

Development of clinical pharmacy services in Denmark from 2008 to 2019

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Background Since American hospital pharmacists published the concept of Pharmaceutical Care the 1990s, clinical pharmacy has gone through a rapid development in Denmark. Especially within hospital pharmacy, the growth in tasks and personnel has been significant.

Purpose The purpose was to give an overview of clinical pharmacy in Denmark and to evaluate the development of clinical pharmacy services in Danish hospitals during the past few decades.

Method National surveys conducted at all hospital pharmacies in Denmark every five years were used to evaluate the development of clinical pharmacy services in Danish hospitals. Separate surveys on the structural organization and the available human resources, and on patient-related activities were distributed in 2008, 2013 and 2019. The questionnaires were sent to all hospital pharmacies in Denmark. Semi-structured interviews were used to provide supplementary data for analysis.

Findings All (N=8) hospital pharmacies participated in the survey. From 2008 to 2013 the number of pharmacists employed within clinical pharmacy increased by 43 % and from 2013 to 2019 that number increased by another 24 % to a total of 169 employed pharmacists in total. During this period, the amount of hours spent on patient-related services increased from 435 in 2008 to 772 in 2013 to 1720 in 2019. This corresponds to a weekly increase per pharmacist from 4.6 to 10.2 hours meaning that a pharmacist spent 28 % of their time working on patient related services in 2019. This development gives an increase of 123 % from 2013 to 2019 and a total increase of 295 % from 2008 to 2019. The most common of the patient-related services carried out are medication review (39 %) and medication reconciliation (15 %). Most commonly, these services take place during admission at hospital (54 %).

Conclusion The field of clinical pharmacy services has grown tremendously in Denmark with a large increase in the number of pharmacists employed. Furthermore, the services are shifting from logistical tasks to patient-related services. This overview of the evolution of clinical pharmacy in Denmark is valuable in order to exploit the potential for future development.