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Brief Report

Knowledge gaps and educational needs of Veterans Affairs healthcare providers regarding COVID-19 at the start of the pandemic

Chana B. Krupka PhD^a, Susan Santos PhD^a, Cris M. White PhD^b, David R. Litke PhD^{a,c},
Lisa M. McAndrew PhD^{a,d,*}

^a War Related Illness and Injury Study Center (WRIISC), Veterans Affairs New Jersey Health Care System, East Orange, NJ

^b Employee Education System, Veterans Health Administration, Department of Veterans Affairs

^c Department of Rehabilitation Medicine, New York University Grossman School of Medicine, 550 1st Avenue, New York, NY 10016

^d Department of Educational and Counseling Psychology, University at Albany, Albany, NY



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A B S T R A C T

This study describes Veterans Affairs providers' perceived knowledge gaps for addressing COVID-19 concerns among Veterans generally and specifically among Veterans with a history of military exposures. A needs assessment was conducted through an online survey of 2,818 medical and behavioral health care providers. Results highlight the importance of ongoing education, even in topics for which providers endorsed adequate knowledge (eg, handwashing). Results also accentuated the need for educating providers about effectively communicating with patients regarding concerning medical topics when scientific data is scarce. Implications are discussed.

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The coronavirus disease 2019 (COVID-19) pandemic escalated quickly thus creating a need for providers to swiftly adapt nascent knowledge of COVID-19 to address concerns of their specific medical populations. Initial research, conducted primarily in Europe and Asia, suggests many health care providers believed they lacked adequate knowledge^{1,2} and confidence to address COVID-19.³ We are aware of only one small qualitative study conducted in the United States (US) which found that health care providers' perceived COVID-19 knowledge gaps.⁴ An additional study conducted prior to the COVID-19 outbreak, indicated a perceived lack of preparedness in US providers for dealing with future infectious disease pandemics.⁵

Our goal is to describe the knowledge gaps and educational needs of Veterans Affairs (VA) health care providers for addressing COVID-19 concerns of Veterans, particularly those with a history of military exposures (eg, agent orange, airborne hazards), as this is a unique medical population the VA serves. As the VA is the largest health care system in the US, VA providers' perceived gaps in knowledge and education at the start of the pandemic can provide guidance about

advanced preparation and quick scale up of education for all US providers in future pandemics.

METHODS

The War Related Illness and Injury Study Center (WRIISC) is the VA center of excellence for military exposures. WRIISC, in conjunction with the VA Employee Educational Service, conducted a provider operational needs assessment to understand the training needs of VA providers treating Veterans with deployment related health concerns including environmental exposures. As this was an operations needs assessment, it was designated with documentation as non-research by a VA Program Office consistent with VA Program Guide 1200.21.

Due to the timing of the survey, additional questions were added regarding COVID-19 including: provider-patient discussion of COVID-19 related topics, provider knowledge of related subject areas, and perceived importance of provider training in these topics. The questions are included in [Appendix A](#). These data were used to better understand COVID-related information needs as it might relate to WRIISC educational products. The survey was sent to approximately 22,000-23,000 personnel via an email link from May 11, 2020 to June 11, 2020. Of these, 3,763 VA health care providers and coordinators completed the survey.

* Address correspondence to Lisa M. McAndrew, PhD, War Related Illness and Injury Study Center (WRIISC), Veterans Affairs New Jersey Health Care System, 385 Tremont Ave, East Orange, NJ 07018.

E-mail address: Lisa.mcandrew@va.gov (L.M. McAndrew).

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Table 1
Percent of providers who reported speaking with a Veteran about COVID-19 topics

	Discussed with veteran %	Knowledge of subject %			Importance of completing training %		
		None/low	Average	High/expert	None/slight	Moderately	Important/very important
COVID-19 impact on Veterans with exposure concern	61	27	36	36	13	17	70
Protective steps against COVID-19	92	3	34	64	8	13	79
Effective handwashing	89	13	21	66	10	12	78
Effective use of social distancing	92	1	25	73	9	12	79
Treatments available for COVID-19	56	28	39	33	12	18	70
Impact of COVID-19 infection on Veteran' health	61	25	36	38	8	15	77

RESULTS

Participants included 1,330 physicians and nurse practitioners; 498 nurses; and 990 behavioral health care providers. Most providers reported speaking with Veterans about COVID-19-related topics (Table 1), including protective measures (92%), handwashing (89%), and social distancing (92%). To a lesser degree, providers reported speaking with Veterans about COVID-19's impact on exposure concerns (61%), health consequences of COVID-19 for those with exposure-related difficulties (61%), and available COVID-19 treatments (56%).

Most providers reported at least average knowledge of basic protective measures (97%), handwashing (98%), and social distancing (98%; Table 1). Fewer providers reported at least average knowledge of COVID-19's impact on exposure concerns (72%), the health consequences of COVID-19 for those with exposure-related difficulties (74%), and available COVID-19 treatments (72%). Finally, most providers (70%–79%) perceived training to be important for all COVID-19 topics (Table 1).

DISCUSSION

Health care providers frequently spoke with Veterans about COVID-19, particularly on topics about which they believed they had adequate knowledge, such as handwashing. At the same time, providers reported that ongoing education was important, even for topics about which they held adequate knowledge. This is consistent with research on risk communication that shows during times of crisis people desire specific and actionable steps – even in mundane areas – to improve a sense of self-efficacy and perceived control.⁶

Although health care providers were less knowledgeable about how to address COVID-19 for Veterans with military concerns, they still spoke to Veterans about these issues. Consistent with existing research, our data suggest providers may need education on how to effectively communicate with patients about concerns when there is little scientific data.⁷ At the time of this survey, little was known about COVID-19 and almost nothing was known about the potential impact of COVID-19 for those with military exposures. Even in the absence of such data, providers can be taught effective risk communication including how to listen and validate patient's concerns while acknowledging what is known as well as what is yet to be determined.⁷

Strengths of this study include having a large sample size and assessing health care providers at the start of the pandemic. Limitations include not assessing if providers had received training in

COVID-19 or risk communication and using self-report to assess extent of COVID-19 knowledge. In addition, as questionnaire response rate was low, results may not be generalizable to other VA providers; furthermore, as respondents were only VA providers, it is unclear if these results are generalizable to providers outside the VA. Future studies should use objective measures of providers' training and knowledge as well as examine factors of geography and provider differences in training and knowledge.

Together, the findings suggest the value of education for health care providers on actionable steps they and their patients can take to mitigate pandemic-related health risk, even in seemingly basic areas. At the same time, the need for increased provider training on ways to effectively communicate with their specific populations about unknown areas of medical concerns.

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SUPPLEMENTARY MATERIALS

Supplementary material associated with this article can be found in the online version at <https://doi.org/10.1016/j.ajic.2022.01.025>.

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