Evaluation of Denmark's handling of the COVID-19 pandemic – Subreport 3: Protective equipment, the vaccination intervention and the interplay among public actors

Key Findings



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VIVE

Key Findings

This report is part of VIVE's overall evaluation of the experiences from the handling of the COVID-19 pandemic in Denmark. The evaluation was carried out on behalf of The Epidemics Committee of The Danish Parliament based on eight broad policy-oriented questions formulated by the committee.

Each of the overall questions in the evaluation was converted to a number of operational survey questions, which were subsequently presented to The Epidemics Committee of The Danish Parliament. The present report answers the four overall questions regarding protective equipment, the vaccination intervention and the interplay among the government and public actors. The results are presented in three independent reports, which have the common aim of seeking knowledge about how COVID-19-related solutions and experiences can be used in the future.

Reoccurring points

A central point across the three analyses is that, at the outset, Denmark was insufficiently prepared to handle a health and societal crisis of the scale presented by the COVID-19 pandemic. The crisis management placed heavy demands on the actors involved and revealed a considerable need for new solutions in relation to the interplay regarding crisis management and the practical implementation of interventions. There were many challenges along the way, but the evaluation finds that, overall, the handling of COVID-19 was successful across the areas treated in the knowledge report.

Overall, the following are indicated: a clear addressing of the crisis management from a national perspective, freedom with regard to economic framework, common goals and freedom to be creative with regard to developing solutions and forms of collaboration – important elements for the results achieved. In addition to these, there are a number of points concerning how trust, relations, network and a generally high level of competency have been crucial for success in the interplay regarding crisis management at both the overall and implementational the executive level.

The most important overall recommendations, therefore, concern maintaining and retaining trust in society generally and between actors as well as developing and retaining structures for a crisis response that is able to maintain a cross-sectoral perspective and act with flexibility in relation to future crises.

The interplay regarding crisis management reappears as a common theme in the evaluation under the four themes of investigation. Interplay is a complex concept

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that can be subdivided into many different elements and be analysed based on different theoretical perspectives. The evaluation's broad focus on the interplay in the handling of an extensive health and societal crisis comes with a correspondingly large complexity. Therefore, the evaluation adopts a pragmatic approach, where interplay is understood as an overall concept, which is unfolded in relation to the specific contexts and points that appear in the data collection.

The following sections present the key findings of the evaluation for each of the three analyses with a focus on the decisions, the organisation and the actions that together were crucial for the results achieved.

The protective equipment intervention

The COVID-19 crisis served as an international wakeup call with regard to how fragile the area of protective equipment was. The national stocks were too small, the international supply chains collapsed, and a fend-for-yourself-only situation soon arose in relation to buying protective equipment. Denmark managed to get through the pandemic without a situation of acute shortages in essential protective equipment in the hospital sector. But securing protective aids severely burdened society and the actors involved. At the same time, difficult prioritisations were necessary, which resulted in the primary sector and especially municipal health and eldercare having no equipment at times.

An effective ad hoc collaboration on protective equipment arose despite a lack of pre-existing plans

The evaluation shows that solutions were quickly found for a large number of challenges, even though the crisis response was insufficient to start with and Denmark was not prepared for a crisis of this scale. A multitude of well-functioning collaborations were set up, so that it became possible to handle the situation in spite of the lack of pre-existing plans. The international experiences mirror those in Denmark and emphasise coordination across different levels, a multi-pronged purchase intervention, stack management and national production to central elements in a successful crisis management.

The national effort to procure protective equipment was carried by a large number of public and private actors, who collaborated across different areas – from purchase over stock management to distribution, production and redistribution. In

spite of this, there were still clear tensions and battles of priority between, for instance, municipalities and regions, and it soon became clear that an initial, coordinated crisis response was lacking – both nationally and internationally. In particular, challenges arose in the collaboration between the executive levels and the authorities, when a mandate was to be granted for fast decisions in relation to purchase and quality assurance.

Lack of clarity regarding roles and ownership as well as lack of support from the authorities presented challenges

In Denmark, purchase of protective equipment was centralised to a few organisations. This was the case for several reasons: to be able to 1) utilise decision-making powers and experience, 2) make larger purchases and have a better overview and 3) simplify the collaboration between public and private actors that were involved in the procurement of protective equipment. However, there were several instances of the initial lack of clarity regarding roles and the distribution of responsibility for purchase and stock management creating uncertainty, which was particularly problematic in a situation involving an acute need for clear management.

As a supplement to purchase, a national production of protective equipment was established to create more robust supply chains. The centralisation also led to a shift in the logistics from a pull to a push principle, where the protective equipment was distributed centrally rather than based on orders from outside. The logistics were supported by private actors with experience in setting up and managing stocks and distribution of deliveries. It was an ongoing challenge to secure good data for stock management, as these had previously been compiled differently from organisation to organisation.

When the crisis was coming towards an end, a need arose to redistribute protective equipment to avoid having stocks that were too large and subsequent destruction. This turned out to be a challenge as uncertainty arose regarding ownership. This delayed the process of redistribution and donation of surplus protective equipment before their use-by date, as it was not clear who could make decisions regarding the protective equipment and who should cover the transport expenses for donation to other countries etc.

Focus points of the evaluation and recommendations for future work in the area of protective equipment are detailed below.

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Experiences point to a need to set up emergency stocks and have clear principles for allocation of roles and responsibilities

Due to the experiences mentioned above from the Danish and international handling of purchase, storage and organisation of protective equipment, the future emergency service is recommended to keep the following overall points of attention in mind:

- Create a better overview and coordination in the supply of protective equipment by setting up a contact emergency plan beforehand with clear and agreed principles for task distribution, which can be implemented in the case of a crisis.
- Set up emergency stocks of protective equipment that can cover the need in the initial phase of a crisis and prioritise systems for continuous monitoring of local stocks to ensure a better and more updated overview.
- Establish a purchase structure that applies across regions and municipalities, which can ensure a fair and needs-based distribution of protective equipment to the affected sectors, and combine this with clear agreements on ownership and responsibility for stocks of protective equipment from the outset.
- Focus on strengthening the authorities' support of those in charge of purchase through clear guides and decision support, and ensure clear and timely communication in the case of changes in guidelines.
- Formulate clear agreements on ownership and responsibility for stocks of protective equipment from the beginning with a view to facilitate redistribution.
- Consider how national production could play a future role in the supply reliability, e.g. by maintaining a small production, which can be accelerated in a crisis situation.

The vaccination intervention

Vaccines were an important key in the handling of COVID-19. The development of effective vaccines was seen as a prerequisite for bringing both the Danish society and the world as a whole back to normal. Therefore, a concerted effort was made to accelerate the otherwise year-long development and approval processes. This succeeded, and Denmark – like many other countries – found itself in a completely new

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and historic situation, where the population had to be mass vaccinated in the middle of an ongoing pandemic, while there was a shortage of vaccines.

In spite of these conditions, Denmark achieved a quick vaccine roll-out and a high vaccine compliance.

The vaccine deployment required effective collaboration and clear information about the priority of the task

The regionally anchored roll-out of vaccination and the national steering committee for the vaccination intervention were important components in Denmark's success in achieving a quick, safe and uniform roll-out under massive time pressure. The regional setup has ensured competencies and capacity, while the collaboration with general practice and the municipalities has allowed the necessary local adjustments of the vaccination intervention. At the same time, the central-decentral collaboration in the steering committee facilitated the continual coordination that ensured national uniformity and that decisions were carried out quickly.

The evaluation also shows that the clear national information about the priority of the vaccination intervention and the full financing were crucial for achieving the quick roll-out. This was not sufficient, however, and without the starting point that Denmark had in the form of, for instance, experience from previous vaccination programmes, extensive digitalisation, high trust among the population and international collaborations, the quick roll-out could not have been achieved.

The roll-out was challenged, however, by a late initiation of planning and the fact that the distribution of responsibilities among the authorities involved that was unclear in the initial phases. The evaluation also shows that an under-prioritisation of the importance of social factors for vaccination compliance contributed to interventions targeting vulnerable groups being initiated late and the lack of inclusion of social vulnerabilities in the prioritisation of target groups. The evaluation shows that uncovering the needs of the various prioritised target groups was more resource intensive than expected.

The deployment of the mass vaccination programme worked satisfactorily, but it was hampered by short time frames for the regional actors and lack of clarity about the future COVID-19 vaccination. The experiences with the present integration of COVID-19 vaccination in the seasonal vaccination programme are largely good.

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Exclusion of certain vaccines promoted trust and had minor consequences in terms of delay

Denmark was well equipped in relation to monitoring side-effects of COVID-19 vaccines, and this contributed to Denmark's ability to react early on to the side-effects of the COVID-19 vaccinations that appeared.

Denmark's exclusion of the AstraZeneca and Johnson & Johnson vaccines in the spring of 2021 was based on a principle of caution. The exclusion could potentially have delayed the roll-out of the vaccination, but the delay that was seen was offset somewhat by purchase of vaccines from Rumania. The exclusion of the two vaccines thus led to expenses of 100 million Danish kroner, which was the price of the Rumanian vaccines, as wasted vaccines was viewed as a basic condition from the beginning.

Trust in the vaccination intervention was an important parameter in the decision to exclude the two vaccines and in the health authorities' communication about the exclusion. The health authorities prioritised transparent communication, based on experiences from other vaccinations programmes, among other things, and maintaining the population's trust has been a recurring point of attention for the authorities. Indeed, the experience from the evaluation is also that the long-term trust was maintained in spite of the exclusion of the two vaccines.

What Denmark had lost in time and money because of the exclusion of AstraZeneca and Johnson & Johnson vaccines was made up for by the success in maintaining trust.

The Free-choice programme was disproportionately expensive, and the handling of vaccine side-effects is assessed as inadequate

In the wake of the medically informed decision to remove the AstraZeneca and Johnson & Johnson vaccines from the official vaccination programme, a political decision was made to set up a free-choice arrangement. The Free-choice programme was carried out by a private actor. The programme ended up being very expensive, having a total cost of 248 million Danish kroner but being used by only about 50,000 people.

The handling of side effects also includes ensuring that people with side-effects after vaccination are able to get help. The help provided is assessed as being inadequate and led to people experiencing side-effects not feeling acknowledged and

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met in their needs for diagnosis and treatment. Not having one's need accommodated can have consequences for one's trust in future vaccination programmes.

Experiences from the vaccination intervention have a future potential

Based on the evaluation, the following overall points of attention are emphasised for use in a future vaccination intervention where mass vaccination of the population is necessary:

- A national, cross-sectoral and multidisciplinary steering committee is set up early and with a clear formal responsibility. Via a central-decentral collaboration, the programme organisation is to ensure quick implementation and access to relevant knowledge supplied by an associated multidisciplinary expert group.
- The organisation of a mass vaccination programme must be able to deliver a safe and quick roll-out with a high capacity as well as meeting both the need of a uniform national roll-out and the option of local solutions.
- Social factors are of great importance for vaccination compliance and trust in a vaccination intervention. Therefore, this should be considered in the strategic planning of a vaccination intervention, in the communication intervention and in the local adaptation of the offer of vaccination, in order to ensure broad compliance and reduce inequality.
- Exclusions of certain vaccines in a vaccination programme can have consequences in terms of delays in deployment, economy and trust. It is thus central that these different consequences are weighed against each other in the case of exclusion of vaccines. It is also central that authorities and politicians take these consequences into account when considering a possible free choice arrangement.
- Trust must be a general point of attention in the specific vaccination intervention, for instance by communicating transparently and minimising the drop in trust that occurs in a crisis. When there is no health crisis, focus should therefore be on building trust.
- With early clarification of the future of the vaccination intervention, costs and obstacles in relation to deployment and possible integration in another vaccination programme can be reduced.
- Handling of side-effects of vaccination should be clarified early on and should ensure that people with vaccine side-effects can feel acknowledged and met. This will reduce the distrust in the authorities and future vaccination interventions that may otherwise easily arise among these persons.

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The public actors' interplay in the handling of COVID-19

The pandemic constituted an acute societal crisis, the like of which has not been seen since the 2nd World War. The need for quick action in a situation with great uncertainty put both the democratic decision paths and the interplay among public actors under great pressure. The setting up of the central political crisis management and the new overreaching structures in the handling of COVID-19 led to many discussions of, for instance, democratic legitimacy and the relationship between medically and politically informed decisions. The international conditions have also developed towards a situation where conflicts, climate changes, migration and health risks together present a more continuous threat scenario, which makes larger crises expected.

The interplay across levels was effective – considering the situation

Overall, the evaluation finds that – considering the situation – the interplay between the Government, the central authorities and the executive levels at the municipal and regional levels went well.

In the acute phase, the crisis management of the Government and the Prime Minister's Office was highly centralised. The central crisis management group consisted of a small circle of ministers and heads of department, while the actual handling of the crisis was characterised by one-way communication and many task requests, where central authorities were required to provide results quickly. This approach appears justified and effective with regard to establishing a common crisis awareness and setting up a framework with clear goals for the interplay regarding crisis management.

A number of ad hoc-based, cross-cutting decision and coordination forums were soon set up, which both in a short and long-term perspective appear justified in relation to setting up the crisis response as well as the interplay among different levels and actors. In the longer-term crisis management, a positive narrative largely existed about how the crisis organisation was unfolded, and that the interplay was continuously developed and supported by new decision and coordination forums, as new interventions needed to be implemented.

The evaluation was requested to be about the interplay among public actors. The interplay among public, private and civil society actors appears as an important

aspect of the crisis management over time in relation to developing new solutions, expanding the capacity for crisis management and mitigating consequences for people with vulnerabilities and functional limitations.

Uncertainty, dilemmas and conflicts were also an expected part of the picture

The positive assessment of the centralised and politically controlled crisis management is to a great extent due to the situation with uncertainty and lack of a cohesive crisis response and up-to-date legislative framework that existed when COVID-19 hit Denmark. Also contributing to the overall positive picture is the fact that there was uncertainty, dilemmas and friction among the various actors during the phases of the crisis management.

It is an important finding that these circumstances have not stood in the way of an overall well-functioning interplay in the crisis management among the public actors. Viewed in the light of the nature and impact of the COVID-19 crisis, these kinds of challenges are largely to be expected – also in relation to future crises with similar characteristics. Major health and societal crises are also complex and often strongly politicised phenomena, where historically it has been difficult to compile and reuse general learning from one crisis to the next.

With these reservations in mind, the evaluation largely finds that the handling of COVID-19 has rendered society better equipped to handle future health crises. The evaluation also finds that it will be a strength, if experiences, principles and specific solutions can be maintained in relation to supporting the interplay regarding future crises. The evaluation's recommendations as regards this work are unfolded below.

Interplay organisation and experiences are valuable in a forward-looking perspective

Via the COVID-19 crisis a number of important and effective cross-cutting structures were developed for the interplay regarding crisis management as well as a new crisis awareness and new competencies in crisis management. In this lies a future potential to reduce the degree of uncertainty and be able to activate a cross-cutting and collaborative crisis response quicker.

In the work to retain and maintain particular structures and interventions from the COVID-19 interplay, it is important to remember the need to be able to act with

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flexibility in relation to an unknown and most likely complex challenge scenario. In accordance with the international experiences, the Danish experiences also point to the importance of having …

- Well-defined – but flexible – collaboration structures and crisis management systems, which can be activated across sectors in case of a crisis.
- Clear channels of communication and distributions of responsibilities that support the interplay regarding crisis management across central and decentral levels.

In the Danish context, we recommend involving the relevant actors from the COVID-19 interplay in a dialog on how the basic structures from the various interplay forums can be retained and maintained with a focus on easy reactivation.

Based on the evaluation, we also recommend working with a focus on establishing and maintaining a basic emergency plan for crisis management and cross-cutting interplay, which …

- can quickly activate a group of broad composition for crisis management and crisis handling, with a clear mandate and a duty to act across sectors.
- rests on clear principles and mechanisms for ensuring crisis management and coordination across sectors and levels.

The Danish interplay experiences clearly illustrate the differences between acute and longer-term crisis management as well as the tensions that appear over time as the crisis gradually becomes a new kind of everyday. In the case of COVID-19, an increasing scepticism towards the centralised crisis management was seen along with a demand for better possibilities for dialog about the expert decision basis and the practical implications of the crisis management, among other things. In relation to this, the results of the evaluation illustrate the importance of …

- setting up crisis a management and interplay organisation that supports a clear divide and clear communication about the relationship between the expert input and the political choices made.
- communicating clearly when it is not possible to ensure an unambiguous and logical relationship between the authorities' recommendations and the specific sequence of events in relation to restrictions and ending lockdowns.

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- being able to extend the central crisis management to a broader circle of actors, with a view to preventing bottlenecks and supporting decentral involvement of the solutions that are to be implemented.

Private actors and civil society organisations played an important role for the crisis management, both in the short and long term. Based on these positive experiences, our recommendations for the future are …

- to have a focus on the interplay with private actors and civil society organisations so that they can be more quickly and systematically incorporated in the crisis management on a par with public actors.

Facts about the investigation

The evaluation combines systematic literature searches with qualitative interviews and desk research. Based on the literature searches, a total of 42 sources are included. Some of the sources cover several questions. Therefore, of the sources used 25 relate to protective equipment, 12 to the vaccination intervention and 19 to the interplay. Interviews were carried out with 48 persons from 29 organisations, and supplementary written sources were used in the form of Danish and International analyses, studies, anthologies etc., selected based on interviews and reading of references.

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