

**ORIGINAL RESEARCH:
EMPIRICAL RESEARCH - QUALITATIVE**

“There was no panic”—Nurse managers’ organising work for COVID-19 patients in an outpatient clinic: A qualitative study

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Abstract

Aim: To provide insight into the contribution of nursing to the establishment and running of a hospital-based outpatient clinic for COVID-19 infected patients, and thereby to inform the development of similar nursing care and healthcare more generally.

Design: Qualitative descriptive study centred on collaboration between nurse managers and researchers.

Methods: Drawing on Donabedian’s model of quality health services and the work of Allen on “Nurses’ organising work”, data were collected using four semi-structured, audio-recorded, focus group interviews with five nurse managers. The interviews were conducted in May and June 2020, transcribed, and subsequently analysed using deductive and inductive content analysis into an overarching category, main categories, and sub-categories.

Results: “There was no panic – challenged by the unprecedented” was a strong thread, which was reflected in two categories: (a) *Everyone walked in step*, containing the sub-categories: Public officials set the tone, Creating order in disorder, and Mutual respect and teamwork, and (b) *Inspired by extraordinary accomplishments*, encompassing the sub-categories: Realising one’s potential and Unexpectedly rewarding. In exceptional circumstances the nurse managers’ decision-making authority grew, material and manpower resources were sufficient, promptly constructed work procedures were in place, and tasks were completed instantly in trusting and respectful interdisciplinary collaboration. With sound support and trust from hospital directors, the nurse managers utilised their expertise to the fullest and they were proud of their work.

Conclusion: The findings portray the almost invisible work of nurse managers in organising complex care. Although the circumstances were exceptional the findings speak to the accomplishments that can be gained when nurse managers have autonomy and the opportunity to utilise their professional capacity to the fullest.

Impact: The findings reveal the almost invisible work of nurses in organising complex care and can inform the establishment of outpatient clinics for patients infected with COVID-19 and of healthcare development more generally.

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KEYWORDS

ambulatory care, COVID-19, leadership, nurses, outpatient clinics, pandemics, qualitative research, telemedicine, urgent care

1 | INTRODUCTION

The coronavirus disease 2019 (COVID-19) brought unforeseen and sudden challenges to the healthcare system in Iceland as elsewhere. Prompt actions within and outside the system to battle the disease were noticeable. A significant part of these actions was a hospital-based outpatient clinic that was established, almost overnight. The contribution of nursing to this event, which is exceptional in the history of healthcare for COVID-infected patients and has relevance internationally for other complex health problems, warrants investigation.

2 | BACKGROUND

In the first months of the year 2020 the government of Iceland took massive actions to contain the COVID-19 pandemic, significantly influencing healthcare institutions within the socialised healthcare system, which serves a population of about 365 thousand. The actions, which conformed to the National Response Plan for Global Pandemics, had two main goals: (a) To protect the vulnerable i.e., individuals with underlying medical conditions and the elderly, and (b) To ensure that the healthcare system could manage the strain of the disease (The Directorate of Health in Iceland & The Department of Civil Protection and Emergency Management, 2020a). A prediction model for the number of people diagnosed with COVID-19 and implications for the healthcare and social systems was used from the outset and has been regularly updated throughout the pandemic (The Directorate of Health in Iceland & The Department of Civil Protection and Emergency Management, 2020b). No lockdown was imposed. Concerted efforts were made to activate the whole nation under the slogan "We are all Civil Protection". People diagnosed with COVID-19 were required to self-isolate, the majority at home. Those who had been exposed to infected people were ordered to quarantine. The primary health care service as the first line of contact in healthcare, organised the screening of people on a national scale and received the first patients infected with COVID-19 (Sigurðsson et al., 2020). The Department of Civil Protection and Emergency Management conducted the tracing of infected people. The country's biggest hospital, Landspítali—The National University Hospital of Iceland (LUH) took over care of the COVID-19 infected patients, provided in-patient care in the capital area, and led the organisation of COVID-19 healthcare nationwide. The Icelandic government delegated the authority for public actions to a considerable degree to a troika consisting of three chief public officials, the Director of Health, the Chief Epidemiologist, and the National Commissioner of the

Impact Statement

Clinical practice and healthcare more generally may benefit, in terms of quality care and cost, by placing greater emphasis on utilising the capability of nurse managers to organise hospital-based outpatient care for patients with intricate health problems, e.g., the COVID-19 virus. The empowering influences on the nurse managers by the unique delegation of power and trust from the hospital administrators in this study warrants further exploration in nursing management.

Icelandic Police. The troika led and influenced actions at all levels of society, not least through massive quantities of information provided to the public and meticulous counselling the government (The Directorate of Health in Iceland & The Department of Civil Protection and Emergency Management, 2020a). This guidance was concurrently translated into the healthcare system in various ways.

The first patient was diagnosed on 28 February 2020. By the end of April 2020 when the first wave of the pandemic subsided, 12% of the population had been tested for SARS-CoV-2, resulting in 1797 patients being confirmed with COVID-19 diagnosis or 4.9 per 1000 individuals. Early in the pandemic an outpatient COVID-19 clinic was established in LUH. It started out as a telehealth risk assessment service to serve the whole country to provide timely and appropriate care, minimise hospitalisation and morbidity, and preserve the quality of life. The outpatient clinic quickly expanded into providing comprehensive and holistic surveillance of patients in self-isolation, aiming to support and guide people during their illness. About two weeks after its initiation an on-site urgency care clinic was added to the telehealth service where patients with severe symptoms were received for examination, observation, and treatment e.g., intravenous fluid and antibiotics, or hospitalisation as needed. Bringing the on-site clinic into being prevented infected patients from attending the hospital's emergency room and the primary healthcare centres where they might transfer the virus to other people (Samuel & Benedikz, 2020).

When the first wave of the pandemic subsided a total of 101 patients (5.7%) had been hospitalised at LUH, of whom 27 (1.5%) were admitted to intensive care, and 10 (0.6%) died (Eythorsson et al., 2020). There were 1762 patients who had been served via telephone with a medium of nine phone calls per patient. There were 212 patients who had been seen at the on-site urgency clinic in 362 visits. Of those, 47 were admitted to the hospital. None of

the patients treated in the on-site urgency clinic died. No healthcare professional became infected while working in the clinic (Helgason et al., 2021). Nurses had a major role in running the service in the outpatient clinic, with 87 nurses working there when the pandemic was at its peak: 22 nurses in the on-site urgent care clinic and 65 in the telephone surveillance, many working from home (Samuel & Benedikz, 2020).

Guidelines about organising nursing and healthcare for people infected with the COVID-19 virus were sparse at the beginning of the pandemic. One of the first guidelines was launched in March (WHO, 2020). Since then, there have been frequent additions (e.g., NIH, 2021). Knowledge of actions in recent contagious epidemics has become an important source in the pandemic, particularly the use of telehealth for remote assessment, triage, and surveillance of infected patients (Keshvaridoost et al., 2020; Nejadshafiee et al., 2020).

We frame the research within two theoretical frameworks. Donabedian's model of structure-process-outcome is widely used to guide the evaluation of quality of health services (Berwick & Fox, 2016). The theoretical framework of Davina Allen (2015) of "nurses' organising work" is useful to study the contribution of the nurse managers in establishing and securing quality nursing and healthcare of patients in collaboration with other healthcare professionals. Allen's work is based on observational research on the everyday work of nurses on hospital wards in the United Kingdom. Although aimed at describing the work of staff nurses, this framework has relevance for elucidating how the nurse managers operate, especially in the context of the "invisible work of nurses" (Allen, 2015). As Allen points out, nurses' work is often seen as ordinary and mundane. The reality is, however, that it is based on highly sophisticated knowledge, is extremely diverse, complex, multifaceted, and requires high technical proficiency and fine-tuned interactions with diverse groups of healthcare professionals. Care of patients is carried out in close collaboration and is imbued with uncertainty, ambiguity, and there are often unexpected occurrences. Allen describes the work of nurses on two interrelated levels. First, there is the direct hands-on care of patients. Secondly, there are actions on the organisational level, with consideration of the ward, the clinic, and the patient case load. In this research, Allen's theoretical framework was adapted to focus less on direct patient care and more on the organisation of nursing and healthcare.

Nursing had a central role in the establishment and running of the care provided in the COVID-19 outpatient clinic in LUH. Knowledge of the leadership that nurses demonstrated during this unprecedented situation may inform further development of outpatient nursing care for patients infected with COVID-19 and of healthcare development more generally. For that purpose, we embarked on a collaborative research project involving nurse managers in an outpatient clinic and a group of nurse researchers, to provide insight into the contribution of nursing to the establishment and running of a COVID-19 outpatient clinic.

3 | THE STUDY

3.1 | Aim

The aim of this study was to describe the contribution of nurse managers to the establishment and running of an outpatient clinic for patients infected with COVID-19. The research question was: What is the nurse managers' experience of establishing and running nursing care for people infected with the COVID-19 disease in an outpatient university hospital clinic?

3.2 | Design and reporting

This qualitative descriptive study is centred on collaboration between nurse managers and researchers (Heron, 1981). The consolidated criteria for reporting qualitative research (COREQ) is used for reporting the study (Tong et al., 2007).

3.3 | Collaborators participating

A nurse manager (S.H.S.) initially introduced the idea of this research to a researcher (H.J.), who subsequently initiated this collaborative research project. Both invited their colleagues to join the study group. The nurse managers belonged to the team that established the COVID-19 outpatient clinic. In total there were three ward nurse managers (S.H.S., E.D.R., G.O.), and two nurses working as project managers (A.H., S.I.). Their working experience as managers in nursing and healthcare ranged from 1 to 29 years. Four were educated to graduate level in nursing and project management and one was a graduate student in nursing management. The five researchers (B.I., E.J.G.H., S.Z., H.J., K.B.), who led the researchers have conducted several research projects on nursing practice and the contribution of nursing to health and wellbeing of people. They were all working at the hospital, and some had a joint position in academia. Two of the researchers (K.B., B.I.) worked for some time in the telehealth service during the beginning of the pandemic. In this "cooperative inquiry" (Heron, 1981) between nurse managers and researchers, all are considered co-researchers. This research was subsequently expanded on and became a part of a larger project on nursing care in the COVID-19 pandemic.

The collaborators knew each other, some had considerable experience of working together. Common to us was the perception that something very unusual had taken place within nursing, healthcare, and society. We felt fortunate and relieved that most people, and the society, came out of the first wave of the pandemic much better than could have. Simultaneously, a sense of uncertainty was all-embracing even though cohesiveness to combat the pandemic was all-encompassing. We sensed that nursing had made a unique contribution, which was somewhat hidden, but

needed to be portrayed, while acknowledging the fair share of other professions was inevitable. We acknowledge that we, and the nurse managers particularly, had vested interest in documenting the success of nursing in the outpatient clinic. To counterbalance this inclination, we made efforts throughout the research process, and particularly in the focus group interviews and data analysis (K.B., H.J.) to critically question what the nurse managers revealed about their contribution to the structure, process and outcome of the healthcare.

3.4 | Context and setting

The establishment of the outpatient clinic for patients infected with COVID-19 i.e., the telehealth service and the subsequent on-site urgency care, draws on previous experience of healthcare development in epidemics, (see Table 1).

The working process of the COVID-19 outpatient clinic was such that the first patient contact was made by a physician who previously had been notified about a positive diagnostic test. The

physician informed the patient about the disease, conducted a health assessment and triage, and ordered self-isolation. After that, surveillance of patients was mainly conducted by nurses. Physicians were notified through an electronic communication system or by phone when patients' condition worsened, or to prepare discharge. The discharge criteria from the clinic were that 14 days had passed from being tested positive and being symptom-free for 7 days. The physicians made the discharge phone calls. This and other protocols were written into a constantly updated web-based procedural handbook.

A 24/7 hot line, mainly run by experienced nurses, was set up on which patients could access healthcare professionals to discuss acute problems as well as other issues of concern. A chat room within the patients' electronic health record system was available for healthcare professionals, and a telephone line was established where nurses in the outpatient clinic and healthcare professionals in the countryside could consult with internal medicine trainees. A seamless transfer between service components was the objective, involving remote surveillance, on-site examination and treatment, and hospitalisation—depending upon

TABLE 1 Background of the establishment of the COVID-19 outpatient clinic

Operational management	Role/Description
Epidemic Committee Disaster Management Team Communicable Disease Control Department Disaster Preparedness and Management Team	The hospital's epidemic committee, which had for years worked on hospital-wide epidemic and disaster preparedness, was activated at the earliest notification of the pandemic to prepare for the imminent disaster in collaboration with the hospital's disaster management team and the Communicable Disease Control Department of the hospital. When the crisis level rose, the disaster preparedness and management team, which in the end included all members of the hospital's executive board, took over the operational management of the hospital (Samuel & Benedikz, 2020).
Experience from previous epidemics Clinical procedures	Previous experience from the Ebola epidemic in 2014 had shown the significance of having infectious disease specialists trace and keep contact with individuals who had travelled to infected areas and had possibly come into contact with infected people. Through remote guidance, mainly by telephone, infectious disease specialists had guided these people in taking care of themselves at home. When necessary, infectious disease specialists admitted them to the hospital. This was repeated for the COVID-19 infected patients at the outset of the pandemic (Guðlaugsson, 2020). Knowledge of some key symptoms of the disease and information on appropriate clinical procedures started to emerge at this time, and was quickly incorporated into the care (Greenhalgh et al., 2020; WHO, 2020).
Interdisciplinary Steering Committee	With the growing number of infected patients, the service needed to be expanded. An interdisciplinary steering committee was formed, which met twice daily during the whole emergency period, to coordinate and develop services in the outpatient clinic. The steering committee consisted of the Head of Division of Clinical Services II, the Director of Internal Medicine and Rehabilitation Services, the Director of Surgical Services, three head nurses, two chief physicians, one medical resident and a project manager (Helgason et al., 2020). One of the chief physicians was the chief of medical care in the clinic and one of the nurse managers was the head of nursing care (S.H.S.). The nurse manager delegated tasks to the other two nurse managers; to oversee the nursing care provided in the telehealth service (E.D.R.), and to coordinate the set up physical facilities and order technical and treatment resources (G.Ó.). A nurse manager was responsible for working with the hospital's informatics department in developing the electronic health record (A.H.). The project manager who worked for the steering committee was the editor of numerous procedures and guidelines on the COVID-19 patient care that were prepared and used in various parts of the hospital and other healthcare institutions around the country (S.I.).
Recruitment of manpower	Infectious disease specialists, internists, internal medicine trainees, junior medical residents, junior medical staff, and a large group of nurses particularly from outpatient clinics of the hospital and clinical nurse specialists from various specialties, as well as nurses from a contingency pool, organised by the government, were temporarily transferred, or recruited for the COVID-19 outpatient clinic.
Information technology	The Information Technology Department was activated to collaborate with clinical staff and others on a wide variety of issues, including a special charting system in the patient electronic health records and a colour coding system to identify patient acuity level.

patients' needs (Helgason et al., 2020). The government rented and remodelled a hotel to accommodate people lacking a place to stay during isolation and quarantine. This facility was run by the Red Cross. Another valuable resource to ease the care outside the hospital was transportation of infected patients by ambulance services.

3.5 | Data collection

Data were collected through four focus group interviews where the experience of the five nurse managers who made up the nurse managers' team establishing the COVID-19 outpatient clinic was the focal point. There were four managers participating each time, not always the same each time. The interviews took place in a non-clinical facility at the hospital at about the time the first wave of the COVID-19 pandemic had waned in May and June 2020. The goal of having numerous interviews was to gather a wealth of valid data to inform the focus of the study from conceivably different perspectives, or to "explore perceptions, feelings, and thinking about issues, ideas, products, services, [and] ... opportunities" (Kruger & Case, 2015, p. 7) in relation to establishing and running the COVID-19 outpatient clinic. The events that were of focus were quite recent and their significance was gradually emerging. Two of the researchers— a moderator (K.B.) and an observer (H.J.)—conducted the interviews.

We followed an interview guide which was designed by the researchers in accordance with the study's theoretical frameworks, (see Table 2). In the interviews that followed, topics in the interview guide were explored in more depth. After each interview, the researchers (H.J., K.B.) conducted a preliminary analysis of the data and brought it up for clarification, elaboration, and confirmation in the subsequent interview. That which was of most significance to the establishment and running of the outpatient clinic was highlighted. Care was taken to ensure that all participants were active in the conversations and could express themselves freely. Care was also taken to critically question and insist that participants truly reflected on their experience. We (K.B.I., H.J.) repeatedly asked about key events, and through these questioning

insisting that the nurse managers acknowledged the contribution of other health professionals to the establishment and outcome of the outpatient clinic. Disagreement and opposing views did not happen. The interviews ceased when no new data surfaced in the interviews.

3.6 | Ethical considerations

The study is a part of a larger study, *Disease course of COVID-19 among patients undergoing extensive risk assessment and comprehensive and organised follow-up and management*. Approval was gained from the National Bioethics Committee of the Ministry of Health (VSN:20078/VSNb2020040005/03.01). Informed consent was not needed because the participants in the focus group interviews were co-researchers in this study.

3.7 | Data analysis

A mixture of deductive and inductive content analysis was used to analyse data from the transcribed focus group interviews (Elo & Kyngäs, 2007; Graneheim et al., 2017; Graneheim & Lundman, 2004). Drawing on notions from the work of Donabedian and Allen we used a deductive approach at the beginning of our analysis to allow respective conceptual frameworks to inform our overall approach. After that, an inductive approach was employed to illuminate the unique experience of the nurse managers as they portrayed it. We classified significant meaning units by identifying relevant quotes in the text, and then we grouped them into codes. The codes were subsequently grouped into a higher order level of sub-categories. Next, the sub-categories were grouped into main categories, and finally, an overarching category representing the experience of establishing nursing care in the COVID-19 outpatient clinic was established.

3.8 | Trustworthiness

Securing credibility of the findings and the research as a whole, we give a thorough description of the decision trail of the research process with special emphasis on the data analysis (Graneheim et al., 2017; Graneheim & Lundman, 2004). Using theoretical frameworks to underpin the study supports rigorousness in the data collection and data analysis. We conducted four focus group interviews with the same participants, followed by structured and repeated conversations within the research group to ensure consensus of the findings, to clarify meanings, and to explore the significance of the findings and the entire research report. To enhance transferability, we report the context of the study in detail (Graneheim & Lundman, 2004). Two researchers (K.B., H.J.) led the data collection, data analysis, and the writing of the research report with all co-researchers contributing.

TABLE 2 Interview guide for the focus group interviews

Opening - *Establishing and running the COVID-19 outpatient clinic was clearly a major challenge:*

1. What were the outcomes that you aimed at?
2. What did you do and how were you do that?
3. Which organisational components most influenced the establishing and running of the service?
4. What were the problems/obstacles?
5. What was helpful?
6. How were decisions made?
7. What was most important for the success of the clinic?
8. Were there any unexpected consequences—positive or negative—of the establishment of the COVID-19 outpatient clinic?
9. If you were to do things differently, what would you do?

4 | FINDINGS

The analysis of the focus group interviews with the five nurse managers revealed an overarching category, two main categories, and five sub-categories, (see Table 3). The sub-categories are not mutually exclusive. Because of the small number of nurse managers participating, they are not identified in the findings.

The overarching category “There was no panic – challenged by the unprecedented” was a strong thread in the conversations between participants. Despite these perilous circumstances that “clearly were a natural disaster”, there was no fear or panic. A typical example of the situation was: “I felt I was in the middle of a disaster, but there was no panic. ... We were so focused. I was never stressed. One day there were a lot of [patients]; it was a little worrying then, but things were always organised and under control”. Day in and day out the nurse managers conducted their work with a steady conviction that they could manage what lay in front of them. There were constantly new challenges, but they were dealt with in a manageable and constructive manner, which is reflected in the sub-categories; “Everyone walked in step” and “Inspired by extraordinary accomplishments”.

4.1 | Everyone walked in step

4.1.1 | Public officials set the tone

During the first wave of the pandemic the government adopted a firm tone and gave directions through public officials, which the whole nation followed. The society slowed down. “Everyone was in the same place in the hospital, the troika [Director of Health,

Chief Epidemiologist, and National Commissioner of the Icelandic Police], and the society. It was very evident that the whole society stood together; everyone was in it—350 thousand people”. The troika gave daily directions for the public and the healthcare system to which the hospital simultaneously reacted. Priorities in services were changed in the hospital. Non-acute services were put on hold. There was an organised redirection of patient flow e.g., elective surgeries were postponed, and some outpatient services were provided by telephone. This was a particularly effective structure to avert chaos and hospital overload. A nurse manager elaborated:

The troika set the tone. They were excellent; we followed—the whole hospital—and we were also excellent. The whole society sensed that all of us were doing the right thing. If the troika had fumbled somehow, we would also have had problems.

The nurse managers considered it their responsibility to do anything in every sense possible to contain the pandemic, which was the approach that was taken among the staff: “We were all in it together”. One important factor was that the actions of the steering committee, to which the nurse managers belonged, were in line with what the public officials proposed: “I sensed very strongly that the direction came from the public officials—the troika—and we were a continuation of what they proposed”. The hospital's action plan and respectful teamwork ensured coherence and unity:

We all had well defined roles and accountability. Everyone knew what the others were doing. There was such a good management of everything. That

TABLE 3 Overview of the study results: Codes, sub-categories, categories and the overarching theme

Codes	Sub-categories	Categories	Overarching theme
Cohesiveness and consistency	Public officials set the tone	Everyone walked in step	There was no panic – challenged by the unprecedented
Committed to contributing to the fullest			
Took the lead in developing the service in a record time	Creating order in disorder		
Recruited skilled nurses for different assignments and supervised daily care			
Supervised the development and installation of clinical protocols			
Autonomy, respect, and trust from directors	Mutual respect and teamwork		
Unity in a coherent, non-hierarchical interdisciplinary teamwork			
All doors fully open			
Confidence in knowing what was needed and how to achieve that	Realising one's potential	Inspired by extraordinary accomplishments	
Learning from experience			
Empowered by being able to employ their managerial expertise to the fullest	Unexpectedly rewarding		
Enjoyment, gratitude, and pride			

was the most important thing; the tasks at hand were clear and we all joined forces. ... Everyone walked in step, each with different tasks. It was like 'I will do this' and another one that.

4.1.2 | Creating order out of disorder

The nursing involvement in the establishment of the outpatient clinic came about rather abruptly. The number of infected people was escalating and the infectious disease specialists who had been contacting the patients by telephone were no longer able to keep up with this rapid increase. The primary healthcare service was also having a tough time. In an informal conversation where the Chief Medical Officer conversed with a chief physician about the pandemic, a nurse manager overheard the conversation and volunteered to join in: "This is a typical nursing matter, I said. I felt that we [nurses] should do this. Standard nursing care was needed: to support and care for these people was a nursing issue". As the Chief Medical Officer agreed with the nurse manager's suggestion, she quickly contacted some nurses on her unit who readily participated. The nurse manager recruited four other nurse managers who had experienced a temporary drop in demand for their services. Subsequently, a telehealth service within an outpatient clinic was established overnight and a few days later an on-site urgency clinic. The nurse managers' role was to define and plan resources for the outpatient clinic and ensure competent training in infection control of health personnel. There was close collaboration with trainees in internal medicine. The nurse managers had a fundamental role in organising and carrying out the nursing care.

The wide-ranging support from the directors of the hospital ensured the nurse managers' autonomy, which allowed them to take the lead in creating an effective structure of the service to develop and make decisions to develop the nursing care. The immensity of the situation required prompt reactions: "It is like being hit by a natural disaster. ... Then I realised how big this was—the seriousness of the situation and the number of patients". There was little knowledge of the virus, although it was constantly increasing. Risk assessment and ordering self-isolation were primary goals of the clinic, but the patients needed more. They needed holistic care including information about rules of isolation and quarantine, and the general principles of infection control. There was no "*exemplar to use*" and the nurse managers were not always certain of what was needed. They decided to trust experienced clinical nurses: "They were the ones who knew how to take care of the patients".

The swift increase in the number of patients called for immediate solutions. "During the first days we were constantly thinking 'we need protocols for this and for that'". Constructing clear processes and keeping them available in a written form was essential. It ensured the consistency of the service and provided access to information, which facilitated the orientation of nurses and physicians who were recruited to the clinic:

When staff came on board later in the process, they could access the documents and find out what to do and how, and whom to contact. There was no hearsay. As time went on, special procedures were put together both for the tele-health service and the on-site urgency clinic.

The nurse managers were key persons in composing these procedures, but the content came from various sources, particularly the epidemic committee and the steering committee. "We put them together and led their development. ... There were countless conversations where we phoned the administrators and insisted answers: 'How should we do this You have to decide on this now'. And the decision was made, and we put it into the right context". Within the hospital's communication platform (Facebook Workplace) there was a feature for these conversations. The project manager put this information into the computer system and documented the decision-making process every day.

One of the crucial elements was the development of a collective database to systematically document clinical information (charting) in the patients' electronic health record system in collaboration with the Information Technology Department (IT). This database was a continuation of a system that the infectious disease specialists had used in the telephone calls with patients at the outset—unstructured text and a scheme to triage the patients based on symptoms, age, and comorbidities. In record time and in close collaboration with the physicians one of the nurse managers became the central team member in developing this charting system with the IT department. With suggestions from nurses working in the telehealth service, a colour coding system was added to the database along with documentation of further symptoms and the counselling, educational, and support interventions that were provided. The colours in the coding system indicated the level of severity of a patient's disease. The system gave an overview of the status of the whole group of patients all at once, showing those in a serious condition and with worsening symptoms (red), worsening symptoms (yellow) mild and improving symptoms (green), as well as some other information, such as those who had been admitted (white) and those who were ready for discharge (brown). By this, no patient was left out.

4.1.3 | Mutual respect and teamwork

Extraordinary support and respect were experienced everywhere: "I felt that the whole hospital was united". There was also a "different style of communication" in this exceptional non-hierarchical interdisciplinary teamwork; "a kind of teamwork which is uncommon in a normal day. ... Nurses and medical staff members on an equal footing. ... I did not sense that someone 'owned' ideas or that we could not bring up ideas or anything of that sort".

The contributions and actions of the nurse managers were supported and highly valued by the hospital directors, who respected

their expertise, judgement, opinions, and competence to take over and finish their assignments.

They simply trusted us. Everything I said was accepted. I don't remember having to fight for anything. ... I had extremely good support from the Chief Nursing Officer. We talked many times per day. She totally supported me. ... This was our project. There were no intermediaries. We could go our own way and let the directors know afterwards. Meetings were twice a day. Everyone was included and informed. ... The steering committee simply enjoyed the trust to do what was needed without any reservations. ... We were learning by doing and no one necessarily knew how things should be. ... I felt I was listened to; I could ask for things and for alterations. We discussed them and came to a decision.

The clinicians participated in these meetings. New and unfamiliar symptoms were frequently brought up for exploration at the same time as new knowledge about the disease was communicated: "We started at 8.15 every single day with this briefing. Then everyone went on their way to work; everyone knew what they needed to do". These meetings were crucial to avoid ambiguity and inform the hospital directors of what was going on and what needed to be done. The teamwork went noticeably smoothly with one exception: "Time and again I got into quarrels with the internal medicine trainees,... In the end, everything worked out".

Looking back, the nurse managers did not consider this time stressful: "It was never difficult. I don't remember having felt that my work was difficult. I think that the key to it was that there were no hindrances; everyone was in it with us". The approach was: "What can I do to help you. 'Yes, of course, I will'. And all doors opened".

4.2 | Inspired by extraordinary accomplishments

4.2.1 | Realising one's potential

The contribution of nursing to the establishment and running the COVID-19 outpatient clinic was extraordinary. In record time, the nurse managers combatted the unprecedented. Explaining their confidence in knowing what was needed and how to achieve that, they referred to their formal education, training, and experience as managers:

We are used to the threefold responsibility for staffing, finances, and clinical care. We could draw on our toolboxes to make things happen. ... We knew the system and how things were related, and how to have the right skills mix. We had to plan, train the staff, have appropriate facilities, keep the electronic database intact and maintain oversight. Simply, these are things

that we do daily as nurse managers. ... Our prior experience of establishing other kinds of patients' units was very useful in these new circumstances.

These unusual circumstances made it possible to bring about changes overnight; something that the nurse managers were not used to but made them realise what could be achieved. This learning also gave them inspiration for how to implement changes in the future: "We need to be able to have this kind of teamwork in developing care for other patients. Yes, we should do that and in a speedy manner. It is amazing what we can accomplish".

The creation and adherence to procedures were important, particularly for new staff but also for care of other patients: "Having procedures documented means that you can always refer to them: 'This is how we do things here'. ... We will continue to work according to procedures".

4.2.2 | Unexpectedly rewarding

The nurse managers were proud of and felt gratified by the contribution that they made to the running of the hospital—what was accomplished in terms of avoiding a disaster for society, as well as safeguarding the wellbeing of patients and families. It was inspiring and empowering, and they expressed their fullest appreciation for having had the opportunity to be a part of this exceptional event: "I was extremely proud of myself when I saw what had been accomplished. It was magnificent".

Surprisingly, amidst the joy of having accomplished something extraordinary, feelings of shame surfaced when the nurse managers admitted that they missed the strange time during the first wave of the pandemic. They thought that this time had even been "enjoyable". This they clarified:

There was of course nothing pleasant about this disease, but it was the cohesiveness among us. We got to know many new people and there were many health professions coming together. There was no rivalry; everyone worked to their greatest potential. The respect. ... This is why we enjoyed ourselves.

When asked, what in retrospect they would have done differently, the answer was simple: "Nothing".

5 | DISCUSSION

This qualitative, collaborative study portrays the nurse managers as key players in developing a novel healthcare service in an outpatient clinic for people with the COVID-19 disease. The structure and process of this service came about rather abruptly, almost a fortuitous event. The nurses' decision-making authority suddenly grew, and tasks were completed instantly. Despite the uncertainty

that prevailed the nurse managers could rely on their expertise to develop the new service; they had done similar things before. The staff were all in it together and everyone worked to their greatest potential. Not least, the staff showed unconditional respect for each other, and for everyone's contribution. It was gratifying to be able to actively contribute to the welfare of people infected with this potentially deadly disease, and their families; they were proud of their work.

Several studies indicate that the various forms of outpatient tele-healthcare that were developed in the first wave of the pandemic were effective (Annis et al., 2020; Blazey-Martin et al., 2020; Lam et al., 2020). Anesi and colleagues (2020) described a conceptual framework for use while preparing and responding to imminent acute surge events related to infectious diseases like the COVID-19 pandemic. The framework includes four components that reflect the healthcare capacity strain – increased patient volume, increased patient acuity, special patient care demands, and/or resource reduction, together with outlining a dynamic surge preparation and response strategy in areas of space, staff, resources, and systems. This framework is remarkably like the structure, circumstances and actions at LUH in the first wave of the pandemic. One study described a short term “a nurse driven system of outpatient monitoring and support” for patients infected with COVID-19 (Driver et al., 2021, p. 1565) which had a structure and process that is similar to the clinic in LUH. In that study the service was launched within a very short timeframe, by adjusting an existing service model that had been developed for a different patient group. The service was mainly provided with the use of the telephone. The outcome of the service was quite positive. The authors concluded that “experienced registered nurses can provide comprehensive, effective and sustainable outpatient monitoring to high-risk populations with COVID-19” (p. 1564).

The low number of hospitalisations and the low death rate of patients are considered to partly reflect the successful outcome of this interdisciplinary service (Helgason et al., 2020). In an audit of the COVID-19 Quality and Scientific Research working group for the hospital the authors concluded:

The energy released during this time probably has no precedence in the history of Icelandic healthcare. ... The motivation of the hospital's highly skilled workforce who were given the autonomy to innovate, and the alignment of the whole healthcare system towards a common goal and capability for technological innovation were among the most significant strengths demonstrated (Samuel & Benedikz, 2020).

The COVID-19 disease pandemic is viewed as a crisis, and ‘crisis management’ is a term that has been used to describe the management of the healthcare. Crisis as a concept was not used by the nurse managers. However, their actions can be interpreted as representing successful crisis management. Burnison (2020) described leadership in a crisis with the purpose of accelerating through it, by referring to a U-shaped crisis curve. This curve has six interwoven components—Anticipate,

Navigate, Communicate, Listen, Learn and Lead—which the findings of this study confirm. Amidst all the ambiguity that prevailed, the daily meetings of the steering committee were helpful for anticipating what might lie ahead. Trust and clear lines of responsibility are apparent in the findings. The nurse managers listened and closely guided the nursing staff in the outpatient clinic, and they trusted them. Weaving these components together through the crisis curve reveals the final component ‘Lead’, which according to Burnison means to “be all in, all the time”.

An explicit goal of this research was to draw attention to the contribution of nurse managers in the establishment and running of the outpatient clinic for COVID-19 patients during the first wave of the pandemic. For that purpose, the theoretical frameworks guiding the study were helpful. As Allen (2015) notes, nurses' work is frequently invisible and there is tendency to consider it just a part of interdisciplinary collaboration of medical treatment of patients. The quite frequent invisibility of nurses' contribution to patients' care is apparent in descriptions of how the nurse managers' participation in the establishment of the outpatient clinic came about more by a chance than acknowledgement of their expertise and place in the service structure of the hospital. When they had joined in, they organised the work by using a wealth of complex knowledge and skills of various kinds. They communicated on a sophisticated level with diverse groups of healthcare professionals to collect and distribute information and to allocate resources—manpower, materials, equipment, and technology. The success of organising nursing and healthcare also relied on the way the directors of the hospital delegated decision-making to the nurse managers and other managers. As a team they had a clear vision and a fluid action plan which they could adapt to constantly changing situations and challenges. Still, the independent contribution of the nurse managers to the COVID-19 outpatient clinic was most likely not apparent to several of their colleagues as their work is likely to have been seen more as support to medical treatment of patients.

The contribution of the nurse managers mirrors the structure, process, and outcome components of the Donabedian model. In addition to the findings of this study, descriptions in the context and setting chapter convey some of the model's components, whereas others remain to be published. For the structure component some key issues were the steering committee for the outpatient clinic, the support from the hospital's directors, policies and procedures that were in place and those that were developed, and the easy access there was to resources. For the process component some of the important aspects were the in-patient services for those in need, the colour coding system in patients' electronic health records to document the severity of patients' disease, the teamwork, the daily briefings, and the procedural handbook. As for the outcome component, some of the key issues were the ratio of patients receiving telehealth service, the ratio of patients admitted to the urgency care clinic and the in-patient units, and the mortality rate.

The collective effort of the nurse managers, nested within a strong interdisciplinary collaboration, is the focus of this research. The personal characteristics of the leaders were given less attention.

One component of the nurse managers' experience—that of finding the work pleasurable and gratifying—is worth particular attention. In the USA, Broome shared her observation of nurse leaders who have revealed that they “have come through this first six months [of the pandemic] stronger than ever” (Broome, 2020, p. 531). These findings are quite significant and need to be followed up in the future. Further research into the nursing contribution to the establishment and running of healthcare for patients infected with COVID-19 more generally is foreseeable.

5.1 | Limitations

This research grew out of an unprecedented situation in the history of healthcare. The call to capture the uniqueness of the contribution of nursing to the care of patients infected with COVID-19 in the outpatient clinic came on rather abruptly and is not without limitations. Not only was there a paucity of literature to inform the research and to serve for comparison purposes, but the time-period from the occurrences of these events to their documentation is short, which limits the depth of reflections that were made. Authors were convinced, and data indicated (Helgason et al., 2020), that the outpatient clinic was effective; an assumption that might have influenced the research process. As co-researchers, we realised that we might be inclined to present a one-sided view of actions and events that were of consideration in the study and have given several accounts of how we attempted to minimise this. A part of this is giving a detailed account of the research process by focusing on major decisions, which gives the readers the opportunity to evaluate themselves the trustworthiness of the study. All of the nurse managers who were key players in the establishment and running of the clinic collaborated in this project, which enhances the trustworthiness of the findings and the research as a whole. The transferability of the findings might be hampered since the findings are to an extent situation specific as regards the small size of the society in which the study took place, and the short lines of communication and collaboration there were between public agencies.

6 | CONCLUSION

The findings show the almost invisible work of nurse managers in organising complex care. Although the circumstances were exceptional the findings speak to the accomplishments that can be gained when nurse managers have autonomy and the opportunity to utilise their professional capacity to the fullest. The nurse managers' decision-making authority grew, material and manpower resources were sufficient, promptly constructed work procedures were in place, and tasks were completed instantly in a situation of trusting and respectful interdisciplinary collaboration and sound support and trust from the hospital's directors. Numerous innovations were critical to provide a secure and effective service e.g., the colour coding system for the patients' electronic health records, which made the

acuity level of all patients visible in an instant. This use of technology is an indication of great leaps forward in using e-health which will inspire future healthcare development and research.

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CONFLICT OF INTEREST

No conflict of interest has been declared by the authors.

AUTHOR CONTRIBUTIONS

HJ and KB designed and planned the study and drafted the manuscript. HJ, SHS, AH, GÓ, EDR, SI, and KB contributed to the data collection. All authors contributed to data analysis, critical review, and writing of the manuscript. All authors read and approved the final manuscript.

PEER REVIEW

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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