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Analysis of problems and potentials for increasing pandemic resilience in public health administrations in Saxony-Anhalt, Germany—a mixed-methods approach

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ABSTRACT:

Introduction The COVID-19 pandemic has shown the importance of resilient, modern, and well-equipped public health administrations from national to communal levels. In Germany, the surveillance, contact tracing, and local adaptions went through local health offices, revealing both their important role and also their lack of equipment and general preparation for health crises. Research on the mode of operation of the public health service (PHS), especially in a time of crisis, is rare. The present study aims to qualitatively and quantitatively assess problem areas, conflict potentials, and challenges that have become apparent for the PHS of Saxony-Anhalt during the pandemic. It focuses on the individual insight of employees of the PHS of Saxony-Anhalt and its 14 health offices to derive concrete needs and fields of action for increasing pandemic preparedness. Furthermore, the prospective personnel and resource-based requirements as well as the necessary structural and organisational changes of the public health departments are to be considered.

Methods and analysis The study will follow a sequential mixed-methods approach. Introductory expert interviews (n=12) with leading staff of Saxony-Anhalt's PHS will be conducted, followed by focus group interviews (n=4) with personnel from all departments involved in the pandemic response. Thereafter, a quantitative survey will be carried out to validate and complement the results of the qualitative phase.

Ethics and dissemination Ethical approval was obtained by the Martin-Luther-Universität Halle-Wittenberg ethics commission (Ref number 2023-102). The authors will submit the results of the study to relevant peer-reviewed journals and give national and international oral presentations to researchers, members of the PHS, and policymakers.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ The mixed-methods approach allows for a comprehensive insight.
⇒ By including Public Health Service (PHS) staff from different levels, a comprehensive and multiperspective data assessment can be expected.
⇒ By focusing on one federal state, specific recommendations for the Saxony-Anhalt PHS can be generated.
⇒ Limitation to the federal state of Saxony-Anhalt hinders generalised answers for the Germany-wide PHS.
⇒ Convenience sampling is susceptible to response and self-selection bias.

BACKGROUND

Public Health Service (PHS) and the COVID-19 pandemic

On 11 March, the WHO declared the Sars-Cov-2 outbreak a pandemic. By this point, the virus has spread to at least 21 countries. In many more, responses to the unfolding public health emergency were already underway.[1] Crisis teams and communication channels were established across all levels from the municipal to European and global institutions. Like many other countries, Germany adopted the triad of test, trace, and isolate. This approach quickly reached its limits due to a lack of testing materials as well as laboratory and personnel capacities.[2] To gain time, the tactic of *hammer and dance* was adopted, which can be characterised by harsh restrictions on public life in the beginning, followed by a slow reopening of society. The aim was to protect and expand the responding infrastructures of the health system by quickly reducing the number of infections.[2–4]

Given that pandemic preparedness has become a core component of national and global health security for WHO in most countries around the world,[4] this almost unanimous global response regarding non-pharmaceutical interventions could be, on the one hand, expected. On the other hand, the choice of harsh containment interventions differed from many pre-established contingency plans, which generally favoured less invasive and targeted measures.[5]

The global reaction demonstrates the limits of practical and structural preparedness. International guidelines and concepts were restricted to regulatory and advisory recommendations as well as standardisations and neglected the need for adaptation to local response conditions and demands.[5] Under circumstances of uncertainty and pressure to act, the power to act is not necessarily found in planning ahead through international guidelines, but also in observing responses in countries affected in the early stages of the COVID outbreak (eg, China and Italy), where the use of lockdowns likely contributed to the diffusion of that strategy to other countries.[6] But neither international guidelines nor role modelling of pandemic responses in neighbouring countries can discharge states to address local specificities and to address their specific bottlenecks of pandemic care and crisis response.

In Germany, the public health service (PHS) was in charge of the local response to the pandemic. Otherwise entrusted with numerous tasks in health-related areas, the PHS became the first responder and central player in containment strategies. The PHS consists of health offices that took on tasks of tracing infection chains, monitoring regional developments, and local hotspots. They also managed public relations and participated in local crisis committees.[7–9] The PHS acted as a central interface between different levels of federal and state institutions such as the Robert-Koch-Institute (RKI), the respective authorities at the state level and the municipal environments. Moreover, the PHS were important regional partners for media, citizens, social organisations, and local political stakeholders alike.[8]

The pandemic brought thus a lot of attention to the PHS, with some expressing appreciation for the work[10 11] and others criticising the lack of preparation and equipment[12] as it quickly became a major bottleneck, overwhelmed with pandemic-related tasks.[13] Although the PHS quickly reacted and set up structures (eg, reporting systems and information hotlines) when the pandemic arose, a deficit regarding the necessary preparation of pandemic plans as well as a lack of human and infrastructural resources was recognisable.[14] Maintaining the fulfilment of pandemic-related tasks was only possible by shutting down other areas of work, administrative assistance (*Amtshilfe*), and ad hoc recruitment of medical students and other non-specialised workers.[5 14 15] These shortcomings might be traced back to decades of cutbacks in financial resources, especially concerning personnel capacity. This development was accompanied both by the expansion of legally assigned tasks and also the curtailment of competences by reducing the PHS in fields of patient-oriented care and preventive measures towards serving as a subsidiary between statutory health insurances and other public health actors in a drive for defederalisation.[10 15 16] While the catalogue of tasks differs strongly between states and their respective laws,[16] their fulfilment depends on local political decisions regarding financing, where health issues play only a subordinate role.[17]

Additionally, the lack of digital infrastructure led to insufficient local IT solutions, which impeded transferring data with each other and thus forced staff to enter data repeatedly into different databases. A nationwide IT solution was later introduced after adaption to the pandemic requirements and came into operation during a phase of intense workload, which made a transition extremely difficult.[18]

Following the increased attention and critique, the federal government launched a reform package during the pandemic that aimed to strengthen the PHS as a whole and promote comprehensive digitisation.[19] The needs regarding digital transformation and required tools were qualitatively assessed. Based on these results, a maturity model[20] and the most recent launch of AGORA, a central platform for all PHS employees to communicate and share information, were introduced.[21] An initial survey of the state of digitisation showed that most health authorities are still at the beginning of their development. However, in some areas, such as IT security, progress has already been made.[22]

State of research

The current state of research on the PHS in Germany is very limited and reached its peak between 1980 and 1999 focussing on the need for reforms.[16] Only a few empirical studies addressed local entities, such as the PHS in Thuringia, describing a lack of IT infrastructure and medical personnel as well as arguing for more centralisation instead of leaving it up to the federal states to define the PHS tasks and handing their fulfilment over to the municipalities.[23] The only almost complete assessment of the PHS regarding the repercussions of New Public Management reforms was held in 2000.[24] The study shows that due to reforms and the reduction of tasks, a clear mission statement for the PHS is lacking. This gap, in turn, leads towards divergence between staff's self-image and desired performance, responsibilities, and the actual legal frameworks and assignments.

A comprehensive analysis of the legal framework of the PHS in its federal states by Klein (2020) shows that the overlaps and vagueness of tasks legally attributed to the PHS in combination with shifts in the political climate towards privatisation could be a reason for its weak position in the German health system.[16] The recent historical work of Elsner (2022)[25] adds to that notion by tracing the function and declining position of the PHS from its advent in the 19th century over the periods of national socialism and bipartition of Germany towards the pandemic, showing how the PHS increasingly became sidelined.

As described earlier, with the pandemic, the PHS came into the spotlight for both, the course of praise for extensive services and rapid adaptation[11 14] as well as criticism of the lack of personnel and material resources,[12 15] which also lead to new interest in research on this topic. Short reports addressed the shortcoming of the PHS work during the pandemic, reporting from single-health

departments,[18 26] or focusing on different fields of work such as the containment process,[27 28] the needs and work with special groups and places such as refugees and their housing[29 30] or school-aged children.[15] Possible explanations were centred around a deficiency in staffing as well as material and infrastructural means. The most comprehensive insight into the work of the PHS during the pandemic was provided by Grauert[5] . Through her ethnographic study, she was able to show that the work of the PHS does not end with their assigned tasks of pandemic response. Beyond containment and surveillance, the PHS played an important role in knowledge generation in the early days of the pandemic through intensive and constant check-ups with infected people. This further provided important care work towards the affected population, especially in the initial phase of great uncertainty, mitigating fears, and concerns.[5]

In light of upcoming health-related crises and pandemic preparedness and regarding the difficulties of previous pandemic response, the need for resilience of social systems is becoming more evident and prominent along state and global actors.[31] The PHS can play an important role in facing upcoming health challenges, for example, in light of climate change[32 33] if prepared and equipped properly. With the Pact for the PHS and the announced Federal Agency for Public Health,[34] political reform is underway. Despite gaining more attention and devotion during the pandemic, the PHS is a largely disregarded field of empirical research. Studies have shown the shortcomings and the importance of the PHS without examining what is needed to overcome these problems. Important insights can be gained from people who managed the COVID-19 pandemic inside the PHS. They can assess pitfalls, obstacles, and potential for successful pandemic preparedness.

Aims and objectives

As previous research focused merely on the PHS shortcomings regarding its equipment, staffing or its history of underfunding, this research project looks closely at the PHS of Saxony-Anhalt and its 14 departments from a needs-oriented point of view. Saxony-Anhalt is a multifaceted federal state with both rural and urban regions. With the pandemic, the long-standing shortage of doctors[35] in the state became a problem given the above-average age of the population, which at least partly explained the above-average hospitalisation and lethality rates.[36] With its forecasting of demographic change and a shortage of staffing in healthcare, Saxony-Anhalt poses an example of challenges and possible solutions in facing future pandemic crises.

The aim is both to identify problems and barriers to a more successful COVID-19 pandemic response and potential changes for improved implementation of infection control measures in a pandemic and general health emergency, and also to assess needs in a more solution-oriented way. To increase pandemic resilience, this study aims to assess resource needs, planning gaps, and procedural problems, both qualitatively and quantitatively. Moreover, it is aspired to develop possible solutions along with stakeholders of the Saxony-Anhalt PHS. The study will assess the needs and potentials of pandemic preparedness through discussion with employees of different levels of the PHS. Since to date, qualitative interview data with members of the PHS are almost non-existent, we aim to gain detailed insights into the subjective assessments and problem diagnoses. This is of vital importance for understanding pandemic responses and formulating lessons learnt during an ongoing reform process. The sequential mixed-methods approach will provide a deep understanding of the subjective problem diagnoses and assessment of PHS employees through qualitative interviews, followed by a survey to validate and complement the results. The general aim is to identify problems and potential measures regarding the response towards the pandemic and other health-related crises. The qualitative strands will investigate the folloing:

- Early crisis response and how the alignment of organisational structures and resources affected the transition into crisis mode.
- Negative effects in terms of workload and straining of personnel in terms of prevention and mitigation.
- Resource needs regarding core personnel as well as ad hoc recruitment and training on the job.
- An insight into concrete structural measures, reforms, and preparations as well as lessons learnt in retrospect and outlook on upcoming health crises.

The quantitative survey aims to assess the evaluation of problem diagnoses and solutions in order to include the wider PHS workforce and to back up the qualitative findings.The findings of the study will be incorporated and further used in a broader research consortium (CoPrep) for modelling future pandemic models. In addition, problem diagnoses and proposals for action will be published in summarised form.

METHODS AND ANALYSIS

The research project follows a multistage exploratory sequential mixed-methods approach. Mixed-methods study designs have grown popular in public health research as they provide an insight into issues from the perspectives of the people affected, instead of solely relying on the perspectives of the providers of interventions and health services.[37] Additionally, exploratory designs in particular are used frequently to gain access to the fields of research and prepare instruments for later survey steps, as in the case of Rogers or Laugesen et al, who validated items of a later pilot intervention on the basis of different interview formats.[38 39]

The qualitative research strand consists of qualitative expert interviews with leading personnel of the Saxony-Anhalt PHS and focus group interviews with employees of all levels below management. Based on qualitative findings, a quantitative questionnaire will be developed that addresses all employees of the PHS Saxony-Anhalt. The

three-step study design allows several points of interference at which data sets and methods are linked to build subsequent steps of data collection or form integrated results.[40] Within the sequential design, findings from the expert interviews will build the guidelines for the focus group. Together, the data sets from the two qualitative strands build the base for the quantitative survey with the aim of generalisation and evaluation. The combination of methods and integration of findings allows for a deep understanding of the issue through verbal data from interviews, which will then be verified through quantification.

The two qualitative strands, expert interviews with organisational leaders and focus group sessions with middle-level employees, are intentionally designed to capture distinct perspectives within the PHS of Saxony-Anhalt. Conducting expert interviews with top-tier personnel ensures an examination of strategic decision-making, policy implementation, and overall organisational preparedness from a leadership standpoint. In contrast, focus group interviews with the broader workforce offer insights into the perspectives, concerns, and experiences of those directly involved in the day-to-day operations, representing the organisational body.

This dual-level approach is anticipated to yield meaningful insights into crisis response mechanisms within organisations. By encompassing both leadership and workforce perspectives, the study aims to unravel the difficulties of how strategies formulated at the top permeate through the organisational structure, influencing the response to crises at various levels, and fit the demands of daily business. The duality in perspectives is envisioned as a strength, providing a holistic understanding of how crisis preparedness strategies are perceived, interpreted, and executed within the PHS, encompassing both organisational strategies as well as organisational behaviour.[41]

Furthermore, the anticipated data interferences between the two qualitative data sets present an opportunity to reveal differences in social and organisational perceptions of problems and potential solutions. Variances in viewpoints between leadership and middle-level personnel may highlight disparities in understanding and priorities. These differences, when analysed, can contribute valuable insights into potential areas of alignment or contention within the organisation. The nuanced understanding gained from the qualitative phase sets the stage for the subsequent quantitative survey. The differences and parallels in perceptions identified in the qualitative data can be systematically evaluated and quantified through the survey, providing a structured framework for assessing the broader organisational context concerning pandemic preparedness. This progression through the different methods ensures a comprehensive and triangulated exploration, enriching the overall validity and reliability of the study's findings.

This study is regionally limited to Saxony-Anhalt. While the state offers a variety of rural and urban contexts, generalisation to the whole of Germany should be made with caution. As described above, data collection at different levels of an organisation can provide interesting insights. However, it also poses a risk of survey fatigue, which threatens participant compliance. To gain further insights into pandemic preparedness and response, other stakeholders such as municipalities, healthcare providers, or affected institutions could provide additional information not included in this study design.

The study follows a timeline starting with expert interviews in late 2023, followed by focus groups beginning in spring 2024, and concluding with the quantitative survey in autumn 2024. The qualitative and quantitative strands will be described in the following.

Qualitative strand: expert interviews

Eligible to partake in the expert interviews are leading personnel of the Saxony-Anhalt PHS which already worked during the beginning of the pandemic in 2020. The expert interviews will be held with leading personnel of PHS offices and will take place in equal numbers with PHS representatives from urban, small town, and rural counties. Possible participants for the expert interviews are contacted through e-mail. Because of this relatively homogeneous study population, we expect to reach thematic saturation through 12 interviews, which would align with empirically assessed saturation.[42] In this first explorative phase, employees are interviewed to gain basic information about the experienced pandemic response, to secure previous knowledge and insights around public health in the pandemic, to learn about specifics of the pandemic response in Saxony-Anhalt and to identify problems and potential measures regarding the response towards the pandemic. The interviews focus on the departments' immediate response to the pandemic, how organisational structures developed during the pandemic and how challenges such as staff expansion and the flood of information were dealt with. From a management perspective, we also look at the integration and cooperation of the health authorities with higher level institutions such as state authorities or the RKI as the national public health institute, as well as with local actors such as crisis task forces and other stakeholders such as hospitals, public, and private sector organisations and citizens.

All interviews will be held in German language, online and recorded with video and audio. A copy of the interview guide can be found in German and English in the online supplemental appendix. The interviews with experts will be transcribed and analysed with structuring qualitative content analysis to describe and structure selected meanings and contents.[43] Starting point of the analysis is a precise theory-guided and literature-guided system of categories along the lines of the research question. During analysis, the deductive categories will be differentiated and supplemented in a recursive process. The combination of deductive and inductive category formation enables proximity to the research question and the recognition of prior theoretical knowledge, while at the same time remaining open to the peculiarities of the research object. The category system is first tested on

the material in several rounds, then revised, structured, and summarised.[36 37] The evaluation takes place using the software MaxQDA 2022.

Qualitative strand: focus groups

The focus groups will be concentrated on personnel from middle and lower-level staff, which worked at the PHS during the pandemic and took on tasks concerning pandemic-related fields of work. The recruitment process for the focus groups will follow the snowball principle with leading personnel functioning as multiplicators for possible participants. Furthermore, the offices will be contacted through e-mail and be invited to take part in the survey.

Through the focus groups (n=4), we aim to capture close to all themes and aspects of the topic.[44] The focus groups will be held guideline-based and problem-centred. The aim is to gain further perspectives on pandemic work, and concrete challenges in the PHS of Saxony-Anhalt. While some thematic aspects of the focus groups will be generated from the data set of expert interviews, the general focus will be on the experiences of the front-line workforce rather than on organisational development or managerial decision-making. Relevant will be the multifaceted and challenging workload and the technical and organisational circumstances of collaboration. Given the ongoing reforms and developments of the PHS especially on the national level, we will also discuss those changes to develop critique, needs, and evaluate possible adaptations and changes. Ad hoc recruited personnel will not be part of the study. Although short-term staff could have special insights into the problems of pandemic response, their recruitment for research purposes is too challenging due to the large time discrepancy and a lack of access to staff lists via the health authorities. Filter questions will differentiate the respondents according to participation in the pandemic response.

The analysis of the focus groups will also take place within the qualitative structural content analysis. The starting point is the system of categories generated in advance and developed during the expert interviews, which will be continuously adapted and expanded.

Quantitative survey

Eligible to partake in the quantitative survey are all employees of the PHS, who worked during the COVID-19 pandemic. The estimated number of employees working in the PHS of Saxony-Anhalt is 630.[45] As this study aims to depict the current situation within the PHS in Saxony-Anhalt, we seek to reach as high as possible participation rate to generate meaningful statements about the current shortcomings and needs in the PHS of Saxony-Anhalt. Since we aim to descriptively present the current situation in Saxony-Anhalt (without any statistical testing), we refrain from a sample power analysis.

For recruitment, the leading personnel will act again as multiplicators for our call for entries. Moreover, we will promote our study through e-mail by contacting all 14 PHS offices in Saxony-Anhalt. Participants will receive written information regarding the study's aims and conditions for participation. The statistical analysis is carried out using the software IBM Statistical Package for Social Sciences (SPSS), version 22. The data are analysed univariately since the aim of the study is a description of the distribution and agreement of the results of the qualitative phase rather than an explanatory approach. The questionnaire will be based on the qualitative results to check the generalisability of the results regarding problem situations and needs as well as fill in blind spots. The closing quantitative survey will capture and highlight the distinctions identified in the qualitative data sets, particularly in terms of their widespread acceptance within the PHS of Saxony-Anhalt. By surveying all employees, it aims to systematically quantify variations observed in the qualitative interviews and focus groups, offering statistical insights into the organisational landscape. This inclusive approach ensures a representative and comprehensive analysis, contributing to a holistic understanding of pandemic preparedness acceptance across different levels within the PHS.

Patient and public involvement

The public or employees from the PHS offices concerned were not involved in the design of the study. If willing, leading personnel from the previously interviewed health administrations are involved in the recruitment process for the focus groups, functioning as multiplicators.

DISCUSSION

This study will provide a differentiated insight into the pandemic work of the health offices in Saxony-Anhalt. From a needs-oriented point of view, we will both look to numerically record the material and personnel deficits and also take an interest in organisational structures and resources. Moreover, we aim to assess how the personnel coped with the extensive workload in times of crisis. The different settings of qualitative data generation allow to assess divergent perspectives on problem diagnoses and possible solutions which can be worked out comprehensively. The verification through the quantitative data assessment enables a generalisation of problem diagnoses and possible solutions.

The research design allows comprehensive insights into the PHS of Saxony-Anhalt and elaborate statements about pandemic-related problems and solution approaches. Both qualitative approaches (ie, expert interviews and focus groups) aim to recruit a convenience sample, which holds the risk of susceptibility to response and self-selection bias. However, it might also promote the participation of engaged personnel with a predefined vision of improvements in the PHS.

By focussing on Saxony-Anhalt only, we seek to generate specific and feasible recommendations for the local circumstances. Nonetheless, the study's outcomes may offer valuable insights, given the diverse mix of

rural and urban public health offices within the sample, contributing to a nuanced understanding of pandemic preparedness across different settings. In light of PHSs around the world struggling with pandemic preparedness and response,[46 47] and identifying similar problems to their health services, this study can provide transferable outcomes in the fields of organisational strategy and organisational behaviour under crisis circumstances.

Ethics and dissemination

Ethical approval was obtained by the Martin Luther Universität Halle-Wittenberg (MLU) ethics commission (Ref number 2023-102). All important protocol modifications will be reported to the ethics commission of the MLU. All participants of all stages will receive information sheets about the content and aims of the study as well as the applicable regulations on data management and protection. A signed declaration of consent to participation and the processing of data based on the EU data protection regulations will be mandatory. Personal data will only be collected to assure the possibility of deleting earlier pseudonymised data from interviews. Personal data will be stored separately from any relevant research data. All data will be stored safely and according to EU General Data Protection Regulation. Only team members will have access to the research data.

We will submit the results of the study to relevant peer-reviewed journals and give national and international oral presentations to researchers, members of the PHS, and policymakers. The generated data and findings will further be incorporated in a modelling process of the entire research consortium (CoPrep). Towards the members of the PHS, we offer the opportunity of email notification of publications and a report on the outcomes of the research as well as further steps in the research process.

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Interview-Leitfaden: Experteninterviews mit leitenden Mitarbeitern des öffentlichen Gesundheitsdienstes in Sachsen-Anhalt

Projekt: Analysis of problems and potentials for increasing pandemic resilience in public health administrations in Saxony –Anhalt, Germany – a mixed-methods approach

Einführung

Vielen Dank für Ihre Zeit und Ihr Interesse an unserem Interview. Mein Name ist [Interviewer]. Ich arbeite am Institut für Medizinische Soziologie der Martin-Luther-Universität Halle-Wittenberg und werde unser Interview leiten.

Einführung in die Ziele der Studie
Unser heutiges Ziel ist es, über die Reaktion des ÖGD auf die Pandemie nachzudenken. Wir werden uns gemeinsam ansehen, was zur Eindämmung und Überwachung der Pandemie getan wurde, welche Herausforderungen und Probleme auftraten und wie sie gelöst wurden. Mit Blick auf die Zukunft möchten wir uns auch mit spezifischen Verbesserungs- und Handlungsbereichen befassen, um den Öffentlichen Gesundheitsdienst besser auf künftige gesundheitliche Krisensituationen vorzubereiten.

Bezüglich der Zustimmung zur Teilnahme an der Studie
Einholung der schriftlichen Zustimmung zur Teilnahme an der Studie und Aufzeichnung der Interviews wie in den Einverständniserklärungen beschrieben und im Einklang mit der allgemeinen Datenschutzverordnung.

Beschreibung des Gesprächsablaufs
Wir haben einige Schwerpunkte vorbereitet, die wir gerne mit Ihnen diskutieren möchten. Wir haben versucht, aus Berichten und Reportagen wichtige Aspekte der Arbeit des ÖGD während der Pandemie herauszuarbeiten und sind nun an Ihrer Perspektive und Expertise interessiert. Wir wollen über Abläufe, spezifische Herausforderungen und Probleme und deren lokale Lösungen während der Pandemie sprechen. Ich möchte Ihnen jeweils ein paar Fragen stellen, aber bitte zögern Sie nicht, frei zu antworten.

Das Aufnahmegerät ist nun eingeschaltet.

1) Vorstellung

Um Sie und Ihre Antwort später besser einordnen zu können, möchten wir Sie zunächst bitten, sich kurz in Ihrer Position und Funktion im Gesundheitsamt vorzustellen. Besonders interessieren würden uns Ihre Position, Aufgaben und Verantwortungsbereiche während der Pandemie sowie die Dauer Ihrer Beschäftigung hier.

2) Frühe Krisenreaktionen und Organisationsentwicklung

Lassen Sie uns zunächst über die erste Phase der Pandemie sprechen. **Wenn Sie sich zurückerinnern, was war die akute Reaktion in Ihrer Organisation, als die Pandemie begann?**

Entwicklung von Organisationsstrukturen:

- Inwieweit haben Sie Arbeitsbereiche und Personal abgebaut und umverteilt?
- Vertiefungsaspekte: Räumliche Organisation; Ausstattung; Personalmanagement

Externe Kontakte: Hotline und Öffentlichkeitsarbeit:

- Wurden externe Kontakte für Bürger und Organisationen getrennt behandelt?
- Wie beurteilen Sie die Zusammenarbeit mit externen Organisationen wie Krankenhäusern und Altenheimen?
- Wie wurde die Öffentlichkeitsarbeit organisiert?

Wie wurde, angesichts der großen Fallzahlen, die Kontaktnachverfolgung organisiert?

- Wie haben sie auf die damit verbundenen technischen Herausforderungen der Digitalisierung reagiert?
- Wie haben Sie die Umstellung auf DEMIS erlebt?
- Welche Unterstützungsleistungen haben Sie in Bezug auf die technische Ausstattung und Infrastruktur vermisst?

Wie hat sich Ihre Einbindung in die kommunalen Krisenstrukturen gestaltet?

- Wie beurteilen Sie die Zusammenarbeit?
- Wie verlief der Dialog mit den lokalen Regierungsvertretern?
- Welche Rolle konnten Sie bei der Beratung von Politikern spielen?
- Wie offen wurde Ihr Rat erbeten und angenommen?

3) Pandemic Preparedness

Welche Rolle haben die bestehenden Pandemiepläne für Sie in Ihrem Gesundheitsamt und bei der Krisenreaktion gespielt?

Inwieweit konnten Sie auf bestehende Pandemiepläne zurückgreifen und diese nutzen?

- Was wäre Ihrer Meinung nach notwendig, um Pandemiepläne besser zu organisieren und sich auf solche Krisensituationen vorzubereiten?
- Wo sehen Sie das Potenzial, zukünftige Krisenvorbereitungen durch die Erfahrung und das praktische Wissen der Gesundheitsbehörden zu verbessern?

- Welche Art von Pandemievorbereitung ist Ihrer Meinung nach erforderlich? Zum Beispiel Übungen, um Rollen zu trainieren und praktisches Wissen zu generieren?
- Welche Rolle würden Sie Simulationen, Serious Games und Übungen bei der Vorbereitung auf Gesundheitskrisen wie Pandemien zuweisen?

4) Informationsmanagement

Während der Pandemie wurden viele Informationen über Pandemieentwicklungen und neue Vorschriften in hoher Frequenz an die Öffentlichkeit weitergegeben, was in vielen Bereichen und für alle Bürgerinnen und Bürger Schwierigkeiten mit sich brachte. **Wie sind Sie in Ihrem Amt mit dieser Herausforderung einer sich schnell ändernden und komplexen Nachrichten- und Informationslage umgegangen?**

- Wie haben Sie die Beschaffung, Auswertung und Aufbereitung der Informationen über Vorschriften und Studienlage organisiert?
- Vertiefungsaspekte: interne Zwecke für die Mitarbeiter und externe Zwecke für die Öffentlichkeit; Einrichtung von dauerhaften Formaten (FAQ; tägliche Briefings)
- Was hätten Sie gebraucht, um das Informationsmanagement besser umsetzen und handhaben zu können?

Wie sehen Sie die Kommunikation mit übergeordneten Organisationen wie dem Landesministerium oder dem Robert-Koch-Institut?
Was wünschen Sie sich in Bezug auf die Informationspolitik und die Zusammenarbeit mit übergeordneten Institutionen (wie dem BMG oder dem RKI)?

Wie verlief der Informationsaustausch zwischen den Gesundheitsämtern?
Nachbereitende Aspekte: Fähigkeit, von anderen PHS-Ämtern zu profitieren oder ihnen Informationen zur Verfügung zu stellen? Zugänglichkeit, Verbesserungsbedarf

5) Personalsituation im Gesundheitsamt

Lassen Sie uns konkret über die Personalsituation in den Gesundheitsämtern sprechen. **Wie ist Ihre Organisation mit den personellen Herausforderungen und Anforderungen in der ersten Phase der Pandemie umgegangen?**

- Vor welchen Herausforderungen standen Sie bei der Rekrutierung?
- Welche Erfahrungen haben Sie mit flexiblen Mitarbeitern gemacht?
- Wie wurde die Ausbildung neuer Mitarbeiter organisiert? Welche Erfahrungen haben Sie in dieser Hinsicht gemacht?
- Hätten Sie sich in dieser Hinsicht Unterstützung von übergeordneten Institutionen gewünscht?

Haben Sie auch Erfahrungen mit den RKI-Feldteams / Containment Scouts gemacht? Wenn ja, welche?
Haben Sie auch Erfahrungen mit der Unterstützung durch die Bundeswehr? Wenn ja, welche?

Wie hätte die Einstellung und Schulung von Personal besser vorbereitet und organisiert werden können?

- Welche Unterstützungsleistungen hätten Sie sich von der Landes- oder Bundesregierung gewünscht?
- Was hat sich im Hinblick auf die Personalentwicklung während der Pandemie besonders bewährt?

6) Arbeitsbelastung, Stress und Beanspruchung

Krisen und Ausnahmesituationen bedeuten immer eine besonders hohe Belastung und ein außergewöhnliches Arbeitspensum, deshalb möchte ich mit Ihnen auch über die Arbeitssituation im Gesundheitsamt sprechen.

Zunächst einmal zu Ihrer Person: Wie haben Sie als Leiterin des Amtes den Arbeitsalltag während der Pandemie erlebt?

- Außerdem, was die Arbeitssituation Ihrer Mitarbeiter betrifft. Wie haben Sie die Arbeitsbelastung und den Stress in Ihren Teams wahrgenommen?
- Wurden Versuche unternommen, diese Arbeitsbelastung für Ihre Mitarbeiter zu reduzieren oder handhabbar zu machen?
  Was würden Sie brauchen, um besser auf die hohe Arbeitsbelastung vorbereitet zu sein?
- Wie sind Sie mit psychologischen Problemen und Stress im Team umgegangen?
- Folgeaspekte: sozialpsychiatrische Betreuung; Entlastungsangebote; Dialogangebote; gemeinsame Auswertung?

Die Aufgaben der Gesundheitsbehörden während der Pandemie waren viel restriktiver als sonst. Die Verhängung einer Quarantäne kann für alle Beteiligten eine Belastung bedeuten. Wie wurden diese Aufgaben und die Position von Ihren Mitarbeitern angenommen und wahrgenommen?

- Gab es Probleme mit der restriktiven Rolle der Gesundheitsbehörden während der Pandemie?

Haben Sie auch schon Anfeindungen von Außenstehenden durch Ihre Mitarbeiter erlebt? Wie sind Sie und Ihre Mitarbeiter damit umgegangen?

Gab es interne Konflikte über die Durchführung und Angemessenheit von Maßnahmen?

- Wie wurden die Konflikte bewältigt?
- Gab es ungelöste Fälle, wie sind Sie mit ihnen umgegangen?
- Hätten Sie sich in dieser Hinsicht Unterstützung gewünscht?

Was wäre Ihrer Meinung nach angesichts der vielen Herausforderungen einer solchen Krisensituation notwendig, um die Mitarbeiter besser auf eine solche Krisensituation und die damit verbundenen Herausforderungen vorzubereiten?

7) Bewertung des Krisenmanagements

Nachdem wir nun ausführlich über die Umstellung auf den Krisenmodus und das Personal gesprochen haben, interessieren wir uns für Ihre Einschätzung der Arbeit Ihrer Gesundheitsbehörde und des koordinierten Kampfes gegen die Pandemie.

- Wenn Sie an die Zeit der Pandemie zurückdenken, welche Aspekte Ihrer Arbeit und Organisation haben besonders gut funktioniert?
- Wo sehen Sie die Stärken der Gesundheitsämter und ihrer Mitarbeiter im Kampf gegen die Pandemie?
- Wo hätten Sie sich mehr Kompetenzen oder Autonomie für Ihr Gesundheitsamt gewünscht?
- Wo hätten Sie mehr Kontrolle und Anleitung durch übergeordnete Institutionen gebraucht?
- -Was könnten Schlüsselbereiche sein, die bei künftigen gesundheitlichen Notfällen angegangen werden müssen?
- -Welchen Bedarf sehen Sie für strukturelle Veränderungen im ÖGD? Und speziell für Krisensituationen und Notfälle?
- Was würden Sie sich für die Koordinierung einer Krisensituation in der Zukunft wünschen?

8) Schluss

An dieser Stelle sind wir am Ende unseres Fragenkatalogs angelangt. Wenn Sie weitere Anmerkungen zu den verschiedenen Themen machen möchten - zu jedem der genannten Themen - können Sie dies jetzt tun.

Vielen Dank für Ihre Zeit und die vielen Einblicke in Ihre Arbeit.