Strauss (2010). This method entails making decisions about the selection and composition of empirical materials concurrently with data collection and analysis (Flick, 2019). The process adopted a cyclic and interactive approach, involving repeated cycles of sampling, interviewing, transcription, coding, and evaluating data until theoretical saturation was reached in each category – either deductively defined through the literature or inductively derived during the analysis – and the theory-building process was completed. Initially, interview partners were selected based on their relevance to the research area, with subsequent participants chosen based on insights gained from earlier interviews. This iterative process continued until additional interviews ceased to yield new information, refining the focus of sampling over time (Misoch, 2019). Furthermore, we adapted the theoretical sampling process by categorizing the interview participants into five groups and interviewing at least two experts from each group, irrespective of whether theoretical saturation had been reached. The groups were defined as follows:

- Politics: Individuals working in government or related agencies who focus on nursing care issues in Austria.
- Education: Directors and lecturers from CHN programs at Austrian higher education institutions, and managers of other CHN training programs.
- Health Care Interest Groups: Members of primary care interest groups in Austria.
- Consulting: Advisors in the nursing sector.
- Operational Area: Managers within nursing institutions or primary healthcare facilities; professionals involved in active CHN projects.

In instances where an interviewee's assignment to a group was unclear or they could be placed in multiple categories, the assignment was determined through discussion among the research team members, focusing on the best match with one of the five fields.

Access to the study interview participants was facilitated through an initial identification of potential interview partners via websites, press appearances, publications, ResearchGate, and social media profiles. Further participants were recruited using the snowball method, with initial contact typically made through email.

Data collection

Data collection for this qualitative research involved conducting semi-structured interviews to explore the participants' contextual knowledge deeply. The chosen method was the problem-centered interview, which adheres to the principles of Grounded Theory as proposed by Glaser and Strauss (2010). This method is designed to explore the subjective perspectives and interpretations of individuals regarding a socially relevant issue (the "problem") with the final aim of generating theory. Problem-centered interviews emphasize narratives as a central principle and are characterized by their highly communicative nature (Witzel, 2000).

Data were collected during May and June of 2022 through 15 detailed qualitative interviews. On average, each interview lasted about 66 minutes, ranging from 41 to 105 minutes in length. The interviews were conducted entirely in German. The initial outreach to prospective participants was made through email, where the study details were explained, consent for participation was requested, and the appointments for the interviews were arranged. A few days before each interview, an informed consent form allowing for the digital recording of the session was sent to participants for their signature.

The interviews adhered to the guidelines specified by Hermanns (2019) and the procedures for expert interviews outlined by Przyborski and Wohlrab-Sahr (2021). In the development of the interview guide, the SPSS method of Helfferich (2011) was applied (SPSS: German for 'sammeln, prüfen, sortieren, subsumieren', i.e., collect,



check, sort, prioritize). The interview guide was developed on the background of an extensive literature research and refined after a pilot test conducted with individuals outside the expert groups. It was designed to be flexible, supporting the conversational flow and the elaboration of the interviewees' narratives rather than enforcing a rigid questionnaire structure. This guide was used to compare interviews and refined throughout the study based on insights gained from the initial four interviews. Once established, the guide remained unchanged as no further modifications were necessary.

The interview guide referred to the main area of interest of the required skills and competencies of CHNs in Austria. The aim was to identify key areas, while establishing a connection to the Public Health Intervention Wheel (Minnesota Department of Health, 2019, p. 11), and addressing the current state of opinion in the literature as well as any peculiarities/special features of the Austrian health and social system. In this respect, the guide represented an overarching orientation framework for the interviews, with the problem area being represented in the form of individual, thematic fields.

The interview process contained a warm-up phase (for example: "When did you first deal with the topic of CHN and in what form/context?", "What is your current professional activity, how long have you been doing it and in which facets does the topic of CHN play a role?", "Are you involved in the establishment of the pilot projects on community nursing or in the general introduction of a system of CHN in Austria in any way and if so, what is your contribution in this regard?"), followed by an open question, which allowed the interviewees to build up narrative sequences and initially define their own priorities ("In your opinion, what are the key skills and competencies that a CHN in Austria should have? ... Just tell us, you can set your own priorities - what is important to you?"). If necessary, additional questions followed (for example: "Could you go into more detail in the area of planning/management/collaboration etc.?", "Do any particularities/specialties/peculiarities of the Austrian health and social system result in further/additional competencies of CHN that differ from other countries?"). As the study progressed, the focus shifted to more specific topics related to the research question. A first focus was the Public Health Intervention Wheel (Minnesota Department of Health, 2019, p. 11) ("Looking at the Public Health Intervention Wheel: What additional skills/competencies - in relation to the Austrian healthcare system - are required for CHNs compared to those currently possessed by qualified nurses trained in Austria? In which areas are additional knowledge or skills required? Please make an assessment."). The interview guide closed with some final questions on the skills and competencies required of CHNs in Austria (for example: "Suppose you had the opportunity to design a system of CHN for Austria: What

central tasks would a CHN take on in this model and what skills and competencies would they need for this?"). At this point, the interview participants were also given the opportunity to add further descriptions and narrative sequences that had not been discussed yet.

Interviews took place over video conferencing platforms and were digitally recorded. In line with the recommendations of Mey and Mruck (2007), no more than one interview was conducted per day to ensure thorough preparation and follow-up. Immediately following each session, extensive field notes were taken to record insights about the process, detail the dynamics of the interview, and note any significant events or behaviors observed during the conversations. Upon the completion of 15 interviews, it became apparent that no additional insights were forthcoming, suggesting that data saturation had been reached.

Data analyses

The interviews were transcribed word-for-word by a specialized transcription agency, adhering to the protocols recommended by Dresing and Pehl (2018). The research team (authors: CM, HL, GM, HS) examined, refined, and anonymized these transcripts to protect participant privacy. To ensure precision, parts of the video recordings were reviewed repeatedly as required. The completed transcripts were then imported into the MAXQDA Plus software for qualitative content analysis (CM, HL).

The data analysis was conducted using the qualitative content analysis method as outlined by Mayring (2015). This approach systematically applies a rule-based and theory-driven examination of textual data with the goal of drawing insights about specific aspects of the communication. It adopts several techniques, particularly emphasizing the use of a categorical system at the heart of the analysis to ensure a structured interpretation of the data (HL, GM, HS).

The process began with initial reading through the interviews, identifying the salient features and elements of each interview. Summaries were created to capture significant sections concisely (CM). This was followed by paraphrasing the relevant content into a focused, descriptive format, stripping away any unnecessary details (HL). These paraphrases were then organized into categories, forming a preliminary categorization system (GM, HS). Both the category definitions and the categorization system were developed deductively from the theoretical background and previous international studies which were included in the scoping review of Lidauer et al. (2022), as well as inductively from the data itself, without referencing pre-existing theoretical constructs (Mayring, 2015). The deductive approach was employed initially, while further along in the process



refining and expanding the system based on its application to the empirical data, with subcategories being added as necessary (Mayring, 2015).

Throughout the analysis, the categories were continuously evaluated by CM, HL, and HS regarding their fit and adjusted through a formative reliability check. After analyzing the initial interviews, a provisional category system was established and iteratively refined until theoretical saturation was achieved (CM, HL, GM, HS). The finalized category system was then rigorously applied to all data. To ensure intersubjectivity, the researchers engaged in peer discussions to validate the plausibility of the coding assignments and regularly consulted with a supervisor to review category assignments throughout the research process (CM, HL, HS). The generalization and reduction steps involved multiple rounds of abstracting the data, removing redundant paraphrases, and synthesizing related paraphrases into new formulations, following a cyclical process until the desired material reduction was achieved (Mayring, 2015).

The data analysis was concluded by identifying relevant thematic fields and compiling substantive findings for interpretation concerning the research question, following the recommendations of Green et al. (2007). Additionally, specific evaluative steps for expert interviews as proposed by Meuser and Nagel (2009) were incorporated to enrich the analytical depth.

RESULTS

The study engaged 15 participants; Table 1 shows the characteristics of the participants.

The study concentrated on the diverse set of skills and competencies required by CHN in Austria. The subsequent sections explore various themes in health management and nursing management, enriched with clinical capabilities, which were identified as crucial during the interviews. The included excerpts from the interviews provide various insights into the participants' perspectives. The results section is structured in communication and problem-solving skills, as well as organizational and decision-making skills.

Communication and problem-solving skills

Experts highlight the competency of being a navigator through the health system. It is essential that CHNs are able to fulfill their role of "guiding the people living in their region and supporting them in navigating the healthcare system and finding the right partners." To do this, they must know "how providers, whether social or health service providers, are distributed in the region where they work, what they offer, their main tasks, and possibly how they collaborate and interconnect" (Int. 11,

Table 1: Demographic and Professional Group Distribution of Study Participants (n=15)

Category	N
Gender	
Male	6
Female	9
Age	
Over 50	9
Under 50	6
Interview Group	
Group 1 - Politics	3
Group 2 - Education	4
Group 3 - Health Care Interest Groups	2
Group 4 - Consulting	2
Group 5 - Operational Sector	4

Lines 43–51). It is about being able to "properly refer clients and pave the way for them, which is targeted to their needs" (Int. 11, Lines 176–177). The CHN performs a "gatekeeper function" (Int. 9, Line 425). It requires "this interface management" (Int. 12, Line 55), and "this interface and already an individual perspective" (Int. 12, Lines 286–287). The goal is for the CHN's role is to "also build a network for these people" (Int. 6, Lines 230–231). Part of the guiding function also includes actively making the members of communities aware of existing health and social services (Int. 7, Line 46) and "also thinking about how to support people with subsidies, services, monetary benefits, or in-kind contributions" (Int. 8, Lines 119–121). In various instances, interview participants emphasize the competency of cooperative collaboration with clients. The emphasis is repeatedly on working "together with those affected, with the relatives" (Int. 7, Lines 267–268). One interview partner also uses the term "customer orientation" (Int. 6, Line 180). The CHN must "be able to approach people and be able to build communicative trust" (Int. 7, Lines 57–58). Clients should be "participatively involved" (Int. 13, Line 537). Furthermore, an advisory component is attributed to the Community Health Nurse's role: "My term for these people is indeed a coach" (Int. 13, Line 530) to guide and advice people. The CHN should not "say: this and that must be changed, but rather [...] really accompany [the clients] in this process-oriented approach, starting from their own strengths and capabilities" (Int. 4, Lines 211–212). Ultimately, the CHN's task is to "educate patients so they can make a decision themselves" (Int. 13, Lines 538–539).

Interview participants also focus on the competency of client self-management support during the surveys: "When we look at the demographic change with a majority of multimorbid, chronically ill people, then we need to see how they can learn to manage their illness



independently in the long run” (Int. 13, Lines 90–92). An essential pillar in this regard is “teaching health “ (Int. 7, Line 179). There is also a need to “build additional knowledge, know-how” (Int. 13, Line 96), “so that the health literacy of the population improves, so that the sick are more informed about their illness” (Int. 7, Lines 180–182), “so that they learn to cope well with their current living conditions, using their own means or also understanding their limits” (Int. 13, Lines 100–101). In this context, it is also important to “bring people into contact with health education early” (Int. 12, Lines 152–153). It requires “this concept of empowerment” (Int. 12, Line 153). The CHN must be able to “also move more towards self-management and therefore probably empower patients to take care of and manage themselves” (Int. 11, Lines 237–239). In this process, a central guideline is “to educate a patient so that they can make a decision themselves, to inform the patient enough so that they can give informed consent” (Int. 13, Lines 538–542).

Other aspects mentioned in the interviews regard the competency of promoting participation and self-determination of clients, which are closely related to the topics of collaboration and self-management. Again, health education and building additional knowledge and know-how play a central role. Also, the concept of empowerment is mentioned, as well as educating clients with the goal of enabling them to make an autonomous decision. Finally, the topic of identifying the clients’ own resources is addressed: The CHN must ask, “what do people already bring with them, what is their expertise, and then derive the support really only from where they definitely need it” (Int. 4, Lines 375–377).

Furthermore, interviewees emphasize the competency of prescription-related knowledge, desiring an expansion of the current decision-making regarding the prescription of medications, aids, etc. for CHNs in Austria. This extended scope should be accompanied by the appropriate knowledge and skills: “For me, it would be absolutely desirable for the area of personal responsible area to be expanded. (...) I would like them to have the possibility to prescribe in broader areas, or at least to prescribe repeatedly if necessary, and then one must consider based on which parameters - it could be time spans or could be significant deviations of standard values or something else - then one would say, this is too much, now we need a physician again or possibly actually the hospital, it doesn’t matter now, but there, I believe, they must be competent” (Int. 8, Lines 127–140). Another interviewee notes: “It is quite possible, in my view, that a competent CHN can change the dosage of a medication without needing to ask a physician. If it’s a diuretic and the heart failure patient has swollen feet, then they can say they should take an extra pill for a few days (...). Or adjust the

dose of a blood pressure medication a bit higher or lower, and such things, yes. So, I think I would give the nurses a bit more competence in this regard” (Int. 7, Lines 278–284). Subsequently, the competency of implementing care goals is also discussed.

In summary, experts highlight the importance of CHNs as navigators in the healthcare system. They guide clients through the system, connecting them with the right services and supporting them with subsidies or other resources. CHNs also build trust, involve clients in decision-making, and empower them to manage their health independently. Improving health literacy through education is seen as a key aspect, especially for people with chronic or multiple illnesses. Interviewees also advocate expanding CHNs’ ability to prescribe medications and adjust dosages autonomously, within their competencies. In essence, CHNs are regarded as intermediaries who advise, empower, and support clients in becoming more self-reliant.

Organizational and decision-making skills

A core competency of CHNs is case and care management. “Case and care management is also very central” (Int. 10, Lines 43–44). It involves “taking over this case and personalized management” (Int. 13, Lines 242–243), “having this lead, this overview, this oversight in management” (Int. 13, Line 343). “The counseling, support, and consultation, this interface management is a significant area of the CHN” (Int. 12, Lines 54–56), with the goal that they “build a network for these people” (Int. 6, Line 231). An important skill in this context is that the CHN is able to assess situations and recognize complex care situations. They must also be able to “act in an interdisciplinary, multiprofessional team along with case discussions, (...) to be able to design the outcome for the affected as optimally as possible” (Int. 4, Lines 132–134). For this, it is necessary to “truly grasp situations and then think based on health determinants - knowing who needs to be involved, what needs to be organized” (Int. 4, Lines 692–694). The competence of case and care management is particularly significant in connection with a possible gatekeeper function of the CHN as “the first point of contact in a region, in a neighborhood, in a district, before I even need to go to a physician” (Int. 9, Lines 423–425). Its importance is also highlighted in the context of discharge management after a hospital stay.

The interviewed experts focus explicitly on the competency of clinical assessment: The CHN “must be able to assess these people”. That means they must be able to perform assessments or (...) clinical assessment” (Int. 1, Lines 381–383), “make a nursing assessment” (Int. 9, Line 68). Another respondent states: “Through clinical assessment, I can collect data, gather data, and this is



ultimately a basis for my further action, for my further decision.” “A CHN should (...) be able to perform these physical examinations, and yes, nursing assessments of course” (Int. 10, Lines 46–50).

Concerning the competency of identifying client groups, it is the task of the CHN “to look at the municipal level, in the communities, where there is a nursing need” (Int. 14, Lines 290–291). “I believe that it really comes down to getting to know, how is my community structured, how are my citizens in the community, where are the problem areas in the various target groups” (Int. 14, Lines 296–299). In the context of ensuring the care of vulnerable groups of people, it is first necessary to “recognize who in the community is such a person” (Int. 14, Line 155). Often clients present their (health) condition better than it actually is, which CHNs should be able to recognize in the process of identifying client groups: “And what we know, that old people quite like to present themselves better than they are, this is noticeable in all care allowance classifications. And finally, it is also necessary that the CHN is able to quickly get an overview of the overall client situation during a visit – only then client groups can be accurately identified: “I must have learned, when I enter a room – and a good caregiver can do this – they enter the room and immediately have a perception of the overall image of the patient, client, resident, whatever, based on the room conditions and the actual physical and mental state of the resident. And I must; this is a very important basic competence in nursing generally, but for the CHN even more, because in mobile care or in long-term care or even in the hospital, I can go to someone more often, because they are already there or they are already bound in a care contract with me and there I can possibly rectify mistakes the second, third, fourth time. The CHN has the first impression and the first chance and again, if that is botched (...), then maybe I can come again a year later” (Int. 6, Lines 542–552).

The competency management of chronic diseases is brought up as central by some interview participants. A corresponding competence is required so that “the progression of chronic diseases can be slowed down in terms of speed” (Int. 13, Lines 417–418). An interview participant states: “They must also have an understanding of chronic diseases. That means, they should be familiar with diabetes, hypertension, etc., because just those people do many controls at home and certainly questions arise when the CHN comes, from the patients, (...) there they should also have a certain knowledge and competence and should know things like a disease management program ‘Active Therapy’, they must know that, yes. They must know that it is checked every quarter, with labs, etc., because also a task area, from my perspective, is the accompaniment at certain controls” (Int. 7, Lines 77–84).

Finally, also the competency of quality in nursing practice is mentioned, particularly addressing the area of quality management: “A very important aspect would be that they also take on a kind of quality management for caregiving relatives. So there, where caregiving relatives reach their limits or need support. (...) That means, really supporting the people and saying, listen, this is important, this is a particular hazard, possibly also supporting them in care planning, in documentation. So there I see a great need” (Int. 8, Lines 304–312). This can enable caregivers to take better decisions and actions. Quality management is also discussed in relation to other professional groups: “I already see them in this area of teaching (...), especially also in the role that they also enable others. So that they might also support other professional groups that are active there – I don’t know, (...) those not belonging to qualified nursing staff from (...) mobile facilities” (Int. 8, Lines 312–315).

In summary, our research outlines the following key competencies of CHNs that enable them to provide comprehensive community care:

- Case and care management: Overseeing patient care, coordinating with teams, and acting as a community gatekeeper.
- Clinical assessment: Conducting assessments to gather data for informed care decisions.
- Identifying client groups: Recognizing healthcare needs and vulnerable populations in the community.
- Chronic disease management: Managing conditions like diabetes and hypertension, supporting patients in care programs.
- Quality management: Assisting caregivers and other professionals with training, planning, and documentation.

DISCUSSION

This study underscores the essential combination of health management and nursing management skills with clinical abilities for CHNs in Austria. Key competencies identified include effective navigation and facilitation of access to healthcare services, as well as deeply understanding the local healthcare system and provider networks. CHNs play a critical gatekeeping role, managing care interfaces and individual cases to ensure tailored support and appropriate referrals. This role as a gatekeeper is crucial for ensuring health resources are distributed fairly and for sustaining the economic stability of the primary care system, especially in light of an aging population and the increasing frequency of chronic illnesses (Velasco Garrido et al., 2011; Liang et al., 2019).

Significant emphasis is also placed on CHNs’ ability to foster cooperative collaboration with clients, adopting a customer-oriented approach that encourages participation



and builds trust. This role is pivotal as CHNs often act as coaches, leveraging clients' strengths to foster better health outcomes. Supporting client self-management, enhancing health literacy and enabling more independent management of conditions are especially important in populations with high rates of multimorbidity and chronic illness. This aligns with preventive health strategies aimed at mitigating long-term complications. Healthcare systems increasingly focus on managing chronic symptoms to preserve patient independence and enhance quality of life over time (Tinetti et al., 2012), transforming traditional relationships between healthcare providers and patients to models where individuals with chronic illnesses take an active role in managing their own healthcare (Grady & Gough, 2014). The field of self-management emphasizes developing patient-centered strategies, enabling better health outcomes across various chronic conditions (Franek, 2013; Foster et al., 2007).

Moreover, the ability to perform clinical assessments and engage in complex case and care management is essential for CHNs, who must integrate their clinical insights with broader public health strategies. Programs such as case and care management have proven effective responses to complex health and social challenges, aiming to improve individuals' health while also addressing their social needs (Tortajada et al., 2017). With rising costs for health and social systems, there is a growing need for qualified professionals to guide individuals and families through complex care structures. Case and care managers are crucial intermediaries, connecting patients and families with various health and social sector stakeholders, and facilitating management of complex medical and social challenges (Harris & Popejoy, 2019).

The present study further highlights the potential expansion of CHNs' roles in prescribing medications and other therapeutic interventions, indicating a shift towards more autonomous practice within regulated parameters. This expanded role would necessitate a deeper understanding of pharmacology and patient-specific therapeutic management, enabling CHNs to effectively manage diverse health conditions independently. Budroni et al. (2020) suggest an extended scope of activities for CHNs, including conducting specific tests and managing therapies. The efficacy of delegating medical tasks to nursing personnel has been supported by findings indicating that this can maintain care quality and improve outcomes, such as patient satisfaction and quality of life (Laurant et al., 2018). Overall, our findings support the feasibility and effectiveness of expanding the CHNs' roles in healthcare settings, leading to enhanced patient-centered care and optimized system efficiency.

The skills and competencies identified in the literature overview in the form of the scoping review (Lidauer

et al., 2022) were also mentioned in the interviews, with the exception of the two competencies of *care and support management* as well as *risk and social impact management*. However, these competencies are also only found very sporadically in the literature in terms of the number of times they were mentioned. Conversely, the interviews revealed a further competence that could not be identified in this form in the literature: *clinical assessment* (increased mentions in the interviews).

Limitations

Some methodological constraints arise from the selection process of interview participants: To mitigate these limitations, we ensured theoretical saturation and deliberately included multiple expert groups. Even after the theoretical saturation, care was still taken to have at least two interviews from each group.

Given the novelty of this domain within the Austrian healthcare system, the pool of potential interviewees with relevant expertise was limited. As the CHN system unfolds, there may be shifts in required skills and competencies over time. With increased proficiency in this realm, more nuanced insights and prerequisites might emerge. Nevertheless, the skills and competencies outlined in this study should sufficiently underpin the structuring of CHN training.

Lastly, it is not possible to generalize the study findings to other nations due to disparities in their healthcare, social systems, and legal frameworks.

CONCLUSION

In summary, the study underscores the vital importance of competencies in healthcare and nursing management, including clinical knowledge for CHNs in Austria. CHNs play an essential role as navigators within the healthcare system, effectively guiding patients through complex healthcare environments and facilitating access to necessary services. This guiding function not only involves in-depth knowledge of the healthcare system and provider networks but also the capacity to manage care interfaces and provide targeted support to patients.

The findings also highlight the significance of cooperative collaboration and the development of a customer-oriented approach, where CHNs act as coaches who empower patients by fostering participatory involvement and leveraging their strengths and capabilities. This approach is crucial to enhancing patient autonomy and aligning care strategies with preventive health measures to address chronic conditions more effectively.

Moreover, the ability to perform comprehensive clinical assessments and engage in sophisticated care management



was emphasized as crucial for addressing the broad health needs at both individual and community levels. The study identified a growing need for CHNs to possess clinical skills to manage the increasing prevalence of chronic diseases effectively and to coordinate care in a manner that integrates clinical insights with broader public health strategies.

Additionally, the potential expansion of CHNs' roles to include prescribing medications and performing specific clinical tasks suggests a shift towards more autonomous practice within the healthcare system. This expansion requires a solid foundation in clinical knowledge and skills, ensuring that CHNs can provide high-quality care without constant oversight.

Overall, the study paints a comprehensive picture of the evolving role of CHNs, highlighting the increasing complexity of their responsibilities and the critical importance of their contributions to the Austrian healthcare system. These findings advocate for enhanced training and support for CHNs to ensure they are well-equipped to meet the demands of modern healthcare challenges. In this context, further research to analyze the specific training requirements for CHNs in Austria should be conducted.

Acknowledgements

We wish to thank all the experts who participated in the study.

Ethical approval

All participants underwent comprehensive disclosure regarding the study's parameters. Following a sufficient period for deliberation and the opportunity to address any queries with a researcher, written informed consent was obtained from each participant. Ethical clearance for the study was secured from the Research Committee for Scientific Ethical Questions at UMIT TIROL – Private University of Health Sciences and Health Technology, Austria (Decision date: 05.05.2022; Application number 3069).

Conflicts of interest

The authors declare that they have no conflicts of interest.

References

- Bogner, A., & Menz, W. (2002). Das theoriegenerierende Experteninterview. Erkenntnisinteresse, Wissensformen, Interaktion. In A. Bogner, B. Littig, & Wolfgang Menz (Eds.), *Das Experteninterview: Theorie, Methode, Anwendung* (pp. 33–70). Leske & Budrich.
- Brieskorn-Zinke, M. (2007). Public Health Nursing. Der Beitrag der Pflege zur Bevölkerungsgesundheit. 1. Auflage. Stuttgart: Kohlhammer Verlag. Online verfügbar unter <http://nbn-resolving.org/urn:nbn:de:bsz:24-epflicht-1285160>.
- Budroni, H., Daugardt, K., & Ohms, R. (2020). Community Health Nursing – Pflege in der Primärversorgung. *Gesundheits- und Sozialpolitik*, 74(3), 27–32. doi: 10.5771/1611-5821-2020-3-27.
- Bundeskanzleramt, Ö. (2020). Aus Verantwortung für Österreich. *Regierungsprogramm, 2020-2024*. <https://www.bundeskanzleramt.gv.at/bundeskanzleramt/die-bundesregierung/regierungsdokumente.html>.
- Bundesministerium für Soziales, Gesundheit, Pflege und Konsumentenschutz (BMSGPK). (2021). Factsheet zu Community Nursing. https://www.sozialministerium.at/dam/jcr:3745e7ac-2c38-43ce-a2ea-73bc5f3f65e4/factsheet_CommunityNursing_final_barrierefrei.pdf.
- Canadian Nurses Association. (2010). *Canadian nurse practitioner core competency framework*. Ottawa. https://www.cno.org/globalassets/for/rnec/pdf/competencyframework_en.pdf.
- Dimmel, N., & Schmid, T. (2013). *Soziale Dienste in Österreich*. StudienVerlag.
- Dresing, T., & Pehl, T. (2018). *Praxisbuch Interview, Transkription & Analyse. Anleitungen und Regelsysteme für qualitativ Forschende* (8. Aufl.). Marburg.
- Flick, U. (2019). *Qualitative Sozialforschung. Eine Einführung* (9. Aufl.). Rowohlt Taschenbuch Verlag.
- Foster, G., Taylor, S. J. C., Eldridge, S. E., Ramsay, J., & Griffiths, C. J. (2007). Self-management education programmes by lay leaders for people with chronic conditions. *The Cochrane database of systematic reviews*, (4), CD005108. doi: 10.1002/14651858.CD005108.pub2.
- Franek, J. (2013). Self-management support interventions for persons with chronic disease: An evidence-based analysis. *Ontario Health Technology Assessment Series*, 13(9), 1–60.
- Gesundheit Österreich GmbH (GÖG). (2021). *Fördercall Community Nursing*. https://goeg.at/sites/goeg.at/files/inline-files/F%C3%B6rdercall_CN_final.pdf.
- Gesundheit Österreich GmbH (GÖG). (2023). Umsetzungsstand der Community-Nursing-Projekte. https://www.goeg.at/CN_Stand_Pilotprojekte.
- Glaser, B. G.; Strauss, A. L. (2010). *Grounded theory. Strategien qualitativer Forschung. Unter Mitarbeit von B. Hildenbrand* (3. unveränderte Auflage). Verlag Hans Huber.



- Grady, P. A., & Gough, L. L. (2014). Self-management: A comprehensive approach to management of chronic conditions. *American journal of public health*, 104(8), e25–31. doi: 10.2105/AJPH.2014.302041.
- Green, J., Willis, K., Hughes, E., Small, R., Welch, N., Gibbs, L., & Daly, J. (2007). Generating best evidence from qualitative research: The role of data analysis. *Australian and New Zealand Journal of Public Health*, 31(6), 545–550. doi: 10.1111/j.1753-6405.2007.00141.x.
- Harmon, M., Joyce, B. L., Johnson, R. G. H., Hicks, V., Brown-Schott, N., Pilling, L., Collinge, R., & Brownrigg, V. (2020). An exploratory survey of public health nurses' knowledge, skills, attitudes, and application of the Quad Council Competencies. *Public health nursing*, 37(4), 581–595. doi: 10.1111/phn.12716.
- Harris, R. C., & Popejoy, L. L. (2019). Case management: An evolving role. *Western journal of nursing research*, 41(1), 3–5. doi: 10.1177/0193945918797601.
- Helfferrich, C. (2011). *Die Qualität qualitativer Daten. Manual für die Durchführung qualitativer Interviews* (4. Aufl.). VS Verlag für Sozialwissenschaften.
- Hermanns, H. (2019). Interviewen als Tätigkeit. In U. Flick, E. von Kardorff, & I. Steinke (Eds.), *Qualitative Forschung. Ein Handbuch* (13. Auflage, pp. 360–368). Reinbek bei Hamburg: Rowohlt Taschenbuch Verlag.
- Hofmarcher, M. M. (2013). *Das österreichische Gesundheitssystem. Akteure, Daten, Analysen*. MWV Medizinisch Wissenschaftliche Verlagsgesellschaft.
- Horak, M., & Haubitzer, S. (2021). *Community health nurse. Handlungsfelder in der Pflege im Kontext von Public Health* (1. Auflage). Facultas. <https://elibrary.utb.de/doi/book/10.24989/9783991114352>.
- Kringos, D. S., Boerma, W. G. W., Hutchinson, A., & Saltman, R. B. (2015). *Building primary care in a changing Europe. Case studies* (Observatory studies series, 40). European Observatory on Health Systems and Policies. <http://www.euro.who.int/en/about-us/partners/observatory/publications/studies/building-primary-care-in-a-changing-europe-case-studies>.
- Laurant, M., van der Biezen, M., Wijers, N., Watananirun, K., Kontopantelis, E., van Vught, A. J. (2018). Nurses as substitutes for doctors in primary care. *The Cochrane database of systematic reviews*, 7(7), CD001271. doi: 10.1002/14651858.CD001271.pub3.
- Lengauer, M. (2020). Brauchen wir «Community Nurses»? *Kommunal*, (4), 28–30. <https://kommunal.at/brauchen-wir-community-nurses>.
- Liang, C., Mei, J. Liang, Y., Hu, R., Li, L., & Kuang, L. (2019). The effects of gatekeeping on the quality of primary care in Guangdong Province, China: A cross-sectional study using primary care assessment tool-adult edition. *BMC family practice*, 20(1), 93. doi: 10.1186/s12875-019-0982-z.
- Lidauer, H., Kainrath, S., Schulc, E., Müller, G., & Stummer, H. (2022). Fähigkeiten und Kompetenzen von Community Health Nurses. Ein Scoping Review. *Pflegewissenschaft*, 24(4), 230–243. doi: 10.3936/12098.
- Mayring, P. (2015). *Qualitative Inhaltsanalyse. Grundlagen und Techniken* (12. Aufl.). Beltz.
- Meuser, M., & Nagel, U. (2009). Das Experteninterview — konzeptionelle Grundlagen und methodische Anlage. In S. Pickel, G. Pickel, H.-J. Lauth, & D. Jahn (Eds.), *Methoden der vergleichenden Politik- und Sozialwissenschaft. Neue Entwicklungen und Anwendungen* (465–479). VS Verlag für Sozialwissenschaften.
- Mey, G., & Mruck, K. (2007). Qualitative interviews. In G. Naderer & E. Balzer (Eds.), *Qualitative Marktforschung in Theorie und Praxis. Grundlagen, Methoden und Anwendungen* (249–278). Wiesbaden: Gabler, S. <https://nbn-resolving.org/urn:nbn:de:0168-sssoar-2994>.
- Minnesota Department of Health. (2019). *Public health interventions: Applications for public health nursing practice* (2. Aufl.). Minnesota Department of Health.
- Misoch, S. (2019). *Qualitative Interviews* (2. Auflage). De Gruyter Oldenbourg.
- Polivka, B. J., & Chaudry, R. V. (2014). Public health nursing position descriptions congruence with ANA standards. Public health essential services, and quad council domains. *Public Health Nurs*, 32(5), 532–542. doi: 10.1111/phn.12148.
- Przyborski, A., & Wohlrab-Sahr, M. (2021). *Qualitative Sozialforschung. Ein Arbeitsbuch* (5. Aufl.). De Gruyter Oldenbourg.
- Schaffer, M., & Strohschein, S. (2019). *Public health interventions: Applications for public health nursing practice* (2. Aufl.). Minnesota Department of Health. <https://www.health.state.mn.us/communities/practice/research/phncouncil/wheel.html>.
- Scheydt, S., & Hegedüs, A. (2022). Dimensionen und konzeptuelle Merkmale des Community Health Nursing. *HeilberufeScience*. doi: 10.1007/s16024-022-00386-y.
- Strauss, A. L., & Corbin, J. M. (1996). Grounded Theory. Grundlagen qualitativer Sozialforschung. Beltz.
- Tinetti, M. E., Fried, T. R., & Boyd, C. M. (2012). Designing health care for the most common chronic condition—multimorbidity. *JAMA*, 307(23), 2493–2494. doi: 10.1001/jama.2012.5265.
- Tortajada, S., Giménez-Campos, M. S., Villar-López, J., Faubel-Cava, R., Donat-Castelló, L., Valdivieso-Martínez, B., Soriano-Melchor, E., Bahamontes-Mulió, & García-Gómez, J. M. (2017). Case management for patients with complex multimorbidity: Development and validation of a coordinated intervention between primary and hospital care. *International journal of integrated care*, 17(2), 4. doi: 10.5334/ijic.2493.
- Velasco Garrido, M., Zentner, A., & Busse, R. (2011). The effects of gatekeeping: A systematic review of the literature. *Scandinavian journal of primary health care*, 29(1), 28–38. doi: 10.3109/02813432.2010.537015.
- WHO. (1978, September 6–12). *Declaration of Alma-Ata* [Conference Presentation]. International Conference on Primary Health Care, Alma-Ata, USSR. <https://www.who.int/teams/social-determinants-of-health/declaration-of-alma-ata>.
- WHO. (2017). *Enhancing the role for community health nursing or universal health coverage* (Series No. 18). Human Resources for Health Observer. <https://www.who.int/publications/i/item/enhancing-the-role-for-community-health-nursing-or-universal-health-coverage>.



- Wild, M. (2020). Die Community Nurse als Teil der Versorgungslandschaft. *Pflege Professionell*, 28, 7–11. <https://pflege-professionell.at/cn>.
- Witzel, A. (2000). The Problem-centered interview. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 1(1). doi: 10.17169/fqs-1.1.1132.