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Leadership and crisis management of COVID-19 pandemic in Lithuania – a survey among public health professionals

Przywództwo i zarządzanie kryzysowe podczas pandemii COVID-19 na Litwie – ankieta wśród pracowników zdrowia publicznego

ABSTRACT

Aim: To explore the perception of leadership and COVID-19 crisis management in Lithuania by public health professionals.

Methods: The study is an observational, cross-sectional study with a quantitative approach. Study population – all public health professionals, who work in local public health bureaus in Lithuania. The sample included 288 professionals, 243 questionnaires were chosen as suitable for the analysis. Statistical significance was based on an alpha error of 0.05 and data was analysed using IBM SPSS Statistics 27.0.

Results: Management measures of the COVID-19 pandemic in Lithuania were evaluated better during the first peak of the pandemic ($p < 0.05$). 49% of the respondents had some difficulties in understanding and pursuing their new tasks during the pandemic. Directors of public health bureaus had more difficulties with their tasks when compared with public health professionals ($p < 0.05$). 84,6% of the respondents think that leadership is important in crisis management.

Conclusion: The management measures were evaluated better during the first peak of the COVID-19 pandemic. Dissemination of information, inter-institutional collabora-

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tion, and future crisis preparedness training were specified as the cornerstones for crisis management.

Keywords: crisis management, leadership, pandemic, public health professionals

STRESZCZENIE

Cel: Zbadanie postrzegania przywództwa i zarządzania kryzysowego związanego z COVID-19 na Litwie przez pracowników ochrony zdrowia.

Metody: Badanie obserwacyjne, przekrojowe z podejściem ilościowym. Badana populacja – wszyscy pracownicy ochrony zdrowia, którzy pracowali w lokalnych biurach sektora zdrowia publicznego na Litwie. Próba obejmowała 288 specjalistów, do analizy wybrano 243 kwestionariusze. Dane przeanalizowano za pomocą IBM SPSS Statistics 27.0. Poziom istotności statystycznej ustalono na poziomie $\alpha = 0{,}05$.

Wyniki: Sposoby zarządzania pandemią COVID-19 na Litwie zostały lepiej ocenione podczas pierwszego szczytu pandemii ($p < 0{,}05$). Pewne trudności ze zrozumieniem i realizacją nowych zadań podczas pandemii zauważyło 49% respondentów. Dyrektorzy urzędów zdrowia publicznego mieli większe trudności z wykonywaniem swoich zadań w porównaniu z pracownikami ochrony zdrowia ($p < 0{,}05$). Spośród badanych 86,4% respondentów uważało, że przywództwo jest ważne w zarządzaniu kryzysowym.

Wnioski: Środki zarządzania zostały lepiej ocenione podczas pierwszego szczytu pandemii COVID-19. Rozpowszechnianie informacji, współpraca międzyinstytucjonalna i przyszłe szkolenia w zakresie gotowości na wypadek wystąpienia sytuacji kryzysowych zostały określone jako fundamenty zarządzania kryzysowego.

Słowa kluczowe: zarządzanie kryzysowe, przywództwo, pandemia, specjaliści zdrowia publicznego

Introduction

Since 2019 new virus entered our world and changed our lives completely. Right now we are facing nearly 4 million deaths worldwide from Coronavirus 2019 (COVID-19) pandemic (WHO, 2021). According to WHO, the COVID-19 pandemic is the most challenging public health crisis we have ever faced (WHO, 2020). The current pandemic appears to be an ultimate stress test for leadership across the world (Dirani, Abadi, Alizadeh, et al., 2020). A crisis of this magnitude requires exceptional leadership and crisis management. Strong national leadership provides unity of purpose and strategy as well as coordination with other countries for resources and coordinated responses (Nicola, Sohrabi, Mathew, et al., 2020). In October of 2020 the second peak of the virus stroke most of the countries, because of the relaxation of lockdowns and other restriction measures (Looi, 2020).

This shows, that there is still a gap in the successful management of the pandemic. There are no studies on perceptions of public health professionals on how to respond to the health crisis in Lithuania. The coronavirus pandemic has highlighted the urgent need for public health professionals' involvement in tackling the crisis. Similarly, as in other European countries, Lithuania, introduced restrictive measures somewhat later. The virus was confirmed to have reached Lithuania in February 2020. The strict lockdown, because of the first peak, was introduced on 16th of March with 18 active cases and continued until 16th of June, 2020. Political events, such as the parliamentary election in October, 2020, stopped the government from

taking an unpopular decision to introduce restrictive measures when number of cases started increasing again in the second peak of the pandemic (The Central Electoral Commission of the Republic of Lithuania, 2020). At the end of November, 2020 the Lithuanian president put together the Council of Experts and Scientists. The Lithuanian Council of Health Experts made recommendations to the responsible authorities on stopping the spread of the virus in Lithuania (President of the Republic of Lithuania, 2020b). The second lockdown was introduced quickly after that on 7th of November, 2020 but it was rather late taking into account that active cases at the time were 22 719 (Lietuvos Respublikos vyriausybė, 2020b; Worldometer, 2020-2021). It is important to mention, that Lithuania is a country with 2.7 million residents and these numbers are very high for this amount of people (Lietuvos Respublikos Vyriausybė, 2020c; Worldometer, 2020-2021).

Public health care in Lithuanian municipalities is provided by public health bureaus, which are responsible for the delivery of public health services in the community. It includes the following functions that span across the municipality: strengthening public health, public health monitoring, prevention of communicable diseases according to the competence, prevention, and control of non-communicable diseases and injuries, implementation of public health programs, strengthening the health of children and young people in educational institutions, cooperation with social partners, assessment of the impact of draft decisions of municipal institutions on public health (Valstybinė ligonių Kasa, 2020). Directors of public health bureaus', who are responsible for these functions, organize, plan, direct, and manage programs to improve a population's overall well-being. Nevertheless, during the COVID-19 pandemic, public health professionals working in local public health bureaus and educational institutions were temporarily seized to perform these tasks to help tackle the healthcare crisis.

This paper aims to explore public health professionals' perceptions of the leadership and COVID-19 crisis management in Lithuania. Specifically, we looked at 1) public health professionals' opinion on Lithuania's response during the first and the second peak of the COVID-19 pandemic, 2) the role of public health bureaus in the management of the COVID-19 crisis, and 3) the insights on the need for leadership in the COVID-19 crisis in Lithuania.

Methods

This observational cross-sectional study is based on one – time anonymous questionnaire survey.

Sampling and data collection

The data, collected from the Lithuanian public health bureaus were used for the analysis. Study population included all public health professionals, employed in local public health bureaus from 47 municipalities in Lithuania, (the total 1143 employees). The sample size was calculated according to the Sample XS program. A 5.0 percent error and 50.0 percent prevalence were selected. To ensure the representativeness of the data, we aimed at 288 specialists to fill in the questionnaire. The invitation letter was sent to the directors of public health bureaus' to participate in the survey. They were asked to distribute the invitation to their employees to enter the survey, without random selection.

The questionnaire (Annex 1) was developed by the authors based on relevant literature on leadership and crisis management (Fener and Cevik, 2015; Kaul, Shah, and El-Serag, 2020; Georgiades, 2020; Forster, Patlas and Lexa, 2020). Only published literature in English and Lithuanian language were considered for the development of the questionnaire. Research design, years of publication, and places were not taken into account while looking for the relevant literature. The questionnaire is a combination of 36 closed-ended and 5 open-ended questions. Subjective opinions of study participants were assessed using the Likert scale, coding from 1 point (lowest score) to 10 points (highest score). The meaning of scores were – 1 (very bad) and 10 (very good).

The anonymous survey was conducted for two weeks from the 1st until the 12th of April 2021 using an electronic questionnaire that was sent to potential survey participants. Survey participants were introduced to the purpose of the study and informed that only generalized questionnaire data would be used for the analysis and the presentation of the results. Overall 250 questionnaires were filled and submitted to the electronic survey environment, seven questionnaires were empty. Therefore, 243 questionnaires were chosen for the analysis.

Data analysis

Descriptive statistics were used to describe the study population. As such, the socio-demographic characteristics (e.g. gender, age, educational level, etc.), and the municipality of the public health professionals. Data were analysed using IBM SPSS Statistics 27.0. Descriptive statistics were used to assess the distribution of analysed characteristics in the selected sample. The chi-square (χ^2) test was used to assess the interdependence of qualitative characteristics. The hypothesis of equality of two proportions was tested using the z test. The mean was used to estimate the quantitative values. To estimate the spread of the data around the mean, the standard deviation was calculated. The median was used to determine an approximate average of the values. The interquartile range (IQR) was calculated to estimate the spread of the data around a central value. Kolmogorov-Smirnov test was applied to check for normality of the distribution. A non-parametric Wilcoxon signed-rank test was used to compare two related samples of rank scale variables when evaluating the management of the COVID-19 pandemic in Lithuania. Friedman's two way analysis test was used to compare multiple questions when there were more than two related samples of rank scale variables when evaluating the leadership of individual institutions and public health authorities in Lithuania during the COVID-19 pandemic. Statistical significance was based on an alpha error of 0.05.

Validity and reliability

To assure the reliability of this study as well as possible, reasons, why participants are excluded from the analysis, were clearly reported. Statistical test Cronbach's Alpha was used to measure and ensure internal consistency of the questionnaire (Laerd Statistics., n.d.). Cronbach's Alpha (0.89) for this questionnaire indicates excellent internal consistency of the questionnaire used in this study.

To minimise systematic response bias, there was an explanation provided in the questionnaire where needed, that professionals filling it would know how to interpret the question (Wetzel, Böhnke, Brown, 2016). To assure sufficient statistical power, an adequate sample size was calculated and mentioned in the previ-

Table 1. The main socio-demographic characteristics of the respondents

Socio-demographic variables	*n*	%
Age		
≤ 30	67	27.6
31–40	50	20.6
41–50	38	15.6
51–60	57	23.5
> 60	31	12.8
Gender		
Male	1	0.4
Female	242	99.6
Education		
University	92	37.9
College	151	62.1
Place of living		
Rural area	51	21.0
City	192	79.0
Occupation		
Director	11	4.5
Public health professional working in a bureau	48	19.8
Public health professional working in an educational institution	184	75.7
Municipality		
District municipality	99	40.7
City municipality	144	59.3

ous chapter. On the subject of external validity in this study, a rather large sample of participants was put together to ensure ecological generalizability and transferability of the results to another context.

Results

All public health professionals working in public health bureaus were invited to participate in this study. Overall 243 respondents participated in the survey. The main socio-demographic characteristics of the respondents are presented in Table 1.

The respondents evaluated the management of the COVID-19 pandemic at an average (median = 6). Statistically significantly, management measures were better evaluated during the first peak of the pandemic (median = 8), compared with the second peak (median = 6) ($p < 0.05$). Harder and earlier lockdown measures, before the second peak of the pandemic, clear and understandable information, better inter-institutional collaboration are the steps that public health professionals think that Government should have taken into account. The biggest part (39.5%) of the respondents did not have any opinion regarding the question that the decisions taken by the Government during the COVID-19 pandemic were based on scientific evidence and good practice from other countries. The involvement of the Council of Health Experts (median = 7) and Independent Expert Advisory Council (median = 6) in managing the COVID-19 pandemic were evaluated positively. Sixty-three point four percent of people agreed that if the Council of Health Experts and the Independent Expert Advisory Council had been involved in the management of the COVID-19 pandemic earlier, the further course of the pandemic in Lithuania would have changed.

When comparing five institutions' involvement in managing the COVID-19 pandemic, the public health bureaus (median = 9) involvement is evaluated best and statistically significant ($p < 0.05$) compared with all other institutions (Table 2).

Table 2. Comparison of the involvement of individual public health authorities in the management of the COVID-19 pandemic

	Median (IQR)	*p* (Friedman's)	*p* (post hoc)*				
			CCDA	IH	NPHC	PHB	CHEDP
Centre for Communicable Diseases and AIDS (CCDA)	7 (3)	<0.001		>0.05	<0.001	<0.001	>0.05
The Institute of Hygiene (IH)	6 (3)		>0.05		<0.001	<0.001	<0.001
National Public Health Centre under the Ministry of Health (NPHC)	8 (3)		<0.001	<0.001		<0.001	<0.001
Public health bureaus (PHB)	9 (2)		<0.001	<0.001	<0.001		<0.001
The Centre for Health Education and Diseases Prevention (CHEDP)	7 (3)		>0.05	<0.001	<0.001	<0.001	

* Comparison and statistical significance between individual public health authorities

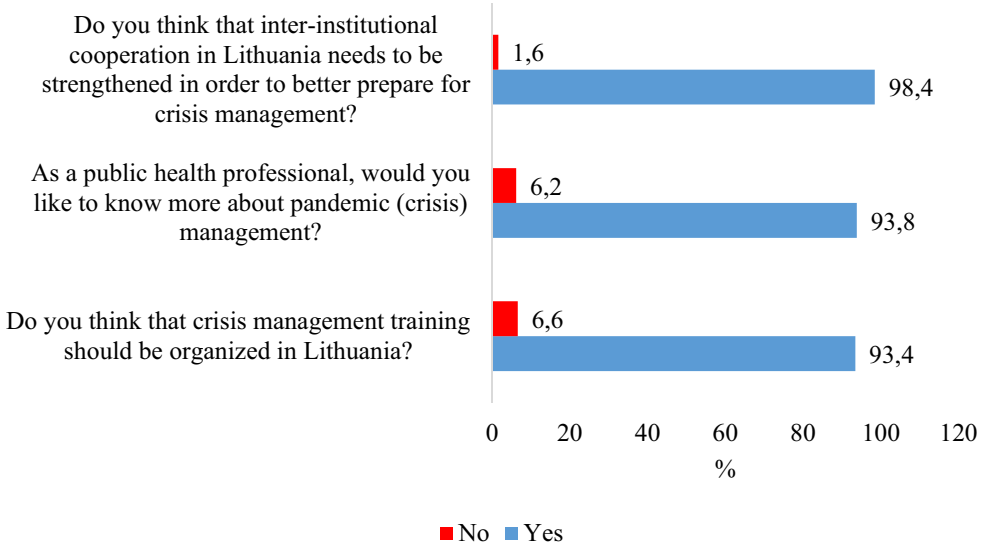

Figure 1. Opinion about crisis management in the future (%)

Public health professionals evaluated their contribution (median = 8) and the involvement (median = 9) to the management of the pandemic very highly. More than half (51.0%) of respondents said that they did not have any difficulties with their tasks, but almost the same amount (49.0%) of respondents did have some difficulties in understanding and pursuing their new tasks during pandemic. Directors of public health bureaus statistically significantly ($p < 0.05$) had more difficulties with their tasks when comparing with other public health professionals. Lack of information, quickly changing information, and poor inter-institutional collaboration were the main challenges that public health professionals encountered during a pandemic. Most public health professionals were seeking more information (228, 93.8%) and were interested in crisis management training (227, 93.4%). Also, 239 (98.4%) respondents thought that inter-institutional cooperation should be strengthened in Lithuania (Figure 1).

Good quality information sharing, communication, and collaboration between institutions and provision of sufficient training for the core workers of this pandemic where the main aspects to take into account when preparing for the crisis response and management.

In the last part of the results, most (86.4%) respondents think that leadership is important in crisis management. The public health professionals think that is important for a leader to make decisions in consultation with professionals (222, 91.4%), ensure transparency and accuracy of information disseminated in the country (205, 84.4%), and maintain communication with the public (193, 79.4%) (Figure 2).

Discussion

The results of this study suggest, that COVID-19 pandemic management measures were better evaluated during the first peak of the pandemic. These restrictive measures during the first peak of the pandemic were harder and gave better results over a shorter period. On 17th June 2020, all measures in Lithuania were relaxed (Lietuvos Respublikos Vyriausybė, 2020a). Before the second peak of the pandemic, parliamentary elections took place in Lithuania. It naturally stopped all policy-

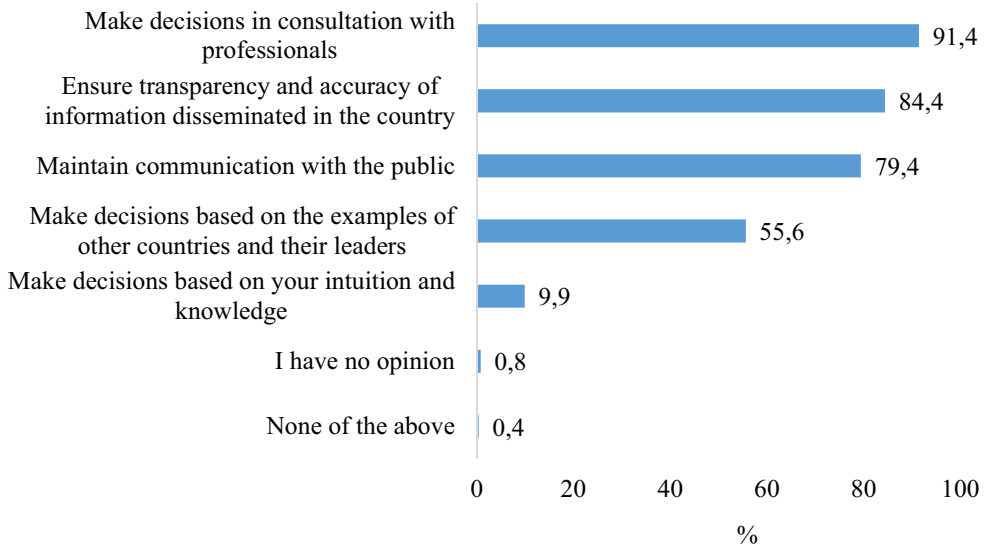

Figure 2. Opinion about leaders' actions in crisis management (%)

makers from making any decisions regarding the management of the COVID-19 pandemic and the introduction of restrictive measures (The Central Electoral Commission of the Republic of Lithuania, 2020). The response of a leader is very important, it could set the tone for further crisis management in the country. The initial effective leadership response to any crisis is likely to impact the ability of any system to develop and maintain the necessary productive interactions underpinning effective leadership for recovery (Currie, Gulati, Sohal, et al., 2021).

One of the most important parts of the management of the COVID-19 pandemic in Lithuania was the experts' involvement in managing the crisis. The introduction of two councils of experts that advise policymakers with scientific evidence was crucial. The Council of Health Experts, which was an initiative of the President of the Republic of Lithuania was tasked with COVID-19 pandemic management and provision of recommendations to the responsible authorities on stopping the spread of the virus (President of the Republic of Lithuania, 2020b). The Independent Expert Advisory Council was a working group formed by the Prime Minister to consider and submit proposals to the Government on the application and implementation of COVID-19 disease prevention, diagnosis, treatment, and other epidemic management measures (Lietuvos Respublikos Ministras Pirmininkas, 2020). The involvement of both councils was evaluated by public health professionals similar, and this could indicate that the difference between both institutions is not clear and the contribution of both could cause some confusion among the specialists. The study conducted in the Netherlands evaluating 114 post-crisis reports related to 60 crisis situations, shows that the involvement of external experts during the crisis response phase provides crisis managers with opportunities to integrate knowledge, carry out complex tasks, and increase their legitimacy (Broekema, Eijk, and Torenvlied, 2018).

Also, leadership should come with an evidence-based approach. According to the results, public health professionals think that is important for a leader to make decisions in consultation with professionals, ensure transparency and accuracy of information disseminated

in the country, and maintain communication with the public. Because of the dynamic nature of a pandemic, complete transparency and prompt communication of both real and potential risks are necessary (Nicola, Sohrabi, Mathew, et al., 2020). In pandemic situations, evidence-based management matters more than ever, because we want that the decisions made by policymakers are driven by the newest information and evidence, although it is more difficult to achieve that than in normal situations (Yang, 2020). Both Councils of Experts in Lithuania were created for the exact same goal to provide the country leaders with evidence-based information in order to make decisions about the management of the COVID-19 pandemic. The study of Kaul, et al. (2020) singled out core principles for a leader for effective crisis leadership in the context of the COVID-19 pandemic. Eight core principles include: communication, realistic view of the current state with optimism for the future, focus on mission and core values, decision making in the setting of ambiguity, plan for the long and short term, engage with purpose and humility, flattening the leadership structure, and looking outward. Leaders have to manage these elements, learn new lessons along the way, and help to develop various creative problem-solving strategies (Kaul, Shah, and El-Serag, 2020). The study of Georgiades (2020) about leadership lessons learned from prior pandemics claims that one of the most important lessons is that practice needs to be based on evidence. History is rich in leadership lessons during crises that can help today's policymakers (Georgiades, 2020).

Naturally, by dealing with something of this magnitude, challenges may arise. According to the results, almost half of the respondents had some difficulties in understanding and pursuing their new tasks. Directors of public health bureaus had more difficulties with their tasks when comparing with other public health professionals ($p < 0.05$). This is very important because directors are the people that get information first and have to make decisions about their employees' tasks. As stated in the results, the bigger part of public health professionals think that leadership is important in crisis management. In times of crisis, like the COVID-19 pandemic, people look up to their leaders for guidance. However, if these leaders, in this case, public health bureaus' directors, are having difficulties in understanding the tasks, issues may arise. Therefore, pandemic or crisis preparedness training is very important, especially for the people in the leading positions, to ensure smooth workflow in the bureau. In 2017 European Centre for Disease Control and Prevention (ECDC) developed competency-based training programmes intended to help the EU Member States improve public health emergency preparedness. This report, by using competency including knowledge and skill statements can form the basis for public health emergency preparedness training programmes and also contribute to better communication and coordination among the Member States in future public health emergencies (European Centre for Disease Prevention and Control, 2017). This type of training should be provided for all public health professionals, especially public health bureau directors.

Strengths and limitations of the study.

This is the first study to the authors' knowledge that investigates and evaluates the public health professionals' perceptions and insights about the management of the COVID-19 pandemic in Lithuania. The results of this work can provide insights for the policy-makers in Lithuania who seek to acknowledge public health professionals' opinions and improve crisis management in the future as well as provide possibility of reflection for other countries with similar contexts. The sample of participants in this study is rather large, therefore it ensures ecological generalizability and transferability of the results to another context.

Although the results of the survey represent the perception and insights of all public health bureaus in Lithuania, it is not possible

to see, which public health bureaus actually participated in the survey and compare the results between the municipalities. A stratified sample method, was not an option for this research, due to confidentiality reasons for public health bureau directors. Since there was a question in the questionnaire about the occupation of the respondents, there was no possibility to include the question about the municipality of bureaus. Every public health bureau has one director in that municipality, so he or she would be easily identified. Therefore, this research could not use a stratified sample in order to assure anonymity and confidentiality for all respondents. Further research can be done in order to compare data among different public health bureaus to see where the most challenges arise and what can be done to mitigate them.

The instrument used for this study was an online questionnaire. Although, it assures great confidentiality because the researcher cannot know, who filled out the questionnaire, at the same time there is no possibility to know if the invitation email to participate in the survey reached all respondents. Therefore, the response rate cannot be calculated properly, because there is no way to know if the questionnaire reached all 1143 public health professionals. The aim was to have 288 public health professionals participate in the survey and 243 fill in the questionnaire completely, which can show a rather great response from the public health professionals. Although before the actual survey, pilot study was not conducted, the questionnaire was reviewed and approved by experts in the field.

This research reflects the public health professionals' perception and insights about the management of the COVID-19 pandemic in Lithuania. Although, it is important to notice, that all these specialists have a subjective opinions about the management of the COVID-19 pandemic in Lithuania and the contribution of the leaders to this crisis, their opinions could have been influenced by other factors that took place in the public health field. For example, a better evaluation of the former Government due to the recent increase of the financing for the public health bureaus or simply a personal preference for the leader itself. (Lietuvos Respublikos Sveikatos Apsaugos Ministerija, 2020).

Conclusions

1. Pandemic management measures were better evaluated during the first peak of the pandemic ($p < 0.05$). The evaluation was more positive because of the change of the government during the pandemic, different restrictive measures and also, greater experience and understanding of a pandemic. These factors might have impact on the way healthcare professionals expressed their own views on pandemic management, which differ from the general guidelines, on how to deal with the situation. Most professionals agreed that if the Council of Health Experts and the Independent Expert Advisory Council had been involved in the management of the COVID-19 pandemic earlier, the further course of the pandemic in Lithuania would have changed.
2. When comparing five institutions' involvement in managing the COVID-19 pandemic the public health bureau involvement is evaluated the best comparing with all other institutions ($p < 0.05$). Directors of public health bureaus had more difficulties with their tasks when compared with other public health professionals ($p < 0.05$). Lack of information, quickly changing information, and poor inter-institutional collaboration were the main challenges that public health professionals encounter during a pandemic. Most public health professionals are seeking more information and are interested in crisis management training.
3. Most public health professionals think that leadership is important in crisis management. For a leader in a crisis is important to make decisions in consultation with professionals, ensure transparency and accuracy of information disseminated in the country, and maintain communication with the public.

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Annex 1

Dear Respondent,

The Faculty of Public Health of the Medical Academy of the Lithuanian University of Health Sciences is conducting a survey to find out the opinion of specialists working in public health bureaus about leadership during a pandemic and COVID-19 crisis management in Lithuania. The questionnaire is anonymous and all data collected during the study is confidential and will be used for scientific purposes only. Tick ☒ **one answer that is the most appropriate** (unless stated otherwise). Thank you very much for your time in the study.

Please contact us if you have questions during the current survey:
Lithuanian University of Health Sciences and
Maastricht University master student
Ieva Stankutė
tel. 861096539 or
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GENERAL INFORMATION

1. Age_____

2. Gender

2.1. ☐ Male

2.2. ☐ Female

3. Education

3.1. ☐ University

3.2. ☐ College

4. Place you live in

4.1. ☐ Rural area

4.2. ☐ City

5. Occupation

5.1. ☐ Director

5.2. ☐ Public health specialist working in an bureau

5.3. ☐ Public health specialist working in an educational institution

6. In which municipality do you work?

6.1. ☐ City Municipality

6.2. ☐ District Municipality

HEALTH POLICY

Evaluate the management of the COVID-19 pandemic in Lithuania. Rate from 1 – very bad, to 10 – very good.

7. In your opinion how the COVID-19 pandemic situation is managed in Lithuania?	1 2 3 4 5 6 7 8 9 10
8. How do you assess the COVID-19 pandemic management measures in Lithuania during the first peak?	1 2 3 4 5 6 7 8 9 10
9. How do you assess the COVID-19 pandemic management measures in Lithuania during the second peak?	1 2 3 4 5 6 7 8 9 10

10. What is your opinion, as a specialist, what other steps could the Government have taken to manage the pandemic?

POLITICAL LEADERSHIP

11. Do you think leadership is important in crisis management?

11.1. ☐ Yes

11.2. ☐ No

11.3. ☐ I have no opinion

12. What actions do you think a leader should take during crisis management? (tick all that apply)

12.1. ☐ Make decisions in consultation with professionals
12.2. ☐ Maintain communication with the public
12.3. ☐ Make decisions based on the examples of other countries and their leaders
12.4. ☐ Make decisions based on your intuition and knowledge
12.5. ☐ Ensure transparency and accuracy of information disseminated in the country
12.6. ☐ None of the above
12.7. ☐ I have no opinion

Evaluate the leadership of individual institutions in Lithuania during the COVID-19 pandemic. Rate from 1 – very bad, to 10 – very good.

13. How do you assess the leadership of President Nausėda during the COVID-19 pandemic?	1 2 3 4 5 6 7 8 9 10
14. How do you assess the leadership of the Minister of Health A. VERYGA (during the first peak of the COVID-19 pandemic)?	1 2 3 4 5 6 7 8 9 10
15. How do you assess the leadership of the Minister of Health A. VERYGA (during the second peak of the COVID-19 pandemic)?	1 2 3 4 5 6 7 8 9 10
16. How do you assess the leadership of the Minister of Health A. DULKYS (during the second peak of the COVID-19 pandemic)?	1 2 3 4 5 6 7 8 9 10
17. How do you assess the leadership of Prime Minister S. SKVERNELIS (during the first peak of the COVID-19 pandemic)?	1 2 3 4 5 6 7 8 9 10
18. How do you assess the leadership of Prime Minister S. SKVERNELIS (during the second peak of the COVID-19 pandemic)?	1 2 3 4 5 6 7 8 9 10
19. How do you assess the leadership of Prime Minister I. ŠIMONYTĖ (during the second peak of the COVID-19 pandemic)?	1 2 3 4 5 6 7 8 9 10
20. How do you assess the leadership of the NATIONAL HEALTH COUNCIL * during the COVID-19 pandemic?	1 2 3 4 5 6 7 8 9 10

* National Health Council – an advisory body for the evaluation and formulation of health policy accountable to the Seimas.

EVIDENCE-BASED MANAGEMENT

21. Do you agree that the decisions taken by the Government during the COVID-19 pandemic were based on scientific evidence and good practice from other countries?

21.1. ☐ Strongly agree

21.2. ☐ Agree

21.3. ☐ Neither agree, nor disagree

21.4. ☐ Disagree

21.5. ☐ Strongly disagree

Evaluate the involvement of health professionals and scientists in the management of the COVID-19 pandemic. Rate from 1 – very bad, to 10 – very good.

22. How do you assess the involvement of the Council of Health Experts* in managing the COVID-19 pandemic?	1 2 3 4 5 6 7 8 9 10
23. How do you assess the usefulness of the involvement of the Council of Health Experts in the management of the COVID-19 pandemic?	1 2 3 4 5 6 7 8 9 10
24. How do you assess the involvement of the Independent Expert Advisory Council in managing the COVID-19 pandemic?**	1 2 3 4 5 6 7 8 9 10
25. How do you assess the usefulness of the involvement of the Independent Expert Advisory Council in the management of the COVID-19 pandemic?	1 2 3 4 5 6 7 8 9 10

* Council of Health Experts – At the initiative of the President of the Republic of Lithuania Gitanas Nausėda, a group of experts on COVID-19 pandemic management was formed, which analyses, evaluates and provides recommendations to the responsible authorities on stopping the spread of the virus.

** The Independent Expert Advisory Council is a working group formed by the Prime Minister Ingrida Šimonytė to consider and submit proposals to the Government on the application and implementation of COVID-19 disease (coronavirus infection) prevention, diagnosis, treatment and other epidemic management measures.

26. In your opinion, if the Council of Health Experts had been involved in the management of the COVID-19 pandemic earlier, would the further course of the pandemic in Lithuania have changed?

26.1. ☐ Yes

26.2. ☐ No

27. In your opinion, if the Independent Expert Advisory Council had been involved in the management of the COVID-19 pandemic earlier, would the further course of the pandemic in Lithuania have changed?

27.1. ☐ Yes

27.2. ☐ No

CONTRIBUTION OF PUBLIC HEALTH AUTHORITIES

28. How do you assess the involvement of individual public health authorities in the management of the COVID-19 pandemic? Rate from 1 – very bad, to 10 – very good.

Centre for Communicable Diseases and AIDS	1 2 3 4 5 6 7 8 9 10
The Institute of Hygiene	1 2 3 4 5 6 7 8 9 10
National Public Health Centre under the Ministry of Health	1 2 3 4 5 6 7 8 9 10
Public health bureaus	1 2 3 4 5 6 7 8 9 10
The Centre for Health Education and Diseases Prevention	1 2 3 4 5 6 7 8 9 10

29. Do you think that the public health bureaus were prepared to manage the COVID-19 pandemic?

29.1. ☐ Yes

29.2. ☐ No

30. Did you personally contribute to the management of the COVID-19 pandemic (contact with patients, their contacts, work at the mobile point, etc.)?

30.1. ☐ Yes

30.2. ☐ No

31. Has the Public Health bureau encouraged you to contribute to the management of the COVID-19 pandemic?

31.1. ☐ Yes

31.2. ☐ No

32. In what ways has the Public Health bureau helped / encouraged you to contribute to the management of the pandemic? (tick all that apply)

32.1. ☐ Provided additional tools (computer, telephone, mobile internet, etc.)

32.2. ☐ Encouraged by added value (cash bonus, additional days off, etc.)

32.3. ☐ There is no need to encourage me, I myself am willing to contribute to the management of the pandemic

32.4. ☐ Did not encourage/did not help

Evaluate the contribution of public health professionals to managing the COVID-19 pandemic. Rate from 1 – very bad, to 10 – very good.

33. How do you assess your contribution as a public health professional in trying to manage the COVID-19 pandemic?	1 2 3 4 5 6 7 8 9 10
34. How do you assess the involvement of public health professionals in the management of the COVID-19 pandemic in general?	1 2 3 4 5 6 7 8 9 10

35. Have you had any difficulties / uncertainties in carrying out your work tasks during the COVID-19 pandemic?

35.1. ☐ Yes, it was unclear how to carry out the tasks assigned to me.

35.2. ☐ No, the new tasks were clear and understandable to me.

35.3. ☐ Other_____(please specify)

36. What challenges have you encountered in contributing to the management of the COVID-19 pandemic? _____

37. In what other ways do you think public health professionals could have contributed to the management of the COVID-19 pandemic? _____

CRISIS MANAGEMENT

38. Do you think that crisis management training should be organized in Lithuania?

38.1. ☐ Yes

38.2. ☐ No

39. As a public health professional, would you like to know more about pandemic (crisis) management?

39.1. ☐ Yes

39.2. ☐ No

40. Do you think that inter-institutional cooperation in Lithuania needs to be strengthened in order to better prepare for crisis management?

40.1. ☐ Yes

40.2. ☐ No

41. Other suggestions on how to better prepare for crisis management in Lithuania

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