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An Exploratory Study of Knowledge, Attitude and Practices of Rural Adolescent Girls and Life Challenges Faced Amid COVID-19

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ABSTRACT

From a psychopathological viewpoint, COVID-19 is a relatively new form of stressor. COVID-19 and its related containment measures namely lockdown, social distancing, and self-isolation are leading to increased loneliness and reduced social interactions having detrimental impact on psychosocial and mental health of general population especially adolescents. Spreading a large amount of uncontrolled news very rapidly with the risk of fake news running faster than the virus itself, and created uncertainties, worries and serious toll on the mental health of adolescents especially rural girls due to the limited access to reliable information in villages and lack of formal professional help groups for resolving their other general crisis amid COVID-19. Hence, an empirical research was undertaken to analyze the existing knowledge, attitude and practices (KAP) of rural adolescent girls pertaining to COVID-19 and their other life concerns amid COVID. A total of 187 adolescent girls with access to smartphone were purposively selected from seven villages of Distt. U.S. Nagar and Nainital in Uttarakhand. Self structured questionnaire was developed to assess KAP pertaining to COVID-19 and informal talks were carried out to discuss their personal/familial/school issues amid COVID through telephonic call. Majority of rural girls were found to have moderate level of knowledge and were reported to have a neutral attitude towards health seeking and preventive behaviour. Nearly half of the respondents were reported to be following inappropriate practices and had few personal/familial/school related issues which needed immediate attention and help. Telecounseling came as a boon for rural girls amid COVID-19. Post telecounseling, girls' depicted notable improvement in KAP on COVID-19 and better mental health due to getting an authentic and reliable ear for hearing and assistance in finding solutions to their personal/familial or school related issues.

Keywords: Attitude, Intervention, Knowledge, Practices, Telecounselling

INTRODUCTION

In many countries, drastic changes and stressful conditions have been developed over the progression of the COVID-19 disease, like imposing lockdown, school closures, quarantine, travel restrictions, social distancing, and fast-deteriorating business environment (Orgilés *et al.,* 2020). Stressors such as prolonged duration, fears of infection, frustration and boredom, inadequate information, lack of in-person contact with classmates, friends, and teachers, lack of personal space at home, and family financial loss can have even more problematic and enduring effects on children and adolescents (Brooks, 2020). Sprang and Silman (2013) showed that the mean post-traumatic stress scores were four times higher in children who had been quarantined than in those who were not quarantined. The impact of the pandemic on adolescent girls may be largely disproportionate. In

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many settings, women and girls are also at increased risk during an epidemic (or pandemic) because they are responsible for caring for children and the elderly at home, and often account for more than half of the healthcare workforce (Wenham *et al.,* 2020) and they often have reduced access to education and increased dropout rates post such crisis.

Several studies have shown that the KAP level in individuals is associated with effective prevention and management of illness and promotion of one's own health (Fan, 2018). Telehealth, or more specifically telemental health services, are practically feasible and appropriate for the support of patients, family members, and health service providers during this pandemic (Smith, 2020). Patil and Khadi (2018) in their study highlighted need for intervention on familial aspects to enhance overall mental health status. Considering the lack of studies related to the current pandemic and how to assist management of COVID-19, there is an urgent need to understand the knowledge, attitude and practices pertaining to the pandemic. Also, limited access to reliable information in villages and lack of expert help make it necessary to intervene through telecounseling for easing mental tensions amid COVID-19. Therefore, the present study was taken up to assess the existing knowledge, attitude and practices (KAP) of rural adolescent girls and impact evaluation of telecounselling on KAP of rural adolescent girls regarding COVID-19.

METHODOLOGY

District Udham Singh Nagar and Nainital of Uttarakhand State were purposively selected for data collection. From the selected districts, a total of seven nearby villages were selected for drawing the sample. A total of 187 adolescent girls who had access to smartphone were purposively selected as the sample for the study.

Self-Structured Questionnaire was developed to assess the knowledge, attitude and practices of rural adolescent girls pertaining to COVID-19. Knowledge component was answered on a three point rating scale i.e. Yes, Not sure, No and was categorized as Poor, Moderate and Good regarding characteristics, clinical symptoms, transmission, and prevention of COVID-19. Attitude was assessed towards health seeking behavior and preventive behavior on a three point rating scale i.e. Agree, Doubtful, Disagree and was categorized as Favorable, Neutral and Unfavorable. The items pertaining to practice part were divided into two categories i.e. practices complying with government guidelines (wearing masks, social distancing, avoiding gatherings, social isolation etc.) and lifestyle practices (practicing hand hygiene, eating healthy food, exercising, panic buying etc.) was measured on two point i.e. Yes and No and was categorized as appropriate and inappropriate.

Telecounselling involved informal talks and discussions with the respondents via telephone to gauge into their opinions and views regarding the issues they are facing in day today life amid COVID-19 and to enhance their KAP regarding the same. Informative videos and texts on COVID-19 were also shared through social networking platforms like Whatsapp. To stimulate better responses techniques like probing were also used. During the conversation, notes were taken and transcripts were produced on the basis of these. The notes were formulated in full sentences soon after the discussion, to ensure that the researcher's memory can assist in documenting the discussion as accurately as possible.

The respondents were briefed about the purpose of the study and a verbal consent was taken from them by explaining the contents and intention of the study. Since face to face data collection was not possible due to lockdowns and bans on movement due to the pandemic, the measures were administered in telephonic mode. Data were collected in four phases; the pilot testing of the research tools, the pre test data collection, telecounselling, a repeat assessment (after a gap of 2 months from the third phase) i.e. post test data collection. Throughout the data collection confidentiality was maintained. The responses of the personal interviews were recorded and later transcribed.

RESULTS AND DISCUSSION

Analysis of data before intervening via telecounseling revealed that around 64 per cent of respondents had

moderate knowledge about the characteristics of COVID-19 followed by 26 per cent who reported having good knowledge (Figure 1). Post telecounselling an improvement was witnessed as 69 per cent respondents reported having good knowledge on characteristics of COVID-10 followed by 25 per cent who had moderate knowledge of the same. There were around 10 per cent respondents who had poor level of knowledge about the characteristics which declined to 6 per cent after telecounselling. Further it was evident that nearly half of the respondents (55%) reported having good knowledge about the clinical symptoms in the pre test phase (i.e. before telecounselling) followed by 41 per cent having moderate knowledge of the same. After telecounselling, 88 per cent of the respondents were found to have good knowledge about the clinical symptoms followed by 9 per cent having moderate level of knowledge. The knowledge on transmission of COVID-19 in the pre-test phase, 65 per cent respondents reported having good level of knowledge followed by 30% respondents who fell under the moderate level of knowledge. Post telecounselling, majority of respondents (91%) had good knowledge followed by 9 per cent respondents who were found to have moderate knowledge. The knowledge on preventive measures before telecounselling revealed that 49 per cent of respondents had good knowledge and around 45 per cent respondents reported having moderate knowledge. After the telecounselling, a remarkable improvement was seen as 87 per cent of the respondents reported good knowledge on preventive measures of COVID-19 followed by 10 per cent respondents having moderate level of knowledge. Results are supported by a study by Rani (2018) which indicated that the intervention led to an overall gain in the knowledge level of the rural woman.

It is evident from Figure 2 that majority (59%) of the respondents had moderate level of knowledge followed by 30 per cent who reported having good level of knowledge. It was unfortunate to observe that 11 per cent of the respondents reported having poor knowledge related to COVID-19. Some believed that rinsing mouth and nose with saline water will help to prevent the disease. Other common myths regarding prevention from COVID-19 included spraying alcohol on body, eating citrus fruits or Vitamin C supplements and taking hot bath. People having low health literacy were more likely to be less worried about COVID-19 and thereby denied the fact that they would get infected and be less prepared for the outbreak (Wolf *et al.,* 2020).

On discussion, the respondents shared that the common sources of information were family members,

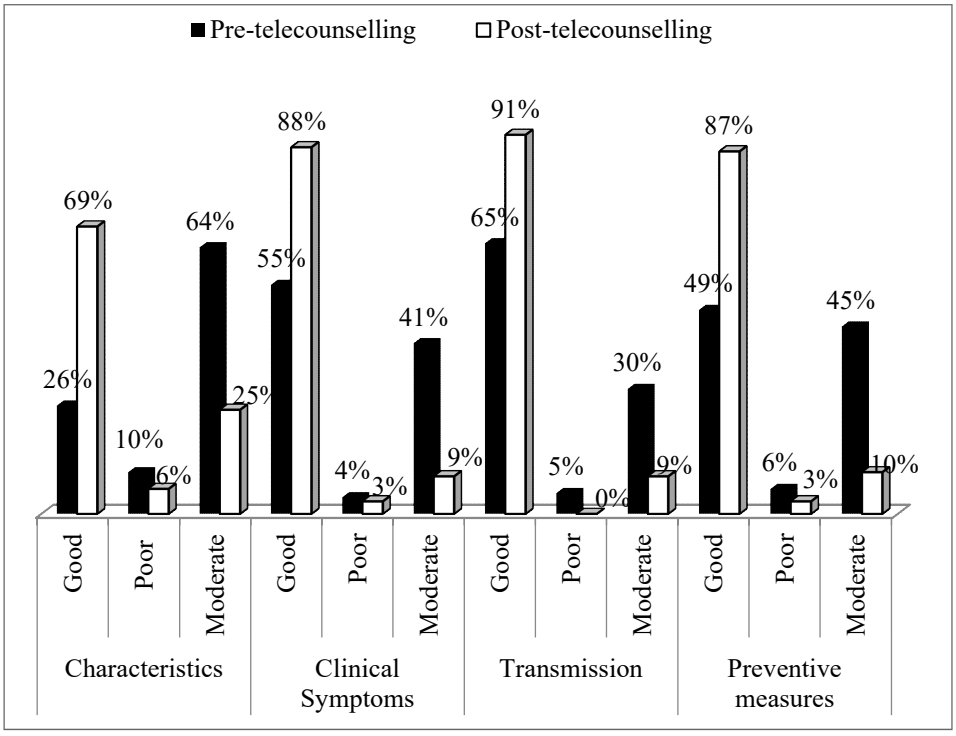

Figure 1: Percent distribution of respondents on knowledge regarding COVID-19

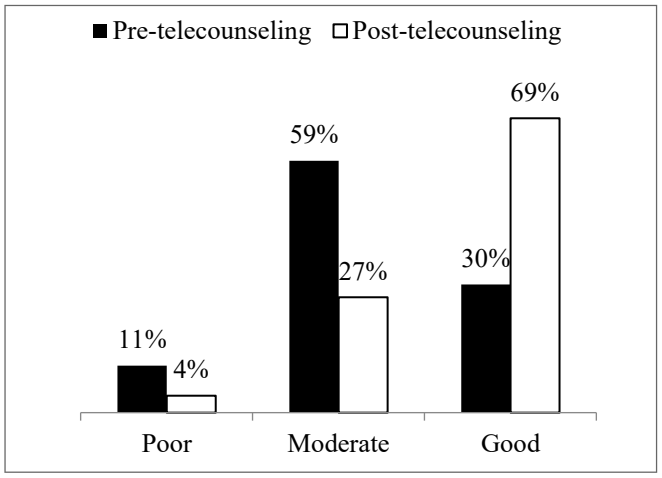

Figure 2: Percent distribution of respondents on overall knowledge regarding COVID-19

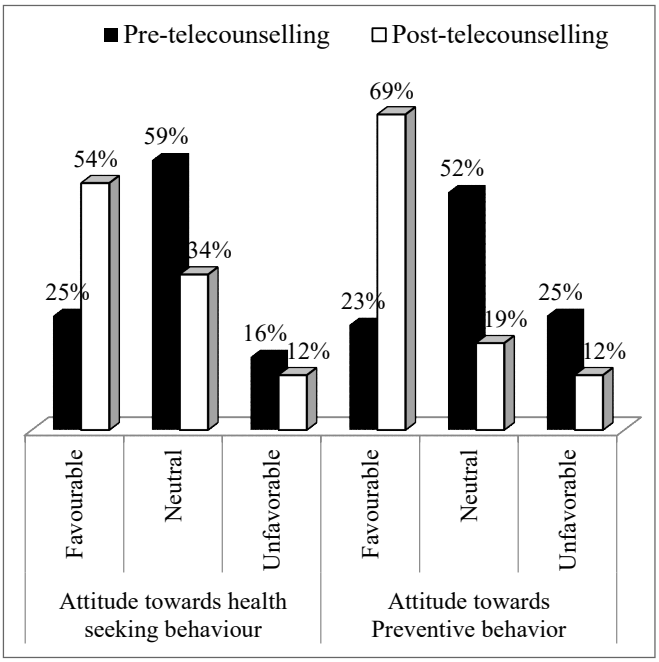

Figure 3: Percent distribution of respondents on attitude regarding COVID-19

friends, internet, social media and newspapers. On further probing, they shared myths and misconceptions regarding the disease. While the healthcare systems were struggling to find a solution to the COVID-19, a number of myths popped out. In this regard, the various health authorities (World Health Organization (WHO), Centre for Disease Control and Prevention (CDC), Ministry of Health and Family Welfare, India etc.) have listed some of the prevailing myths to increase awareness about the infection and have provided factual information about COVID-19 at their websites. (require reference). Post telecounseling, respondents depicted notable improvement in knowledge related to COVID-19 with majority (69%) eliciting good level of knowledge followed by moderate knowledge (27%). Around 4 percent of the respondents revealed poor knowledge related to COVID-19. One of the participants stated "*Earlier I had this notion that the virus can't survive in high temperatures. This is why all my family members were drinking ginger water, garlic and other food items that are believed to help maintain high body temperatures. Now I am aware of various studies by institutions all over the globe that COVID-19 is able to survive in wide range of temperatures and humidity*".

It is evident from the Figure 3, that before telecounseling, 59 per cent of respondents reported having neutral attitude towards health seeking behavior followed by 25 per cent of respondents who reported favourable attitude. Around 16 per cent of respondents had unfavourable attitude towards health seeking behaviour. On observing the trend of attitude towards preventive behaviour, it was observed that around half (52%) of the respondents has neutral attitude followed by 25 per cent and 23 per cent of respondents who had unfavourable and favourable attitude respectively. It was unfortunate to observe that some respondents reported social stigma relating to the pandemic in the form of social boycott of infected or suspected persons and their family members. The possible reasons might be ambiguity regarding various aspects of the disease and fake news spreading fear and anxiety among common people. In the telecounselling, respondents were made aware that at present, families of infected individuals need moral support and cooperation. They were given examples of various health care professionals are working closely with such individuals to provide care and medical / clinical support in this situation of crisis. Post telecounseling, a sweeping change was observed as majority (54%) of the respondents reported favourable attitude towards health seeking behaviour followed 34 per cent of respondents who reported neutral attitude. The attitude on preventive behaviours also seemed to have changed post counselling as 69 per cent of the

reported favourable attitude towards it. The percentage of respondents having unfavourable attitude also dropped to 12 per cent. After telecounselling, most of the respondents reported having confidence in the government or health care systems in relation to inhibiting the spread of COVID. This may also be in response to the critical involvement of the government with the COVID outbreak taking proactive measures in line with global approaches and guidelines from the Ministry of Health and Family Welfare, and the Ministry of Home Affairs. In previous studies, younger people were found to more easily change their attitudes (Taghrir, 2020). Few respondents stated that "*we believe COVID can be controlled if we make a collective effort as a society by following preventive measures such as maintaining social distancing, wearing masks sincerely.*"

It is apparent from Figure 4 that before telecounseling, 57 per cent respondents followed inappropriate practices complying with government guidelines followed by 43 per cent who followed appropriate practices. It was observed that 51 per cent of the respondents were following inappropriate practices. Some of the respondents shared that they were not aware of the severity of the disease and therefore left the house often without wearing masks. Respondents reported use of "use and throw" masks often being used interchangeably with the family members. Unhealthy dietary habits and sleeping patterns were reported in response to the growing uncertainty about the future. A study by Emlie (2020) also reported lack of information, imprecise information, and deception can lead to hysteric and fuel behavioural practices for example panic buying. According to another recent study, panic buying is having detrimental impact on health supply chains leading to shortage of essentials like sanitizers, masks and pain relievers (Flora, 2020).

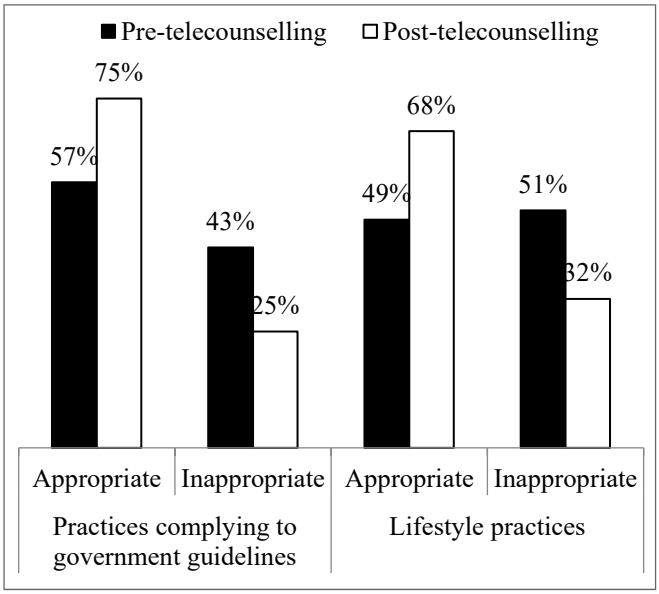

Figure 4: Percent distribution of respondents on practice regarding COVID-19

Post telecounseling it was observed that enhanced knowledge translated into practices with 75 per cent of respondents following appropriate practices of complying with government guidelines. Many reported refraining from attending social events with large gatherings. However, 25 per cent of the respondents still followed inappropriate practices. Similar trend was witnessed in lifestyle practices as 68 per cent of the respondents reported following appropriate practices post telecounselling. It is common consensus that a more educated population about any given disease will comply better with the preventive and treatment measures (Hocking, 2013).

Personal/familial or school related issues of the rural adolescent girls amid COVID-19

Because of the school closures, respondents reported disproportionate increase in household responsibilities. Around 83 per cent of the respondents

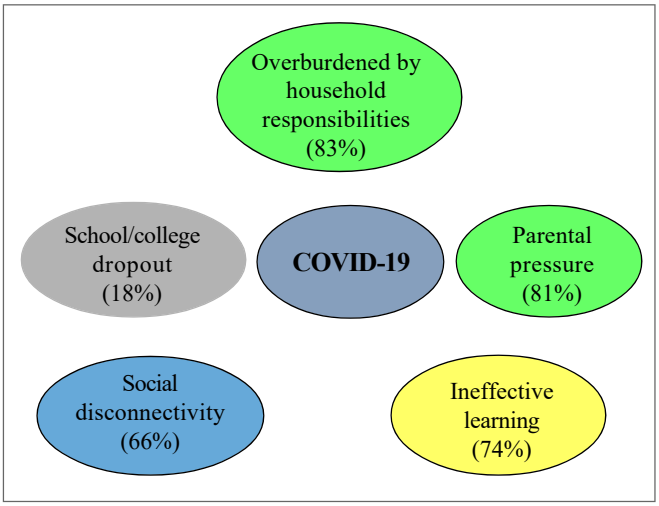

Figure 5: Personal/familial or school related issues of the rural adolescent girls amid COVID-19

cited burden of household responsibilities as one of the major issues they are facing amid COVID-19. One of the respondent shared "Since *the schools are closed, I am expected to help in every household chore. Things were very different before. Now my mother thinks that me sitting idle so she keeps engaging me in some work which irritates me sometimes*". There were around 81 per cent of the respondents who talked about their strained relationships with parents during COVID time. They reported to be bearing the brunt of parental anger. Some even shared that they are struggling to find a balance between their desires and parental expectations. One of them stated "*Earlier I used to go to college but now studying online and because of this my parent's think that I am always on phone and not doing anything productive and they get angry over it every now and then and this keeps me under pressure all the time".*

On probing about the experiences of online education, around 74 per cent of the respondents reported that this mode of learning is not very effective. According to respondents, video calls and zoom classrooms were not possible for them as most of them come from humble backgrounds and have just one smartphone in their home and that too with limited access, so notes were being circulated on Whatsapp groups and in such groups there is no room for discussion. The respondents felt that the lessons should not be just a one-way dialogue. They should have the opportunity to discuss the topics and raise questions to understand the concepts clearly and this seems to be missing in this mode. Being confined to the boundaries of one's home was reported as being comparable to being imprisoned by around 66 per cent of the respondents. It was further reported to create a sense of vulnerability and uncertainty. One respondent shared "I *used to have so much fun with friends earlier but this pandemic has changed everything. Being always confined to home feels like a jail, it is so suffocating*". Around 18 per cent of the respondents reported that their families are reconsidering financial cost of educating them after the COVID situation gets better. Research shows that girls risk dropping out of school when caregivers are missing from the household because they typically have to (partly) replace the work done by the missing caregiver (Huisman, 2009). Therefore, government needs to formulate policies to ensure girls return to schools once lockdowns are lifted, and organize awareness campaigns that encourage families to continue supporting education.

CONCLUSION

Post telecounseling, a drastic shift was observed in Knowledge, Attitude and Practice of the respondents. It offered creative and flexible solutions in responding effectively to the crisis and helped in charting out ways to provide professional assistance to rural adolescent girls regarding their personal/familial and school related issues amid COVID. Expanding its usage is vital to cope with the upsurge in mental health symptoms due to the coronavirus. Additionally, adequate monitoring of social media platforms to confirm and improve the quality of information delivered to the people is of prime importance. Mental health support should be made more readily available to the people, especially adolescents and government needs to strengthen their health system to apply standard infection prevention and control measures.

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REFERENCES

Brooks, S.K., Webster, R.K. and Smith, L.E., Wooland, L., Wessely, S., Greenberg, N. and Rubin, G.J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence, *The Lancet*, **395**, 912-920.

Emlie, B.K. (2020). COVID-19 (coronavirus): Panic buying and its impact on global health supply chains, *Investing in Health*, Available at COVID-19 (coronavirus)_ Panic buying and its impact on global health supply chains.html

Fan, Y., Zhang, S., Li, Y., Li, Y., Zhang, T., Liu, W. and Jiang, H. (2018). Development and psychometric testing of the Knowledge, Attitudes and Practices (KAP) questionnaire among student Tuberculosis (TB) Patients (STBP-KAPQ) in China*, Bio Medical Central Infectious Diseases,* **18**(1), 213.

Flora, S. (2020). Panic buying amid coronavirus fears: How much we spend and why is it problem? Available at Panic buying amid coronavirus fears_ How much are we spending… and why is it a problem_.html

Hocking, A., Laurence, C. and Lorimer, M. (2013). Patients' knowledge of their chronic disease: The influence of socio-demographic characteristics, *Australian Family Physician*, **42**(6), 411.

Huisman, J. and Smits, J. (2009). Effects of household and district level factors on primary school enrollment in 30 developing countries, *World Development*, **37**, 179–193.

Orgilés, M., Morales, A., Delvecchio, E., Mazzeschi, C. and Espada, J.P. (2020). Immediate psychological effects of the COVID-19 quarantine in youth from Italy and Spain, *Frontiers in Psychology*, **11**, 579038.

Patil, M.S. and Khadi, P.B. (2018). Impact of intervention on innovative strategies to optimize mental health of farmers, *Indian Journal of Extension Education*, **54**(1), 155-160.

Rani, J.A. (2018). Dissemination of nutrition knowledge among rural women and children for the nutritional security and assessing perceived socio-economic impact, *Indian Journal of Extension Education*, **54**(1), 1-5.

Smith, A.C., Thomas. E, Snoswell, C.L., Haydon, H., Mehrotra, A., Clemensen, J. and Caffery, L.J. (2020). Telehealth for global emergencies: Implications for coronavirus disease, *Journal of Telemedicine Telecare*, **26**(5), 309-313.

Sprang, G. and Silman, M. (2013). Posttraumatic stress disorder in parents and youth after health related disasters, *Disaster Medicine and Public Health Preparedness*, **7,** 105–110.

Taghrir, M.H., Borazjani, R. and Shiraly, R. (2020). COVID-19 and Iranian Medical Students: A survey on their related-knowledge, preventive behaviors and risk perception, *Archives of Iranian Medicine*, **23**(4), 249-254.

Wenham, C., Smith, J. and Morgan, R. (2020). COVID-19: The Gendered Impacts of the Outbreak, *The Lancet,* **395**(10227), 846–848.

Wolf, M., Serper, M., Opsasnick, L., O'Conor, R. M., Curtis, L.M., Benavente, J.Y., Wismer, G., Batio, S. Eifler, M., Zheng, P., Russell, A., Arvanitis, M., Ladner, D., Kwasny, M., Persell, S.D., Rowe, T., Linder, J.A. and Bailey, S.C. (2020). Awareness, Attitudes, and Actions Related to COVID-19 Among Adults with Chronic Conditions at the Onset of the U.S. Outbreak: A Cross-sectional Survey, *Annals of Internal Medicine*, **M20**, 1239.