



Danish Network for
Community Pharmacy Practice
Research and Development

The Danish Pharmacy Network

PRISMA Symposium, Amsterdam, May 28, 2024

Lotte Stig Nørgaard

(Co)-initiator and steering group member of pharmacy network



Lotte Stig Nørgaard

Professor

Social and Clinical Pharmacy

Universitetsparken 2

2100 København Ø

lotte.norgaard@sund.ku.dk

Phone: +45 35 33 61 01



ORCID: [0000-0002-3490-0475](https://orcid.org/0000-0002-3490-0475)

Presentation

Research outputs


Prizes

Press/Media

...


Pharmacy is and always was my interest area: it's technology, it's staff, what staff says and does in relation to customers, customers' experience of the drug information, their drug-related problems and solutions, the pharmacy and the pharmacist of the future, cognitive services in pharmacy, pharmacy and pharmacist's cooperation with the surrounding community. So social and clinical pharmaceutical issues. In recent years, I have also been qualified in the field of journalistic research dissemination, just as I have also in recent years done quite a lot of research in the hospital area.

Most downloads

[Being a long-term user of nicotine replacement therapy:](#) 822 downloads 


[Interpretative phenomenological analysis of former smokers' experience of continued nicotine dependence](#)

Contribution to conference › Poster › Research

[Addressing Ethnic Inequalities In Medicine Use In Denmark: Selected](#) 569 downloads 

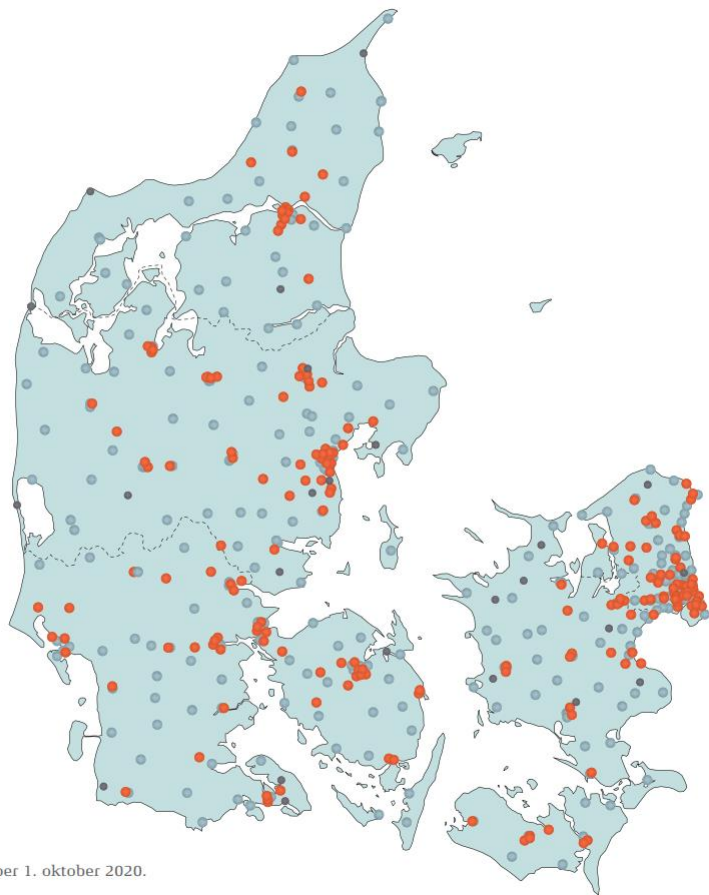
[Theory-Based Interventions](#)

Contribution to journal › Review › Research › peer-review

[Establishing trustworthiness and authenticity in qualitative pharmacy research](#) 535 downloads 

Contribution to journal › Journal article › Research › peer-review

Community pharmacies in Denmark



More than 520 community pharmacies
197 pharmacy owners

12 staff per pharmacy

96,500 customer visits
222 daily prescription customers

Turnover: DKK 25 million (EUR 3.3 million)

Network established in 2016

Basic narrative

The network helps
Danish pharmacies
develop pharmacy for
the benefit of citizens
and society

- Aim: to strengthen pharmacy practice and pharmacy practice research in Denmark by providing a forum where researchers and representatives of community pharmacies meet to share knowledge and support evidence-based community pharmacy practice.



**Community
pharmacies and
researchers meet**



**Discussion
and
collaboration**



Ideas



Quality



Results



Publication

**Danish Network
for Community
Pharmacy Practice
Research and
Development**



Organization I

- Community pharmacy **owners** are members
 - Pharmacists and pharmacy technicians
- Four newsletters a year
- No financial support
- Membership is free
- Steering group



Af Lone Søndergaard, Lotte Stig Nørgaard, Ulla Hedegaard, Kerly Maire Servilieri, Susanne Bendixen, Julianne Marie Ris Hansen, Charlotte Røssing, Rikke Nørgaard Hansen

I dette nyhedsbrev fortæller vi om netværksmødet den 9. november, nye projekter i netværket og resultater fra specialeprojekter i apotekspraksis. Derudover kan du læse nyt fra netværkets facebookgruppe.



Siden 2017 har Aarhus Kommune arbejdet med fast tilknyttede læger på kommunens plejehjem. Ønsket var at skabe en større faglig indsigt, bedre medicin håndtering, større kontinuitet i pleje- og behandlingsforløb samt en reduktion i antallet af forebyggelige indlæggelser. Efter tre år er projektet nu blevet evalueret af Forskningsenheden for Almen Praksis i Aarhus. Evalueringen viser, at der er sket en positiv ændring i kontaktmønstrene til almen praksis og en reduktion i antallet af indlæggelser. Konkret er der sket forbedringer indenfor følgende områder: Færre kortvarige indlæggelser, færre

Organization II

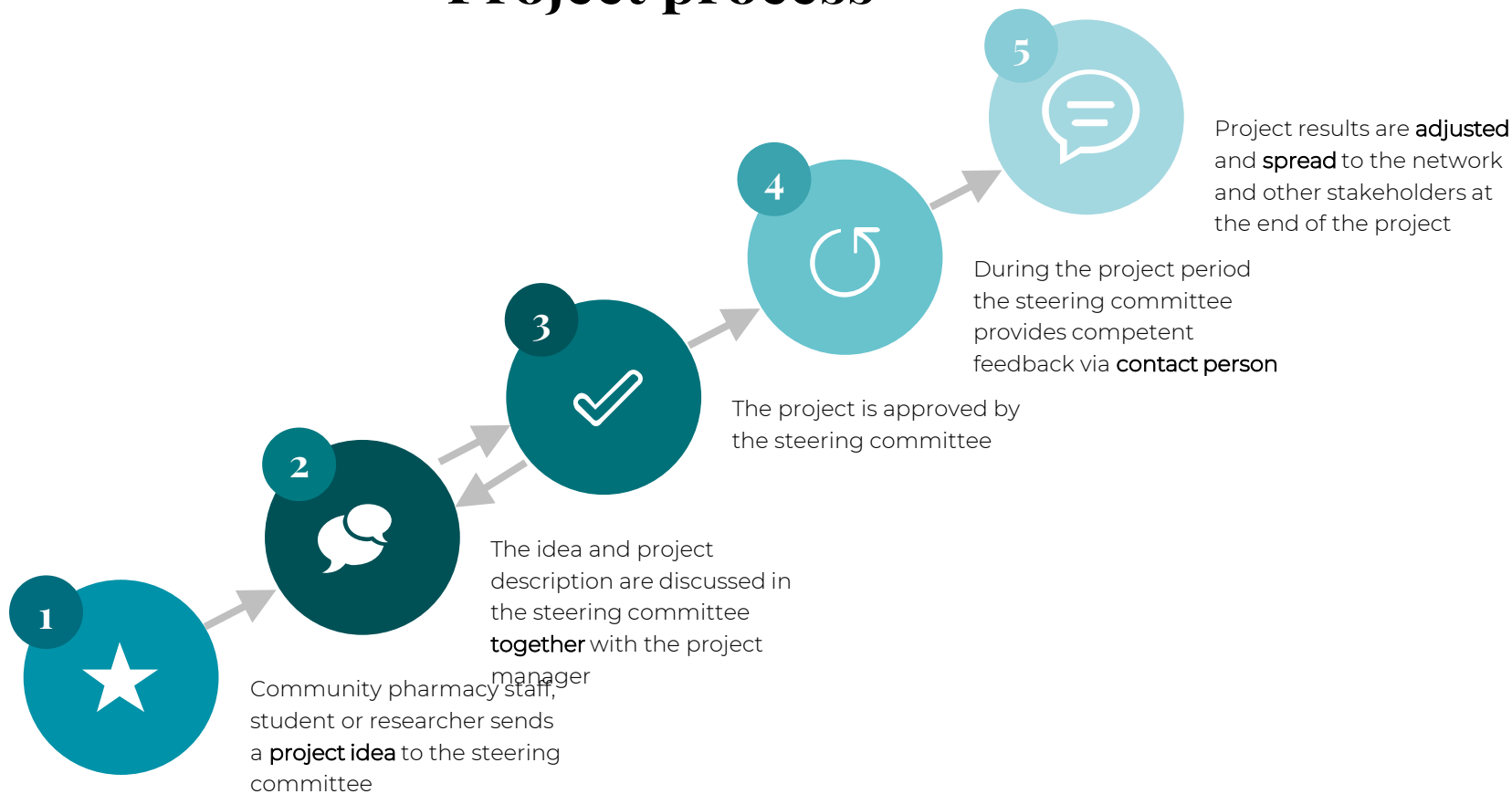
Steering committee tasks:

- An on-line meeting every month –
2 yearly physical meetings
- Review board
- Support project managers
- Arrange network meetings (earlier...)
- Collect information for newsletters





Project process





Pharmadeem

Kommunikation mellem apotekspersonalet og andre borgere med anden etnisk baggrund end dansk

Covering practice at the community pharmacy

Development of new pharmacy health services

Improvement of existing tasks and services
















Research projects

Practice-based projects

Completed projects (some of the 33)















Danish Network for
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-  Communication between community pharmacies and elderly people with ethnicities other than Danish
-  Narrative medicine in pharmacy practice – a feasibility study
-  Pharmacy customers' wishes and attitudes towards COVID-19 antibody test
-  KliAkkit – a technology which supports adherence counselling
-  Quality of pregnancy prevention in women using teratogenic drugs
-  Shortage of medicine in community pharmacies
-  Establishing an inter-professional collaboration between hospital and community pharmacists in Denmark
-  Optimised medication counselling – a pharmacy practice research project
-  Customers' information seeking behavior prior to community pharmacy visits
-  Assessment of dosage rationality of antibiotics to infants, children and adolescents
-  Unavailable prescriptions at Danish community pharmacies: a national descriptive study
-  Reduction in long-term treatment with proton pump inhibitors (several studies)
-  Collaboration between community pharmacies and general practices
-  Tripple whammy effect – safe use of NSAID
-  COVID-19 affecting community pharmacies - from pharmacy students' point of view

Projects in progress (some of the 16)



Danish Network for
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-  Stop Medicine Waste Alliance study
-  Scope and practice of re-prescribing service in Danish community pharmacies
-  Towards more appropriate use of drugs – Testing models for stopping unnecessary treatment with PPIs
-  Job satisfaction among pharmaconomists and community pharmacists in DK
-  15 STARS – validation questionnaire – patient compliance
-  Wegovy use in DK
-  Patient voices in research – the elderly
-  Pharmacy and late effects of cancer (several studies)
-  Experiences with abuse of OTC medication in community pharmacies
-  Dosing semaglutid (Ozempic)
-  PEP device training for patients at community pharmacies
-  Feedback guide – pharmacy counter

Customers' information seeking behavior prior to community pharmacy visits: A community pharmacy survey

Lundby ^{a, c}, Charlotte Rossing ^d, Rikke Nørgaard Hansen ^d

Six community pharmacies

Data collection for three weeks

2,623 customers

14.4% sought information



Triple whammy effect – safe use of NSAID



Idea and discussion at network meetings

12 community pharmacies

8% of costumers at risk of TWE



Counselling customers at risk of the triple whammy effect at community pharmacies – A feasibility study

[Rikke Nørgaard Hansen](#)^a, [Alaa Burghle](#)^b, [Sofie Brøndal Grünfeld](#)^a,
[Anne Mette Jørgensen](#)^c, [Stine Westergaard](#)^d, [Hanar Hamid](#)^e,
[Charlotte Verner Rossing](#)^a





Selected RESULTS



Stop Medicine Waste:

Graabæk T, Amstrup G, Blenstrup BG, Kloster KV, Winther BN, Thøgersen P, Nørgaard LS. PHARMACIES. 2023. Poster, The European Society of Clinical Pharmacy (ESCP)

Graabæk Hansen T, Nørgaard LS. Indleverede medicinrester på apoteker

Hansen TG, Nørgaard LS, Amstrup G, Winther BN, Thøgersen P, Kloster KV. Medicinrester afleveret af borgere på apoteker i Danmark. 2023

Graabæk T, Amstrup G, Blenstrup BG, Kloster KV, Winther BN, Thøgersen P, Nørgaard LS. Oral presentation by Citizens to Danish Community Pharmacies. Oral presentation

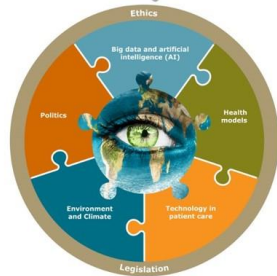


Figure 1. Conceptual model situating pharmacy practice and research in the Anthropocene discourse (Illustrated by Lene Witzøe, Pharmacist)



21 August 2023

By Lotte Stig Nørgaard, Janine M. Traulsen, both at the University of Copenhagen, Faculty of Health and Medical Sciences Department of Pharmacy Copenhagen, Denmark, and Charlotte Verner Rossing, Department of Research and Development, Danish College of Pharmacy Practice, Hillerød, Denmark.

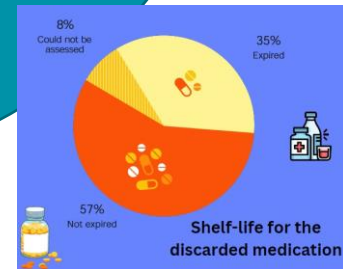
39 pharmacies

One week: **4,384 registrations** of discarded medications were completed (average 112 packages/pharmacy) (3 mio packages/year)

21% of drug packages were **unopened packages** and 40% contained half or more in the package.

12 % of discarded medicine comes from **estates**

The price for discarded medications total appr. **410 mio DKK/yearly** (number attached some with uncertainties)




Opportunities for the community pharmacy

Expectation:

- Get, add and qualify ideas
 - Find collaborators
 - Discuss the different phases of project
 - Learn from other pharmacies' experiences
 - Gain experience
 - Run own projects
 - Participate in other pharmacies' projects
 - Communicate results
 - Contribute to development of pharmacy practice
 - Ownership
- * Share knowledge and ideas
 - * Initiate and participate in projects
 - * **Communicate projects and results**
 - * Support from pharmacy management
-

Quotes from participating community pharmacists and researchers



"Collaboration with other community pharmacies and researchers push me out of my comfort zone and increase my competences in project management."
Community pharmacist

"It is very motivating in my daily job at the pharmacy to participate in projects. It gives me an opportunity to be updated about what is going on in the community pharmacy sector."
Community pharmacist

"Projects in the network make me feel well equipped to address the patient's needs."
Community pharmacist

"The network makes my research realistic and close to the pharmacies and the patients."
Researcher

"The data collection becomes more effective when many community pharmacies, which I have access to through the network, participate. It generates a lot of data in a short period of time."
Researcher

"My research is now visible for more community pharmacies. That gives me plenty of new ideas which can develop pharmacy practice further"
Researcher

Why did/do we succeed?

• **History:**

- Small country 😊
- Tradition for developing pharmacy practice
- Pharmacist union – local pharmacy circle association
- work – network days – Pharmacy Association consultancy
- UPPER network

• **Steering group:** Composition, structure, secretarial support, hard work... and a lot of laughing 😊

• **Communication:** All three unions/universities/Pharmakon, strategy, dissemination/outreach/SoMe

• **Projects:**

- Makes work more interesting and varied
- Breath – room for all types of projects

Int J Clin Pharm (2014) 36:608–614

DOI 10.1007/s11094-014-0903-8

COMMENTARY

The Utrecht Pharmacy Practice network for Education and Research: a network of community and hospital pharmacies in the Netherlands

Ellen S. Koster · Lyda Blom · Daphne Pothorst · Willem Rump · Marcel L. Bouvy

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Abstract Practice based networks can serve as effective mechanisms for the development of the profession of pharmacists, on the one hand by supporting student internships and on the other hand by collection of research data and implementation of research outcomes among public health practice settings. This paper presents the characteristics and benefits of the Utrecht Pharmacy Practice network for Education and Research, a practice based research network affiliated with the Department of Pharmaceutical Sciences of Utrecht University. Yearly, this network is used to realize approximately 600 student

Impact of findings on practice

- Practice based research networks (PBRNs) can be used in pharmacy practice research to collect data on practice settings.
- The Utrecht Pharmacy Practice network for Education and Research (UPPER), realizes approximately 600 student internships and 20 research projects each year.



What lies ahead of us?

- More practitioner- and especially pharmaconomist-initiated projects

- Cooperation with



Danish Hospital Pharmacy Research
Network (DanHoPR Network)

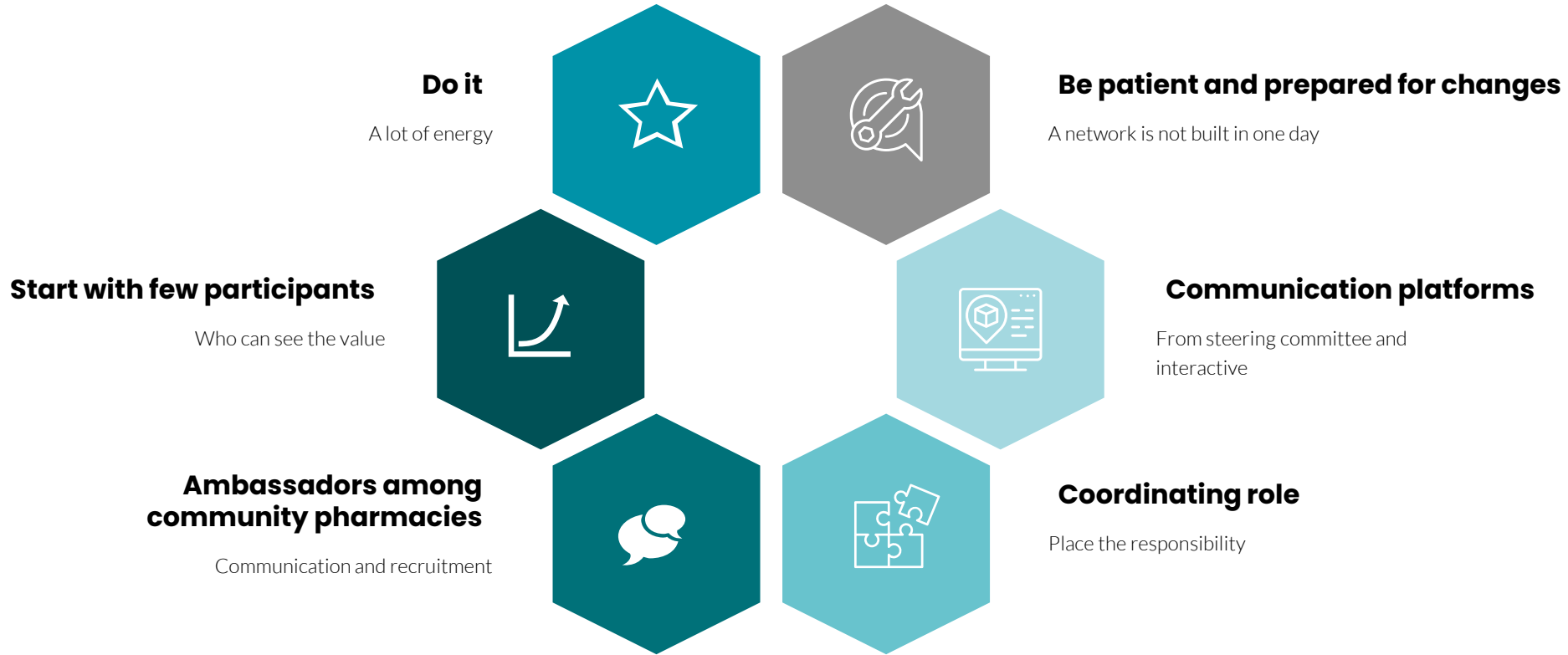
Hospitals and Health Care
Copenhagen



- Securing that project leaders want steering group input
- Support project leaders in seeking funding
- Projects on staff maintenance, use of AI
- Even more communication and interaction – nationally and internationally... FIP congress in Danmark 2025 😊



If you want to initiate a network like this





Institutional member of Pharmaceutical Care Europe (PCNE) in 2023



Review

The Danish Network for Community Pharmacy Practice Research and Development

Alaa Burghle ^{1,2,*}, Rikke Nørgaard Hansen ³ , Lotte Stig Nørgaard ⁴ , Ulla Hedegaard ², Susanne Bendixen ⁵, Lone Søndergaard ⁶, Kerly Servilieri ⁷, Julianne Hansen ⁵ and Charlotte Rossing ³

¹ Hospital Pharmacy Funen, Odense University Hospital, 5000 Odense, Denmark

² Clinical Pharmacology, Pharmacy and Environmental Medicine, Department of Public Health, University of Southern Denmark, 5000 Odense, Denmark; uhedegaard@health.sdu.dk

³ Department of Research and Development, Pharmakon, Danish College of Pharmacy Practice, 3400 Hilleroed, Denmark; rmh@pharmakon.dk (R.N.H.); cr@pharmakon.dk (C.R.)

⁴ Social and Clinical Pharmacy, Department of Pharmacy, Faculty of Health and Medical Sciences, University of Copenhagen, 2100 Copenhagen, Denmark; lotte.norgaard@sund.ku.dk

⁵ København Sønderbo Pharmacy, 2300 Copenhagen, Denmark; 199sb@apoteket.dk (S.B.); 199ju@apoteket.dk (J.H.)

⁶ Aarhus Viby Pharmacy, 8260 Viby J, Denmark; lone.soendergaard@mail.dk

⁷ Kløver Pharmacy Brædstrup, 8740 Brædstrup, Denmark; kerly@apoteket.dk




* Correspondence: alaa.hassan.burghle@rsyd.dk

Abstract: The community pharmacy has a number of attributes that makes it an excellent setting for research and development projects, as it is a highly accessible part of the healthcare system and is

Hansen RN, Nørgaard LS, Hedegaard U, Søndergaard L, Servilieri K, Bendixen S, Rossing C. Integration of and visions for community pharmacy in primary health care in Denmark. *Pharmacy Practice* 2021 Jan-Mar;19(1):2212. <https://doi.org/10.18549/PharmPract.2021.1.2212>

International Series: Integration of community pharmacy in primary health care

Integration of and visions for community pharmacy in primary health care in Denmark

Rikke N. HANSEN , Lotte S. NØRGAARD , Ulla HEDEGAARD, Lone SØNDERGAARD, Kerly SERVILIERI, Susanne BENDIXEN, Charlotte ROSSING .

Published online: 22-Jan-2021

Abstract

In 2014, the Danish government launched a plan for health entitled: "Healthier lives for everyone – national goals for the health of Danes within the next 10 years". The overall objective is to prolong healthy years of life and to reduce inequality in health. In Denmark, the responsibility for health and social care is shared between the central government, the regions and the municipalities. National and local strategies seek to enhance public health through national and local initiatives initiated by different stakeholders. The Danish community pharmacies also contribute to promoting public health through distribution of and counselling on medication in the entire country and through offering several pharmacy services, six of which are fully or partly remunerated on a national level. Because of greater demands from patients, health care professionals and society and a lack of general practitioners, the Danish community pharmacies now have the opportunity to suggest several new functions and services or to extend existing services. The Danish pharmacy law changed in 2015 with the objective to maintain and develop community pharmacies and to achieve increased patient accessibility. The change in the law made it possible for every community pharmacy owner to open a maximum of seven pharmacy branches (apart from the main pharmacy) in a range of 75 km. This change also increased the competition between community pharmacies and consequently the pharmacies are now under financial pressure. On the other hand, each pharmacy may have been given an incentive to develop their specific pharmacy and become the best pharmacy for the patients. Community pharmacies are working to be seen as partners in the health care system. This role is in Denmark increasingly being supported by the government through the remunerated pharmacy services and through contract with municipalities. Concurrent with the extended tasks for the Danish community pharmacies and utilisation of their excellent competencies in medication the community pharmacies need to focus on their main tasks of supplying medicines and implementing services. This requires efficient management, an increased use of technology for distribution and communication and continuing education and training.

Keywords

Pharmacies; Primary Health Care; Delivery of Health Care, Integrated; Ambulatory Care; Community Health Services; Pharmacists; Community Pharmacy Services; Professional Practice; Denmark



Netværk for Udvikling af Apotekspraksis

Forside / Forskning / Apoteksnetværk

Netværk for udvikling af apotekspraksis

Formålet med Netværk for udvikling af apotekspraksis er at styrke apotekspraksisforskningen i Danmark. Det sker via et forum, hvor forskere og apoteker mødes om videndeling, udvikling af apotekspraksisprojekter og fastholdelse af resultater.

<https://www.pharmakon.dk/forskning/apoteksnetvaerk/>

