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RESEARCH ARTICLE

The “affected” pharmacist and the “business as usual” pharmacist: Exploring the experiences of pharmacists during COVID-19 through cluster analysis

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ABSTRACT

Background: The global coronavirus disease 2019 (COVID-19) pandemic has necessitated considerable changes in the delivery of pharmacy services, with pharmacists experiencing increasing demands and a high rate of burnout. The ability to categorize pharmacists based on their burnout risk and associated factors could be used to tailor burnout interventions.

Objective: This study aimed to identify subgroups (profiles) of pharmacists and use these profiles to describe interventions tailored to improve pharmacist’s well-being.

Methods: A survey was disseminated to pharmacists working in Australia during April and June 2020. The survey measured demographics, burnout, and psychosocial factors associated with working during COVID-19. A two-step cluster analysis was used to categorize pharmacists based on burnout and other variables.

Results: A total of 647 survey responses contained data that were used for analysis. Participants were mostly female (75.7%) and working full time (65.2%). The final cluster analysis yielded an acceptable two-cluster model describing 2 very different pharmacist experiences, using 10 variables. Cluster 2 (representing 53.1% of participants) describes the “affected” pharmacist, who has a high degree of burnout, works in community pharmacy, experiences incivility, is less likely to report sufficient precautionary measures in their workplace, and has had an increase in workload and overtime. In contrast, cluster 1 (representing 46.9% of participants) describes the profile of a “business as usual” hospital pharmacist with the opposite experiences.

Interventions focused on the “affected” pharmacist such as financial support to employ specialized staff and equitable access to personal protective equipment should be available to community pharmacists, to reduce the risk to these frontline workers.

Conclusion: The use of cluster analysis has identified 2 distinct profiles of pharmacists working during COVID-19. The “affected” pharmacist warrants targeted interventions to address the high burnout experienced in this group.

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Key Points**Background:**

- The global coronavirus disease 2019 (COVID-19) pandemic has necessitated considerable changes in the delivery of pharmacy services with already burned-out pharmacists being challenged with increasing demands and increasingly high rates of burnout.
- Various interventions to manage and prevent burnout in health professionals have been trialed, with varying success, and it is unclear whether these interventions would be effective or suitable for pharmacists.
- It is important to understand which groups of pharmacists are most at risk of burnout and which specific factors are associated with their burnout.

Findings:

- This cluster analysis has categorized pharmacists into 2 distinct profiles, the “affected” pharmacist and the “business as usual” pharmacist, which describes 2 very contrasting experiences of pharmacists during the COVID-19 pandemic.
- The “affected” pharmacist working in community pharmacy is experiencing more burnout and patient incivility, is being treated differently, and is less likely to report adequate personal protective equipment (PPE); they are experiencing an increase in workload and working overtime. In contrast, the “business as usual” pharmacist is a hospital pharmacist with less burnout and less changes to their usual practices.
- This cluster analysis has identified the factors that differentiate between the 2 groups, which could identify priority areas for interventions such as workload (and hence overtime) and adequate PPE. Interventions focused on the “affected” pharmacist such as financial support to employ specialized staff and equitable access to PPE should be available to community pharmacists, to reduce the risk of burnout in these frontline workers.

contributing factors, including increased workload and work hours, sleep deprivation, perception of threat of infection, insufficient personal protective equipment (PPE), and an unsupportive work environment.^{1,3,5,7,12-15}

Although the high demands placed on pharmacists during COVID-19 and the resulting increase in burnout have been well described since the onset of the pandemic, it is still unclear how this problem can be addressed. Various interventions to manage and prevent burnout in health professionals have been trialed, such as implementing resilience training, roster rearrangement, and self-help training to name a few.¹⁶⁻¹⁹ Interventions have had varied success, and it is unclear whether these interventions would be effective or suitable for pharmacists who are seeking real and tangible interventions.^{16,20,21} Recommendations for prioritizing pharmacist well-being in an American consensus document include improvement in areas such as communication, conditions, remuneration, and education.²² During the COVID-19 pandemic, interventions such as education and training, peer support programs, adequate provision of PPE, thoughtful staff scheduling, and the use of specialized staff to allow pharmacists to concentrate on their own tasks have been recommended.^{23,24} However, to assess the potential suitability and optimize the success of interventions to reduce burnout, it is important to understand which groups of pharmacists are most at risk of burnout and which specific factors are associated with their burnout.

In Australia, registered pharmacists can work in a range of practice areas, with community and hospital practice being the 2 most common. Community pharmacists participate in many roles, most frequently prescription dispensing, patient counseling, and provision of point-of-care testing and vaccination services.²⁵ Hospital pharmacists commonly have roles that focus on direct patient care in the inpatient hospital setting, including counseling patients and working within the hospital health care team to advise on optimal medication management. Community pharmacists are readily accessible and free, and are therefore commonly consulted by patients for mild ailments and health care advice.^{25,26}

Thus far, studies on pharmacist burnout have traditionally reported on rates of burnout and their associated variables. The ability to categorize pharmacists based on their burnout and associated factors could be used to tailor interventions to specific groups of pharmacists deemed at risk of burnout. The identification of subgroups or profiles of pharmacists using variables associated with burnout can be achieved using cluster analysis.

Objectives

Our previous work has examined the extent of burnout in Australian pharmacists during the COVID-19 pandemic.¹ This study aimed to identify subgroups (profiles) of pharmacists based on their level of burnout and associated factors and to use these profiles to describe possible interventions tailored to improve pharmacist’s well-being.

Methods*Study design, setting, and participants*

An online survey was designed and distributed to Australian pharmacists via Qualtrics (Provo, UT. <https://www.qualtrics.com>),

Background

The global coronavirus disease 2019 (COVID-19) pandemic has necessitated considerable changes in the delivery of pharmacy services. Pharmacists have continued to provide in-person health care while being challenged with increasing demands and a high rate of burnout.¹⁻⁷ Burnout is an occupational phenomenon resulting from unmitigated chronic workplace stress and is measured using the validated Maslach Burnout Inventory (MBI).^{8,9} There are 3 distinct, measurable components of burnout, namely emotional exhaustion, depersonalization, and reduced professional accomplishment.⁸ Pharmacists, even before COVID-19, reported high rates of burnout, but there have been increasing reports of burnout in these frontline health care workers during COVID-19.^{1,7,10,11} These increased reports in burnout have described various

after assessment of readability and face validity by a small group of pharmacists. The survey was distributed widely to maximize the number and variety of respondents, at the expense of knowing a total number of possible respondents and calculation of sample size. This broad distribution was achieved by disseminating the survey link via social media and professional contacts and through advertising with pharmacy membership organizations. All participants were included provided that they were a pharmacist registered to practice in Australia at the time. The survey link was open between April 28, 2020, and June 28, 2020. During this time, Australia had closed international borders and enforced physical distancing including closure of nonessential services owing to the global COVID-19 pandemic (Australia's social distancing rules). This project was approved by the Australian National University human ethics committee (2020/154).

Study materials

A full and detailed description of the study instrument is published elsewhere.¹ The survey consisted of 3 parts: Part 1 captured demographic information including sex, age, primary practice area, employment status, years of practice, and leadership role. Part 2 measured burnout using the MBI—human services survey.²⁷ The MBI provides a mean and SD for each of the 3 components of burnout (emotional exhaustion, depersonalization, and personal accomplishment). A higher score for emotional exhaustion and depersonalization is associated with increased burnout; however, a lower score for personal accomplishment is associated with increased burnout. Part 3 of the survey investigated the psychosocial impacts of the COVID-19 pandemic with questions relating to changes in work, the psychological effects, and personal effects (Appendix 1). The results of a descriptive analysis of this survey have been published previously.¹

Statistical analysis

This study used a cluster analysis using SPSS (version 26; IBM, Armonk, NY). Cluster analysis is a type of multivariate analysis used to find homogenous groups within a dataset based on the likeness and differences of each measured variable.²⁸ Unlike factor analysis, which sorts like variables with the aim to reduce the total number of variables, cluster analysis sorts whole cases and considers both the likeness and difference of the whole case, not just the individual variables.²⁹

This study used the two-step clustering method. In the first step, the cases are grouped into preclusters to reduce the large dataset, where the algorithm decides, based on a distance measure, whether each case should be allocated to an existing precluster or start a new precluster. In the second step, these preclusters are analyzed using a hierarchical agglomerative clustering method (where cases are compared by likeness in a stepwise manner), and each assigned to the appropriate cluster.³⁰ The two-step cluster method, which is considered one of the most reliable cluster methods, has multiple advantages relevant to these data including that it can handle very large datasets and can analyze both categorical and continuous data simultaneously.³¹ The two-step method automatically determines the desired number of clusters using a commonly employed statistical measure of fit the Schwarz Bayesian

information criterion. A silhouette coefficient is used to determine how well the cluster solution represents the whole dataset. If the cluster solution adequately represents the data, then the cases within each cluster are alike, and the cases in different clusters are not alike (with a silhouette coefficient value between 0 and 1 indicating a good fit, with higher values being a better fit).³⁰⁻³² The two-step cluster method also provides a comparison (ratio) of the size of each cluster (which should be < 2) and the weight each individual variable contributes to the cluster or how important each is to the final solution.^{31,32} Finally, the content expertise of the researcher is used to ensure the practical appropriateness of the cluster solution.^{29,33}

Initially, all of the available variables were analyzed using the two-step cluster analysis, the cluster solution was assessed based on the abovementioned criteria (silhouette coefficient and cluster size ratio), and any variable that did not contribute to the formation of the cluster solution was removed.³³ Finally, to assess the reliability of the analysis, the final cluster solution was tested by splitting the original dataset into 2 and rerunning the cluster analysis on the 2 separate sets of data.³⁴

Results

A total of 1202 participants accessed the survey with 647 responses containing data that were used for analysis. Participants were predominantly female (n = 487 [75.7%]) and working full time (n = 422 [65.2%]) with more than 10 years' experience in pharmacy (n = 377 [59.0%]) and a mean age of 39.7 years (\pm SD 12.1) (Table 1).

The final cluster analysis yielded an acceptable two-cluster model. Of all available variables, the final cluster solution comprised of 10 variables which all contributed to the resulting cluster solution and were all considered to be practically relevant. These 10 variables resulted in a cluster solution with a silhouette coefficient of 0.3 indicating a good fit (value between 0 and 1) and a ratio of size comparison acceptable at 1.31 (< 2). The included variables were: whether the pharmacist experienced incivility and rudeness from patients, increased workload, the primary area of pharmacy practice, emotional exhaustion (burnout) score, depersonalization (burnout) score, whether the pharmacist was working overtime, the degree of concern the pharmacist had for their family, the degree of concern the family had for the pharmacist, whether the pharmacist had been treated differently, and the perceived sufficiency of precautionary measures (PPE) in the workplace. There was an almost equal distribution of cases across clusters, with cluster 1 representing 46.9% of the total study population and cluster 2 representing 53.1%. The top 3 variables that contributed most considerably to the determination of the clusters and the most important differences between the clusters were patient incivility and rudeness, increased workload, and the primary area of pharmacy practice (Figure 1).

The clusters

Cluster 1: The "business as usual" pharmacist

Cluster 1 best describes the profile of a pharmacist that has a lower level of burnout, both emotional exhaustion (mean = 22.59) and depersonalization (mean = 5.64), does not experience incivility from patients (only 10.3% reported having experienced this), and has not been treated differently during

Table 1
Study participant demographics

Demographic variables	Overall sample (N = 647)
Age, y, mean ± SD	39.7 ± 12.1
Primary area of pharmacy practice, n (%)	
Community pharmacy only	253 (39.9)
Hospital pharmacy only	269 (42.4)
Other (government/policy, industry, outpatient/clinic/nursing home, accredited pharmacist)	21 (3.3)
Combination of any of the above	91 (14.4)
Years of practice in pharmacy, n (%)	
< 5 y	118 (18.5)
5–10 y	144 (22.5)
> 10 y	377 (59)
Employment status, n (%)	
Full time	422 (65.2)
Part time	164 (25.3)
Casual	32 (4.9)
Other	29 (4.5)
In a position of management/leadership, n (%)	
Yes	366 (56.7)
No	280 (43.3)

COVID-19. This cluster best represents a pharmacist who works in a hospital environment (70.7%), reports sufficient PPE (85.8%), has not experienced an increased workload, and has reported working less overtime (32.8% reported working overtime). This pharmacist is only slightly or somewhat concerned with the health of their family, and their family is slightly or somewhat concerned with the health of the pharmacist (Table 2).

Cluster 2: The “affected” pharmacist

In stark contrast, cluster 2 describes a pharmacist with a high degree of burnout, in both emotional exhaustion (mean =

33.74) and depersonalization (mean = 10), working in community pharmacy (64.3%), experiencing incivility from patients (76.2%), and having been treated differently. Just over half of this group report sufficient precautionary measures in their workplace (59.8%), and have had an increase in workload (92.7%) and worked overtime (69.2%). This pharmacist is very to extremely concerned with the health of their family, and similarly the family is more likely to report extreme concern with the health of the pharmacist (Table 2).

Discussion

This study has categorized pharmacists into 2 distinct profiles, the “affected” pharmacist and the “business as usual” pharmacist. This delineation describes 2 very contrasting experiences of pharmacists during the COVID-19 pandemic. Importantly, there will be pharmacists who identify with none, some, or all of the characteristics in these cluster profiles. These clusters do not definitively describe all “affected” or “business as usual” pharmacists and certainly do not include all factors that have affected pharmacists’ work during the pandemic. These clusters provide a way to view some of the characteristics that differentiate pharmacists and provide a target for interventions.

An important difference between the 2 clusters is their burnout scores. The scores in the “affected” pharmacist (cluster 2) for both emotional exhaustion and depersonalization are above the traditional cutoff scores used to categorize “high risk” (more than 27 for emotional exhaustion and a depersonalization score of 10 or more).^{35–37} The scores signify the substantial burnout burden, which is not surprising given that the other factors experienced by this group including increased workload and challenging patient interactions contribute to pharmacists’ burnout.^{11,38} Various studies have reported the overall burnout burden on

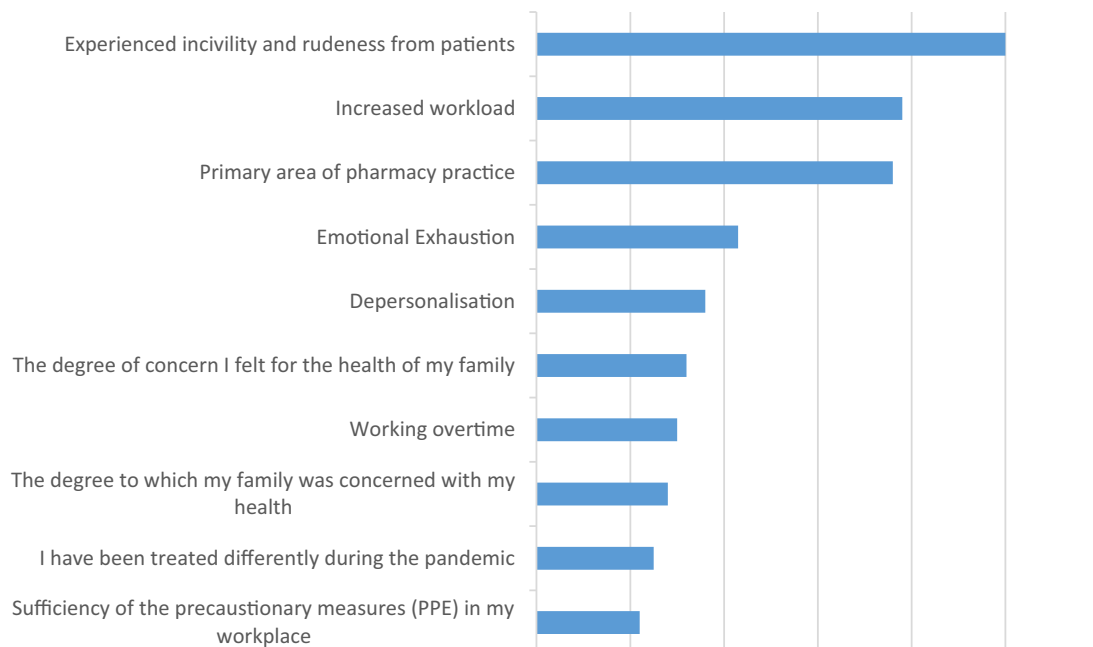


Figure 1. Variables in order of importance for cluster formation. PPE, personal protective equipment.

Table 2
Cluster variables and final cluster solution

Variable	Overall sample, N = 647 (100%)	Cluster 1: The “business as usual” pharmacist, n = 303, (46.9%)	Cluster 2: The “affected” pharmacist, n = 344, (53.1%)
Experienced incivility and rudeness, %			
Yes	24	10.3	76.2
No	76	89.7	23.8
Area of pharmacy practice, %			
Hospital	42.4	70.7	17.7
Community	39.9	12.0	64.3
Combination hospital and community	14.4	6.6	0.61
Other	3.3	10.7	17.4
Experienced increased workload, %			
Yes	35.9	37.6	92.7
No	64.1	62.4	7.3
Emotional exhaustion score (mean)	28.5	22.59	33.74
Depersonalization score (mean)	7.98	5.64	10
The degree of concern I have for my family’s health related to COVID-19, %			
Very to extremely	36.3	16.9	53.7
Slightly to somewhat	56.1	72.1	41.1
Not concerned	7.6	11	5.2
Worked overtime, %			
Yes	52.2	32.8	69.2
No	47.8	68.2	30.8
The degree to which my family is concerned about the risk of COVID-19 to my or their health as a result of my work, %			
Very to extremely	28.1	11.4	42.1
Slightly to somewhat	57.9	67.2	50.3
Not concerned	14	21.4	7.6
Treated differently during the pandemic, %			
Yes	40.8	33.1	55.5
No	59.2	66.9	44.5
Precautionary measures in my workplace related to COVID-19 are sufficient, %			
Sufficient	71.1	85.9	59.8
Not sufficient	19.9	6.2	30.5
I do not know	9	7.9	9.7

Abbreviation used: COVID-19, coronavirus disease 2019.

pharmacists as high both before and during COVID-19, with higher rates reported among community pharmacists^{3-5,7,10,12} The weighty influence of patient incivility on the cluster outcome signifies the important impact that this has had in the community setting during COVID-19.^{1,39} Even before COVID-19, community pharmacists experienced violent or aggressive patients in their practice, with inadequate support or training to manage these situations. Since the onset of COVID-19 with high level of stress and volatility in the community, reports of inappropriate and abusive behavior of patients toward community pharmacists have increased.^{40,41} Patient incivility and general conflict experienced by community pharmacists particularly, not only have considerable effects on the well-being of the pharmacist but also have patient safety implications with pharmacists involved in aggressive patient encounters describing an increased risk of error.⁴²

The increased workload experienced by the “affected” pharmacist included an increase in patient numbers presenting to the pharmacy, increased point-of-care testing, cleaning protocols, managing stock supply, managing the limited numbers of consumers permitted in the pharmacy, and increased home deliveries among many other demands.^{1,4,39,43} This increase in workload necessitated this group working overtime during COVID-19, in contrast to the “business as usual” pharmacists (cluster 1) who were less likely to

experience an increase in workload during COVID-19. In fact, in some cases, the usual workload of hospital pharmacists may have actually decreased owing to a reduction in hospital presentations, temporarily ceasing elective surgeries and implementing telehealth consultations.^{23,44}

The perception of risk to one’s family and the risk perceived by one’s family for the pharmacist was more pronounced for the “affected” pharmacist working in the community than the “business as usual” pharmacist. The “business as usual” pharmacists working in hospitals were not unexpectedly exposed to patients with COVID-19 given that these patients were managed in a dedicated area in the hospital, and staff were provided with PPE and training. In contrast, the “affected” pharmacists in the community were seeing many patients each day with no way of knowing or mitigating their potential exposure risk or that of their family. The “affected” pharmacist was also responsible for sourcing their own PPE and infection control equipment, such as sneeze guards, cleaning their own pharmacies, and managing patient access to the pharmacy. This perception of risk is an important factor associated with burnout and one that adversely affects long-term psychological outcomes for health professionals.^{5,45}

This cluster analysis has clearly identified a profile of the “affected” pharmacist who is experiencing burnout and for whom interventions should be prioritized. Although there are factors that are difficult to mitigate such as poor consumer

behavior and being treated differently, interventions to specifically target the other factors, particularly in the “affected” pharmacist group, should be addressed. Pharmacists are seeking real and targeted interventions, rather than tokenistic “interventions” to address the significant burden of burnout on the profession.²¹ This cluster analysis has identified 2 factors that, while being complex and requiring careful planning, may be specifically addressed, workload (and hence working overtime) and PPE.

Some of the increase in workload and the overtime experienced by the “affected” pharmacist during COVID-19 is expected, owing to the major changes to the provision of services in the community including many primary health care practitioners moving to a telehealth model, which increased the role of community pharmacists in providing point-of-care testing.^{23,46} Pharmacists although capable of performing such tasks, were not prepared or remunerated for this additional increase in workload. Similarly, the increased requirement to provide deliveries and manage supply disruptions was additional to the usual workload. A simple acknowledgment of this additional workload and financial support would have enabled many pharmacies to employ people to provide specific support for these additional services. Early in the pandemic, it was suggested that pharmacies employ specialist staff to allow the pharmacist to prioritize their work in the context of increasing workloads, to improve their resilience throughout this time.²⁴ Employing staff to perform specific duties such as a security guard to manage patient access to the pharmacy; a delivery driver for stock transport and patient deliveries; an allied health professional, nurse, or student to assist with point-of-care testing; and an administration assistant to manage the phone, inquiries and other administrative tasks could all have reduced the pharmacist workload. With an acknowledgment of the additional workload placed on the “affected” pharmacist, a simple intervention of employing support staff could be implemented. Although this intervention is simple in nature, there are notable complexities and challenges given that community pharmacies are independently owned and operated. The financial disadvantage that this intervention would have on pharmacy owners could be prohibitive, and it should not be expected that this financial burden fall onto individual pharmacy owners; therefore, this intervention would need considerable external financial support.

Another intervention that would support the “affected” pharmacist would be to facilitate centralized and compensated access to PPE. Although access to PPE is less of an issue now, it is an important consideration for future pandemics, given that this has affected pharmacist’s experiences on the frontline and affects long-term psychological outcomes.⁴⁵ With the limited access to PPE, in the early stages of COVID-19, and the responsibility and cost falling to the individual pharmacist or pharmacy business, it is not surprising that adequate PPE supply was a factor that differentiated the “affected” pharmacist and the “business as usual” pharmacist.⁴⁷ Community pharmacists were at risk of exposure during the pandemic and should have had consistent, subsidized access to PPE and infection control supplies, as well as consistent and endorsed guidelines to ensure compliance.⁴⁷ This access to PPE would have reduced the concern the “affected” pharmacist had for their family and their family had for them during this stressful time, which was

another factor that separated the “affected” pharmacist from their “business as usual” colleagues. It would be interesting to reassess the pharmacists experience now, where there is increased access to PPE.

Limitations

This was a relatively small study in a single country, and hence, these profiles may not be generalizable or reflective of other practice areas. Although this cluster solution reflects the experiences of the 2 different pharmacist clusters during COVID-19, there are obviously many other possible variables that may contribute to burnout not investigated in this study. This cluster analysis could not adequately represent the experience of all pharmacists, and there will be many pharmacists who may have experienced burnout who do not identify with either of these clusters, and whose experience is different from that represented here. This study also reports on a convenience sample and therefore may not be generalizable.

These data were collected at the beginning of the global COVID-19 pandemic, and many changes have occurred over the last 2 years for pharmacists. These data may not represent the current situation and experiences of pharmacists in the future.

Conclusion

The use of cluster analysis has identified 2 distinct profiles of pharmacists working during COVID-19. Cluster 1, the “business as usual” pharmacist, describes a hospital pharmacist with low rates of burnout, with less increase to workload, who is confident about PPE and safety, and without a change to the way they have been treated. Cluster 2, the “affected” pharmacist, describes an entirely different profile of a community pharmacist with high rates of burnout, with an increase in workload and overtime, and who is being treated poorly and concerned with their safety. This “affected” pharmacist would benefit from interventions such as financial support and consistent access to PPE to address some of the factors associated with the high burnout experienced in this group. Pharmacists, pharmacy management, organizations, and government can use these profiles to consider interventions to support the well-being of pharmacists into the future.

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Appendix 1

Online survey 2020

Psychometric data to be collected

a. As stated in the MBI-HSS (no changes to the 22 questions)

Demographic variables to be collected

26. Age – Free text

27. Sex

- a. Female
- b. Male
- c. Rather not to say

28. Primary area of Pharmacy practice – Please choose ONE response

- a. Community
- b. Hospital
- c. University
- d. Government/policy
- e. Industry
- f. Outpatient clinic/Nursing Home
- g. Other

29. If other, please specify

30. Do you currently practice in more than one area?

- a. Yes
- b. No (skip next question)

31. In which other area(s) are you currently practicing?– Please add comments if applicable for specific areas of practice (eg critical care, pharmacy owner, manager, pharmacist-in-charge etc)

- a. Community
- b. Hospital
- c. University
- d. Government/policy
- e. Industry
- f. Outpatient clinic/Nursing Home

32. Years of practice

- a. < 5 years
- b. 5-10 years
- c. > 10 years

33. State of Primary Practice

- a. ACT
- b. NSW
- c. VIC
- d. QLD
- e. SA
- f. WA
- g. NT
- h. Tas

34. Geographical area of practice

- a. Rural
- b. Metropolitan
- c. Remote
- d. Other – please provide details

35. Current employment status

- a. Fulltime
- b. Part-time

c. Casual

d. Other – Please provide details

36. Are you currently in a position of leadership or management of staff?

- a. Yes
- b. No

37. In your role as a pharmacist, to your knowledge, have you ever cared for a COVID-19 patient?

- a. Yes
- b. No
- c. Not sure

38. Do you have a close contact who would be considered a ‘vulnerable person’ during COVID-19?

- a. Yes
- b. No
- c. Not sure
- d. Rather not say

Variables related to COVID-19 specifically (adapted from Nickell, 2004 and Shiao 2007) as well as Pharmacy specific questions developed by the authors.

39. The degree of concern I have currently about my own personal health related to COVID-19

- a. Not concerned
- b. Slightly to somewhat concerned
- c. Very to extremely concerned

40. The degree of concern I have currently about my family's health related to COVID-19

- a. Not concerned
- b. Slightly to somewhat concerned
- c. Very to extremely concerned

41. The degree to which my family is currently concerned about the risk of COVID-19 to mine or their health as a result of my work

- a. Not concerned
- b. Slightly to somewhat concerned
- c. Very to extremely concerned

42. Precautionary measures in my workplace related to COVID-19 are currently

- a. Sufficient
- b. Not sufficient
- c. I don't know

43. Have there been any changes to your regular job/role have resulted from COVID-19?

- a. Yes
- b. No (skip next question)

44. What changes to your regular job/role have resulted from COVID-19? Please select all that apply

- a. increased workload
- b. decreased workload
- c. different work area to usual
- d. different role to usual
- d. other (please provide comment)

45. I have been working overtime as a result of COVID-19

- a. yes
- b. no

46. I have suffered financial losses as a result of COVID-19
 - a. yes
 - b. no
47. I am being treated differently because I work in healthcare during COVID-19
 - a. yes
 - b. no
48. Has your personal life been affected by affected by COVID-19
 - a. Yes
 - b. No (Skip next question)
49. In what ways has your personal lifestyle been affected by COVID-19?
 - a. Financial due to loss of income in the household
 - b. Burden of caring for children as school closed
 - c. Isolation from your family/friends
 - d. Loss or illness of loved one
 - e. Other – please comment
50. Have there been any positive impacts from COVID-19?
 - a. Yes
 - b. No (skip next question)
51. In what ways has COVID-19 had a positive impact? Please comment if you want to add any additional information.
 - a. Increased awareness of disease control
 - b. Learning experience.
 - c. Increased sense of togetherness and cooperation
 - d. Less busy than usual
 - e. Greater appreciation of life and work
 - f. Other (comment)
52. What have been the factors that have most significantly affected you at work?
 - a. My work has not been affected
 - b. Medicines supply issues
 - c. Exposure to patients with significant morbidity and mortality
 - d. personal health
 - e. reduced staffing
 - f. increased workload
 - g. providing advice to patients/customers
 - h. providing advice to organisation/staff
 - i. Working in roles different to usual job
 - i. Incivility/rudeness/ poor behaviour of patients/customer
 - j. other (comment)
53. As a pharmacist are you currently, or are you likely to be providing COVID-19 vaccination?
 - a. Yes
 - b. No
54. Have you experienced being in quarantine or having had to isolate?
 - a. Yes
 - b. No
55. Please provide comments on your experience or anything you think is important to report about providing pharmacy services during COVID-19.
56. The opportunity to complete this survey approximately every 12 months will be provided to track any changes over time and we would encourage you to participate again at those times if possible. We would like to thank you for taking the time to complete this survey.