

# “We must be strong in our heart, in our mind and in our soul”: An exploratory qualitative study on nurses’ psychological self-care in strengthening their mental health while providing COVID-19 care

**Khadizah H. Abdul-Mumin** (✉ [Khadizah.mumin@ubd.edu.bn](mailto:Khadizah.mumin@ubd.edu.bn))

Pengiran Anak Puteri Rashidah Sa’adatul Bolkia, Institute of Health Sciences, Universiti Brunei Darussalam

**Aminol Azrin Maideen**

Department of Nursing Services, Ministry of Health, Brunei Darussalam

**Agong Lupat**

Pengiran Anak Puteri Rashidah Sa’adatul Bolkia, Institute of Health Sciences, Universiti Brunei Darussalam

**Siti Nur-Diyana Mohd-Alipah**

School of Tropical Medicine and Global Health, Nagasaki University

**Roziah H. Mohammad-Alli**

Department of Nursing Services, Ministry of Health, Brunei Darussalam

**Hajah-Noraini H. Abd-Manaf**

Department of Nursing Services, Ministry of Health, Brunei Darussalam

**Abd-Rani Osman**

Department of Nursing Services, Ministry of Health, Brunei Darussalam

**Haji Mohd Reduan Abd. Fata**

Department of Nursing Services, Ministry of Health, Brunei Darussalam

**nani busrah**

Department of Nursing Services, Ministry of Health, Brunei Darussalam

**Cynthia Darling-Fisher**

University of Michigan School of Nursing, United States

**Deeni Rudita Idris**

Pengiran Anak Puteri Rashidah Sa’adatul Bolkia, Institute of Health Sciences, Universiti Brunei Darussalam

---

Research Article

Keywords:

**Posted Date:** October 18th, 2022

**DOI:** <https://doi.org/10.21203/rs.3.rs-2160729/v1>

**License:**  This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

---

# Abstract

## Background

It is two years since the unprecedented and massive COVID-19 pandemic affected the world. Since its emergence, nurse frontliners across the globe faced various challenges that lead them to experience adverse mental health. An important yet often overlooked or underappreciated initial coping strategy is psychological self-care. Research has shown that nurses' psychological self-care practices strengthened their mental well-being when facing the unpredicted nature and chaos of COVID-19. This study examined the specific positive psychological self-care practices used by nurses who provided care for COVID-19 patients.

## Methods

An exploratory qualitative study was conducted on 40 nurses who worked in providing care for confirmed and suspected COVID-19 patients across Brunei. Data was collected using focus groups aided by semi-structured open-ended questions and analysed thematically using the principles underpinning Constructivist Grounded Theory (Charmaz, 2021).

## Results

Four themes emerged: 1) 'Care of the mind, heart and soul' – explained the meaning and importance of psychological self-care practices to the nurses; 2) 'Physical care for the psychological well-being'- illuminated efforts undertaken to strengthen knowledge and practices for preparedness in caring for suspected and confirmed COVID-19 patients; 3) 'Venting out and distraction' – demonstrated the measures undertaken to release and relieve stress; 4) 'Have faith, think and stay positive' – described the importance of having faith in the higher being or supreme entity such as God for protection, and enduring the daily challenges positively

## Conclusions

Due to the challenges of dealing with a worldwide pandemic, nurses' mental well-being was unintentionally placed at risk while the government strategized and prioritised containing and preventing the spread of and death from COVID-19. This study describes specific psychological self-care practices undertaken by nurses to strengthen their mental health and develop resilience in their professional care role while addressing the challenges of the COVID-19 era. Health administrators, as well as nursing educators, need to promote and developing resources to strengthen nurses' positive psychological self-care practices. This will not only benefit individual nurses but will help promote the wellbeing of patients

and employees, improve the health of all, and counteract any unintended stressful situations, even beyond the COVID-19 pandemic.

## Background

In the past two years, the Coronavirus disease (2019) (COVID-19) and its variants has affected the world through multiple waves at different scales and intensities. The World Health Organization (WHO) [1], urged countries to take all preventive measures possible to limit the virus transmission including continuous surveillance, quarantine, awareness campaigns, and early detection. After two years the number of COVID-19 cases and deaths continue to fluctuate daily, and many countries have moved on to the endemic phase. This new norm defined by the endemic phase has indirectly created the perspective that COVID-19 is seen as a recurring disease, comparable with the common flu. Consequently, and unintentionally, the serious risk of COVID-19 may not be viewed as life-threatening and the risk of death may not be as compelling a concern as they have been over the last two years. The process of normalization of COVID-19 may place additional stress on healthcare providers, in particular nurses, should the pandemic recur.

Nurses take the lead in promoting health, advocating for patients, and strengthening patients' care [2]. In fact, nurses were among the first front-line workers to provide daily care for confirmed and suspected COVID-19 patients. There is substantial research demonstrating that nurses have experienced increased stress and psychological distress in response to the unprecedented and unpredictable nature of COVID-19 and its related protocols [2–4]. An Italian study found that nurses had the greatest psychological problems as a consequence of the COVID-19 outbreak [5].

## Nurses' Mental Health And Coping During The Covid-19 Pandemic

Anxiety, depression, loneliness, and other mental health concerns were compounded throughout the COVID-19 pandemic. Dealing with and combatting COVID-19, amplified and significantly and adversely affected the mental health of healthcare workers. A survey conducted on 1,119 healthcare workers in the United States of America found that they experienced stress (93%), anxiety (86%), frustration (77%), exhaustion and burnout (76%), and felt overwhelmed (75%). Healthcare workers also shared that they are experiencing trouble with sleep (70%), physical exhaustion (68%) and work-related dread (63%)[6]. Likewise, a cross-sectional study using a self-administered online questionnaire involving 800 nurses in Spain found that 68% had some level of depression, anxiety, insomnia, and distress, and of these, 38% had moderate or severe symptoms that highly impacted those who worked in COVID-19 hospital units and in nursing homes [7]. Similarly, an American survey that investigated nurses' perceptions of working during the early stages of the pandemic found that more than 50% of respondents experienced symptoms of depression and anxiety and close to one-third had symptoms of post-traumatic stress disorder [8].

Notably, numerous COVID-19 related studies identified potential contributors to mental health problems among healthcare workers. These include fear of infection for oneself and one's loved ones, the high rates of disease transmission and fatality, and fear of the unknown regarding this disease [9, 10]. The struggle to keep abreast with protocols that kept changing, especially during the early days of the pandemic, contributed to the feeling of fear and stress [11]. Reports on burnout as an occupational hazard amongst nurses were also evident, [12]. Burnout is a psychological syndrome resulting from a prolonged response to stressors on the job [13]. There is no doubt that nurses providing COVID-19 related care over the pandemic experienced multiple stressors which could lead to burnout and decreased job satisfaction. Burnout further impacts nurses' psychosocial well-being, interpersonal relationships, and the quality of patient care provided, which, in turn, could have an effect on patient mortality [13]. Additionally, those nurses caring for dying COVID-19 patients were found to have a heightened risk of job burnout and secondary traumatic stress syndrome [14].

Research shows that nurses use various coping strategies to manage the psychological distress of working during a pandemic. To assess nurse coping during the pandemic, we conducted a nationwide qualitative study in Brunei using focus group discussions involving a total of 75 nurses. We found that varied psychosocial coping methods were employed during the different phases of the COVID-19 pandemic along with support from family, friends, the public, and at the governmental level [3]. It is noteworthy that the nurses' first and foremost primary coping strategy was psychological self-care. This reflects an understanding of the importance of and commitment to strengthening their mental health. The nurses described self-care activities such as getting adequate sleep, healthy eating, regular exercise, social connections, and mindfulness. It can be deduced from the study that nurses demonstrate a strong sense of responsibility, autonomy and commitment to empowering their psychological well-being positively.

The concept of self-care and self-care deficit described by Orem [15, 16] provides a framework for understanding these findings and a foundation for our current research. Self-care was also popularly advocated in health promotion, prevention and protection as the principal concept to empower health [17, 18] and largely emphasised the management of chronic diseases. In the context of the COVID-19 pandemic, self-care can be viewed as behaviours that promote and maintain physical and psychological wellbeing, which assist nurses in promoting self-efficacy and managing their health despite the stressors they face [19]. Poor psychological health among nurses is not only detrimental to the individual but also affects professional performance and, in turn, the quality of nursing care to patients [20]. Study findings from previous pandemics such as H1N1 emphasized the importance of studying the experiences of frontline nurses to inform effective workplace and national responses during future healthcare crises [21, 22]. This is essential to support organizational and workplace efforts to allay the stress and physical and mental health issues that nurses have experienced during, and, in the wake of, the pandemic.

## **Significance and aim of the study**

At all management levels, there was no intention to put nurses' mental health at risk. However, the past two years of the COVID-19 era have taught us a great deal that healthcare systems across the globe are confronted with various shortcomings in providing care for COVID-19 patients, the efforts to contain the spread of COVID-19, prevent death [20] and normalize life amidst the COVID-19 invasion. Adverse mental health was evident not only among the public but also equally and intensely felt by nurses [8]. There was a lack of preparedness for the pandemic due to the unprecedented nature of COVID-19 [23], and the lack of knowledge, skills, expertise and equipment that consequently produced fear, anxiety and stress [2]. This indirectly placed the nurses in a situation that required them to prioritise healthcare provision and disregard their own adverse mental health experiences. Previous studies highlighting the importance of self-care practices among nurses emphasize that nurses must have strong determination, be empowered and be autonomously able to take charge of their mental health [3, 24].

Although self-care practices amongst nurses were addressed in previous studies, they did not provide an in-depth detailed exploration of the self-care practices nurses used to positively function to promote their psychological care [3, 25]. Hence, the present study aims to explore positive psychological self-care among nurses who provided COVID-19 related care and examine how these practices were adopted by nurses to strengthen their mental well-being, which enabled them to continue to function and perform their roles efficiently beyond the COVID-19 epidemic and pandemic to endemic and any other future crises.

## **Methods**

The study protocol was designed and performed according to the principles of undertaking human research as documented in the Declaration of Helsinki [26]. Ethical clearance was provided by the joint committee of the Pengiran Anak Puteri Rashidah, Institute of Health Sciences Research Ethics Committee (IHSREC), Universiti Brunei Darussalam and Medical and Health Research and Ethics Committee (MHREC), Ministry of Health (ERN: UBD/PAPRSBIHSREC/2020/49).

## **Design**

An exploratory qualitative approach was employed. This design was relevant for acquiring in-depth insight [27, 28] into the psychological self-care of nurses who provided COVID-19 related care during the pandemic requiring exploration to understand the phenomenon. The consolidated criteria for reporting qualitative research (COREQ) 32-item checklist [29] guided the design of the study.

## **Study settings and participants**

All nurses working in the national health system of country of Brunei, have at least two years of work experience, and worked in COVID-19 related care during the study were eligible to participate. COVID-19 related areas denote clinical settings where nurses provided care to confirmed and suspected COVID-19 patients.

## **Data collection and Data analysis**

The use of language that allows the participants to express and also be understood by the researcher is important as it represents both the data and the communication process by which data is generated [30]. Hence, our data were collected using focus groups (FGs) in the language commonly spoken (Malay and English languages). These provide flexibility to the nurses to communicate in the language(s) comfortable to them and interactively share, discuss, and exchange their experiences.

Key questions on psychological self-care practices whilst working in the COVID-19 related care were asked (See Table 1).

Table 1  
Key questions for the focus groups

<b>What do you understand by self-care practices that enhance your psychological health?</b>
What were the psychological self-care practices that you have undertaken?
How (when and where) were the psychological self-care practices undertaken?
What was the importance of psychological self-care practices? (How did you see that psychological self-care practices important to you?)

Data were analysed using the step-by-step thematic analysis underpinned by the principles of constructivist Grounded Theory [31, 32]. The FGs were transcribed verbatim and counterchecked by the second and fourth authors. Data analysis was facilitated by the central process of coding that resulted in coding and categorisation. Initially 'open coding' was conducted where words that sounded and felt the same were grouped together. Consequently 'focus coding' proceeded where similar words constituted the same meaning were grouped together resulting in the development of preliminary themes. The constant comparative method to data analysis was performed where data in a transcript and with other transcripts were compared to ensure that all the data were accounted for during the data analysis. All the researchers crosschecked and finalized the themes and sub-themes to ensure the credibility and reliability of the findings (See Table 2).

## Findings

### Participants characteristics

Seven FGDs were conducted with 40 nurses comprising first level nurses (Staff Nurses and Nursing Officers) (n = 25, 62.5%) and second level nurses (Assistant Nurses) (n = 15, 27.5%) who worked in various COVID-19-related areas. Their workplaces include the National Isolation Centre (General Ward, Intensive Care Unit and High Dependency Unit), Influenza-like illness settings of the Emergency Departments, Sudden Acute Respiratory Infection Centres, Swab Centres and Flu Clinics. The majority of the nurses are female (n = 33, 82.5%) and have vast work experience of 10 years or more (n = 33, 82.5%) prior to placement in COVID-19-related areas (See Table 3). As Brunei is such a small country, individual nurses may easily be identifiable from their affiliations with their workplace. Hence, confidentiality and

anonymity are protected where their characteristics are not reported with relationships to their workplaces in Table 3. Exemplar quotes representing the themes are provided to explain and describe the themes.

It is important to note that this study only reports participants' positive psychological self-care practices. This is in accordance with the purpose of this study which is to acquire lessons learnt during the pandemic which may be applied in any other current and future crisis. Some participants also shared negative self-care practices which will be reported in a separate paper.



Table 2  
Themes and sub-themes

THEMES	SUB-THEMES
<p><b>Theme 1:</b> Care of the mind, heart and soul</p> <p><b>Explanation:</b> The meaning and importance of self-care practices to strengthen the psychological wellbeing among the nurses</p>	<ul style="list-style-type: none"> <li>• Settling the mind</li> <li>• Calming the heart</li> <li>• Feeding the soul</li> </ul>
<p><b>Theme 2:</b> Physical care for the psychological well-being</p> <p><b>Explanation:</b> All efforts which were undertaken to strengthen knowledge and practices to be mentally prepared in caring for suspected and confirmed COVID-19 patients</p>	<ul style="list-style-type: none"> <li>• strengthening infection prevention and control practices</li> <li>• Evidence-based practices</li> <li>• Practice makes perfect</li> <li>- Learning from experience, writing reflective journals</li> </ul>
<p><b>Theme 3:</b> Venting out and distraction</p> <p><b>Explanation:</b> The measures carried out to release and relieve stress</p>	<ul style="list-style-type: none"> <li>• Talking to colleagues</li> <li>• Keeping diary</li> <li>- Book, phone, media, human</li> <li>• Exercising</li> <li>- Hiking, jogging, running, walking, cycling</li> </ul>
<p><b>Theme 4:</b> 'Have faith, and think and stay positive'</p> <p><b>Explanation:</b> Having faith in the higher being or supreme entity such as God for protection and the positive endurance of the daily challenges</p>	<ul style="list-style-type: none"> <li>• Religious practices</li> <li>- Acceptance of COVID-19 pandemic as a challenge/test</li> <li>- Blessings in disguises</li> <li>- Recitation of prayer words</li> <li>- Praying in action</li> <li>• Spiritual practices</li> <li>- Meditation/Yoga</li> <li>- Listening to calming music</li> </ul>

Table 3  
Sociodemographic data of participants

<b>PIN CODE</b>	<b>GENDER</b>	<b>AGE RANGE</b>	<b>WORK EXPERIENCE</b>	<b>MARITAL STATUS</b>
P01	Male	40–44	15 to 19	Married
P02	Female	45–49	20 to 24	Married
P03	Female	50–54	25 to 29	Single
P04	Female	35–39	10 to 14	Single
P05	Male	45–49	20 to 24	Married
P06	Female	50–54	25 to 29	Married
P07	Female	45–49	20 to 24	Married
P08	Female	50–54	25 to 29	Married
P09	Female	35–39	10 to 14	Married
P10	Female	55–59	≥ 30	Married
P11	Female	35–39	10 to 14	Married
P12	Female	20–24	≤ 5	Single
P13	Female	35–39	10 to 14	Married
P14	Female	40–44	15 to 19	Married
P15	Female	40–44	15 to 19	Married
P16	Female	35–39	10 to 14	Single
P17	Female	55–59	≥ 30	Married
P18	Female	40–44	15 to 19	Single
P19	Female	35–39	10 to 14	Married
P20	Female	35–39	10 to 14	Married
P21	Male	35–39	10 to 14	Married
P22	Male	30–34	5 to 9	Married
P23	Female	35–39	10 to 14	Married
P24	Female	55–59	≥ 30	Married
P25	Female	40–44	15 to 19	Married
P26	Female	25–29	≤ 5	Single
P27	Female	35–39	10 to 14	Married

PIN CODE	GENDER	AGE RANGE	WORK EXPERIENCE	MARITAL STATUS
P28	Female	50–54	25 to 29	Married
P29	Female	55–59	≥ 25	Married
P30	Female	30–34	5 to 9	Married
P31	Female	25–29	≤ 5	Single
P32	Male	30–34	5 to 9	Single
P33	Female	40–44	15 to 19	Married
P34	Female	40–44	15 to 19	Married
P35	Male	35–39	10 to 14	Married
P36	Male	20–24	≤ 5	Single
P37	Female	35–39	10 to 14	Married
P38	Female	50–54	25 to 29	Married
P39	Female	50–54	25 to 29	Married
P40	Female	45–49	20 to 24	Married

### Theme 1: Care of the mind, heart and soul

This theme depicts the meaning and importance of self-care practices to strengthen the psychological health of nurses. Despite working in various COVID-19 related care, all the nurses equally explained psychological self-care practices as the care of the mind (thoughts), heart (emotion) and soul (inner self).

“We must have the strength to care for our mind, calm our heart and feed our soul. We need to think straight even in a panic situation, be calm even if we are worried, and control our emotions although we wanted to cry out loud.”

(P11)

All of the nurses also elaborated that they had to settle their minds by finding the inner strength to stay calm and reiterated the need to be in control of their emotions. They pointed out that as frontliners, they are obliged to be strong and stay strong psychologically.

“We have to find the inner strength, be strong, and stay strong in our mind, calm our heart and make our soul at peace. The whole country is in chaos...trying to stop COVID-19 from mushrooming (spreading)...every single day and night attempting to prevent death from COVID-19...Time felt like our enemy...it felt that we always ran out of time. Time must not be wasted on being weak and fragile...for not being able to handle our thinking, feelings and emotions.”

(P20)

They voiced that although at times they felt agitated as they always felt that they ran out of time. They also expressed that they carried a huge responsibility to protect the country. They stressed that they had no time to be in turmoil, hence, highlighting the need for psychological self-care.

“Of course, we are nervous and worried. But there is no time for that. Every pound of the heartbeat, every second counts. Time is precious...The safety of the whole nation seems to revolve around each click of the time...Tik tok tik tok...People’s lives may be at stake in the blink of an eye. We must be strong in our heart, in our mind and in our soul.”

(P37)

They summed up psychological self-care care as their ability to care for themselves rather than focusing on any burden and or complaining. They highlighted the importance of being composed, thinking rationally, eliminating negative thinking and emotions, and strengthening their mental health.

“It is important for us to take care of ourselves. We cannot resolve anything if we keep on whining. We cannot be strong if we keep on counting our weaknesses and calculating all our limitations. What matters the most is that we must be able to take care of ourselves. Not only physically, but also being able to think straight and clearly, keep control of ourselves, keep our mind calm, move away from all negative impulses...”

(P04)

## **Theme 2: Physical care for the psychological well-being**

This theme illustrated how psychological self-care practices were executed and strengthened by enhancing knowledge and practices that consequently facilitated preparedness for caring for suspected and confirmed COVID-19 patients. The first and foremost fear which was equally shared by the nurses was being infected and infecting others which negatively affected them psychologically.

“I wash my hands several times. I showered at work after I finished my shift duty. Then I showered again when I arrived home. Sometimes I have doubts about the function of PPE (Personal Protective Equipment) that I wore. Does it really protect me? How do I ensure that I am fully protected? I even asked myself if all that I do are normal. All I care about is I do not want to carry the virus (COVID-19) with me and then spreading it to my family. This was and still is my biggest fear..”

(P27)

The nurses acknowledged that strengthening infection prevention and control practices (IPC) reassured them psychologically, hence, ensuring the spread of COVID-19 to others especially their loved ones. At the early outbreak of COVID-19, they requested PPE refresher training and other IPC principally required to work at COVID-19 related area.

“Over 30 years of my work experience, I never encountered a situation as abrupt as COVID-19. It is not that we totally don't know (how to wear PPE). We have the knowledge and have been taught the skills, but because it is not a common daily practice, we might not remember all or even forget a few of the important steps of prevention and control of transmission of communicable diseases, moreover steps for wearing them (PPE). It's like even if you knew things to do but if you do not do them daily, then you will take them for granted and eventually forget about them. I am one of those that need the PPE training. It is peace of mind, calms my heart and strengthens me mentally...Not only to prevent me against COVID-19 but also my family.”

(P10)

Nurses who worked in direct contact with confirmed COVID-19 patients shared that they regularly updated their knowledge and practices by searching for current evidence and learning from experiences of other countries. They stated that by doing so they are preparing themselves to be strong mentally, hence enhance their preparedness in working at COVID-19 related care.

“We do our homework at home. We ‘googled’ the internet (search the internet using Google search engine) and regularly follow authentic and reliable resources such as the WHO (World Health organizations) website, CDC (Centre for Disease Control of the United States of America), and The Global Infection Prevention Control (GIPC) Network. We looked for daily updates to ensure that we keep pace with the exceptionally quick and sometimes daily changes in practices. Doing all of these strengthen our psychological health. We must be prepared mentally.”

(P29)

Reflecting on and learning from experiences was also highlighted by the nurses as one of the physical means of strengthening their mental health. One of the ways they performed reflective practice was by thinking through what they did daily, analysing their strengths and improving their limitations. They asserted that they also endeavoured to improve their practice daily that made them more confident and better prepared for providing care at the COVID-19 related areas.

“We were used to doing reflective journal assignments during our nursing training (educational preparation to become a nurse). I revert back to that (writing reflective journals) ever since I was placed in NIC (National Isolation Centre). I took the time to write down my experiences whenever I have the time to write, be it at work, in the car before driving home and at home. At home, I took the time to read what I have written, analysed my strengths and weaknesses, and evaluate all what I have done and whatnot. I searched the internet for research or best practices from other countries on things that I need improvement. In this way, I learnt to improve myself through my experiences and keep on improving myself through practicing what I have learnt, ‘practices makes perfect’, right?”

(P16)

### **Theme 3: Venting out and distraction**

In this theme, the nurses discussed the measures they carried out to release and relieve stress in order for them continually be strong psychologically. The most common psychological self-care practices were talking to each other about their experiences as a way of approving and disapproving their emotions, thoughts, and practices.

“When we have time, as long as we are away from the patients, we will vent out our feelings, usually our favourite place is the pantry. We pour what we felt, what we have done, what went wrong, and how to improve ourselves in the future. We usually talk it (the experience) out and discuss it with each other. Whatever we discussed stay within that four walls as far as possible. It helps us to drain out all that we thought and felt rather than keeping it to ourselves.”

(P25)

Some nurses also kept a diary of their experiences by writing in a book or in the software application of their mobile phones. They considered this as a way of letting go of their emotions and thoughts where they said that they felt better after they write even if what was written was not read by anybody.

“I wrote all my experiences in a small book, like a diary. Especially my anger and frustration. It helps me to release my tension of working under constant pressure (during the COVID-19 pandemic. I don’t need anybody to read it but I don’t mind if someone read it too.”

(P13)

“I pour all the things in my heart and my mind to ease my soul in the ‘Notes’ app (mobile software application). It’s not good to keep them to myself. I don’t care how I wrote it (experience), the words that I used to write it, and for whatever reasons that I wrote it. It’s me and the ‘Notes’ app. makes me feel better after I let out all those negativities. It is okay...I do not need anyone to read it and tell me that what I did was right or wrong. I just need to let it (experience) out.”

(P31)

Likewise, a few nurses use media such as ‘Facebook’ and ‘Instagram’ as platforms for voicing out their daily experiences and emotions albeit with limitations due to work confidentiality, professionalism and nurses being role-models during the pandemic.

“I spill out my heart on Facebook and Instagram. Like writing a diary of my daily experiences. But I have to be mindful too... I have to maintain confidentiality and professionalism as a nurse. Nurses have become important role-model during this pandemic. I have to be selective and cannot pour all of my heart there. I cannot just swear, used bad words and say things irrationally. There are audiences out there. I must be careful.”

(P36)

A few other nurses also talked to the person closest to them such as their husbands or family members or best friends whom they denote as 'human diary'. The nurses said that the concept of a 'human diary' lend them listening ears, understanding of their situation and acknowledging their emotions.

"I just need listening ears, a shoulder to cry on, a mind that understands me and a heart that can feel what I felt. A 'human diary', that allowed me to pour my heart out without limitations. I don't need sympathy. Just be there by my side, listen to me and be tolerant. It feels good every time after I let everything (whatever related to daily experiences) out of my chest. I become positive again and save me from adverse mental health. For that, I am grateful I have my best friend who is my human diary."

(P12)

Aside from the above, healthy, and positive distractions were employed by nurses to relieve negative thoughts arising from negative experiences. Some of these include hiking, jogging, running, walking, and cycling. According to the nurses focusing on the exercises deviated their attention from their anxiousness, hence, strengthening their mental well-being while also maintaining their health physically.

"Exercising is a healthy practice. Doing exercises such as hiking, jogging, running, walking, and cycling help us to distract our minds from all the bad experiences and help us to forget about our worries and stress. Our mental health was strengthened in this way."

(P07)

#### **Theme 4: 'Have faith, and think and stay positive'**

This theme represents the nurses' religious, spiritual and psychosocial self-care practices. All the nurses equally shared the importance of having faith in the higher being or supreme entity such as God for protection and the positive endurance of the daily challenges that they faced. Regardless of the different religions, all the nurses were also in agreement and believed that COVID-19 was a test from God or a supreme being for their patience. Although it took time for them, they gradually were in acceptance of the test and believed that this was 'a blessing in disguise'.

"COVID-19 is a very new virus. Nothing much is known about it. Of course, there are dissatisfaction, people angry at you, stressors and pressures at work, I just go with the flow. The way that I stay strong is by reciting prayer, that's my faith. I always talk to 'Allah' that I always remind myself that COVID-19 is a test of our patience and I always believe that it happens for a reason."

(P05)

"Of course, nursing is a stressful job, but not all the time. During the pandemic, it is the other way around. It is not easy to get used to working in a situation where stress is there all the time. Time after time, eventually I become more acceptance of this test (COVID-19). Although I am a freethinker, I believed in faith. When all hopes seem gone, there's always a silver lining."

(P40)

A large number of nurses acknowledged that prayer in terms of invocation, supplication or requesting, or even asking for help or assistance from the supreme being strengthened their mental health. They believed that their prayers would definitely be answered and that they were protected.

“Every night before sleep, with my children and my husbands, altogether we pray to God. We know He is always there protecting us. We would not be left alone. Jesus and Blessed Virgin Mary protect us all.”

(P22)

“Just by holding the Bible soothe my heart. What more if I read it? I search for spiritual words of wisdom in the Bible that help me through during the challenging time. I know I will be protected”.

(P35)

“I make du’a to ‘Allah’. Ask forgiveness for all our wrongdoings that we as a country might not realise that we have done wrong. I feel strong and close to ‘Allah’ every time I make du’a. I know he will answer my du’a. He (‘Allah’) promised that in the Qur’an. Maybe not immediate but gradually and definitely.

(P01)

More than three-quarters of the nurses who are Muslim felt that they are closer to ‘Allah’ when consistently practising their ritual prayer. They deemed this action to strengthen them emotionally and mentally by conveying their hopes through prayer.

“We keep on praying to ‘Allah’, even we did it (praying) in our PPE during our shift duty. It (praying) is a way to communicate to ‘Allah’ that we are hopeful that this (COVID-19) will end soon. ‘Allah’ hear us, listen to us and will grant our wishes, albeit may take time, but for sure, definitely.”

(P33)

Many nurses resort to spiritual practices such as meditation where Yoga was given as an example. They also listened to music. They asserted that the spiritual practices bring peace to them emotionally and calm them from the chaos brought about by COVID-19.

“It is not easy to get a decent day off. Whenever I can, I perform meditation through Yoga. It (Yoga) helps to bring peace to my mind. It made me strong. I was able to control my emotion, have faith, think positive and stay positive.”

(P02)

“I listen to music that can calm me. It soothed my heart, made my mind peaceful, and I felt like it (calming music) took away all my stress and bring positive energy to my body.”



## Discussion

The current study of psychological self-care expanded on previous studies on self-care among nurses during the COVID-19 pandemic [3, 33]. Aside from practising physical care to strengthen mental health, our study fundamentally established that self-care is firstly and principally psychologically driven. For self-care to be functional in strengthening mental health, the activities undertaken should be positive in nature. It was found that central to psychological self-care is the understanding and commitment to strengthening mental health. Therefore, it is important to encourage nurses to undertake practices and activities such as physical care, emotional care and social care which include religious and spiritual care to promote their mental health. Uniquely, we also found that the nurses' strong determination to embrace self-care was inherent to them as nurses and was enriched by their foundational knowledge of the underpinnings of health.

Working during an epidemic/pandemic can be physically, emotionally, and morally demanding for nurses. Self-care allows them to preserve their mental health by overcoming and adapting to stressful situations [34, 35]. If consistently and positively practised will eventually develop resilience, a concept widely studied in nursing [36, 37]. Self-care is defined as:

*"proactive, holistic, and personalised approach to the promotion of health and wellbeing through a variety of strategies, in both personal and professional settings, to enhance capacity for care of patients and their families"*[38]

The existing body of knowledge largely advocated physical care as the key to self-care with an emphasis on disease management for individuals with chronic or long-term conditions [18]. In our study, self-care is evident to be broad in scope that can be embraced, even, for the protection, promotion and maintenance, hence, preventing adverse mental health. The study findings also pointed out that mental and physical health is interrelated, inter-connected and interdependent with each other. Indeed, health is incomplete without mental health, and mental health may not be achieved without being physically healthy. It is also evident in this study that mental health includes emotional, psychological, and social well-being. Good mental health encompasses the ability to handle stress, relate to others, and make healthy choices [17]. Adverse mental health may affect individual capacities to maintain physical health that not only results in mental disorders but also increases the risk for communicable and non-communicable diseases and contributes to unintentional and intentional injury [39]. If self-care focuses on negative approaches, psychological distress is likely to occur [20].

Daily self-care routines to meet our basic needs include nutrition, hygiene, exercise[16] and psychological self-care to keep anxiety at bay. A salient feature in our study is that the nurses employed physical activities as a distraction, which they found useful for keeping their sanity. The psychological wellness of the individual is one of the health benefits of physical activity and exercise [18, 40]. Exercise releases endorphins and serotonin that improve mood. Our study supported previous research and systematic

reviews that physical activity is positively associated with reduced occurrence of depression/anxiety disorders and poor physical health outcomes [41–44]. Individuals who do regular physical activity were found to be less unhappy compared to those who did not exercise during COVID-19 [7, 45].

Another important feature of psychological self-care is “voicing out” anxiousness and stress to prevent and eliminate the negative energy to be mounting. The present study supported a study conducted in the United States of America that found nurses used journaling, gathering virtually with friends, and talking to their loved ones as a way of self-care during the pandemic [2]. This explains the importance of sharing feelings or ‘venting out’ and not just holding back emotions, keeping silent, and suffering alone. These self-care approaches allowed nurses to go back to work each day to continue to care for as best as they can for their patients throughout the pandemic. This also highlights the importance of social support and remaining in contact with friends and families during the pandemic. It is accepted that we need to practice ‘physical distancing’ during COVID-19, but not ‘social distancing’ [24]. Our study findings indicated that kind/compassionate self-talk was practiced through journaling and keeping a diary, which indicated the expression and handling of emotions responsibly [3]. Incorporation of such methods of self-care is a way to mediate self-compassion [46]. This lessened nurses’ vulnerability to caregiving fatigue, hence, improving wellbeing and resilience [24]. Evidence from the pre-pandemic research has also shown that resilient individuals when confronted with crises or distressing situations are less likely to experience stress and loneliness than their counterparts [47].

This study demonstrated that nurses recognised the importance of equipping themselves with knowledge and skills and showed concern with the appropriate technique of donning and doffing PPE. It is natural for nurses to be anxious, especially during the early phase of the pandemic. This finding corroborates findings from a previous study in China that in the early stages of the pandemic, nurses’ lack of knowledge about the virus and fear of infecting their families caused them anxiety [35]. Worldwide, at the beginning of the pandemic COVID-19, PPE guidelines were inconsistent and ambiguous, fluctuated over time, and differed across organizations and countries [48]. Appropriate training in PPE usage is critical to ensure maximum protection, prevent cross-contamination and reducing the risk of COVID infection in healthcare workers [49]. Keeping abreast with evidence-based practice with the appropriate knowledge and skills would lessen the anxiety. Information-seeking could help individuals identify essential information to educate themselves about the pandemic and other infection control measures, thereby reducing their stress [47].

This study also highlighted that religious and spiritual practices were an important component of self-care and should be a part of a holistic approach to positively strengthen mental health. Our study demonstrated how religious/spiritual beliefs assisted the nurses in dealing with everyday life working as a frontliner. This finding reinforces various studies on the significant role of religion in reducing stress and maintenance of mental health [50, 51]. Hence, it is important to recognize that spirituality and religion facilitate self-reliance, hence, resilience [52], and can be a protective factor for physical and mental health [53]. In conclusion, embracing the inter-play of positive physical, emotional, and spiritual/religious care as components of psychological self-care allows a more holistic approach to strengthening mental health.

Therefore, enhancing the important functions underpinned in the biopsychosocial-spiritual care model [54].

## Implications of the findings

Staying psychologically strong during, pre and post-pandemic is very important. The World Health Organization forecasted that COVID-19 is still here and warns countries globally about the complacency of embarking on to the endemic phase and gradually normalizing COVID-19 [1]. The stress caused by the pandemic will still persist during the endemic amidst may decrease in intensity, but the daily work environment of nurses remains not without stress. Resilience is vital in nursing and embracing positive psychological self-care practices, in addition to physical self-care practices, revealed nurses' efforts towards achieving resilience. It is vital to ensure that all nurses are managing their mental health, even beyond the stressful COVID-19 pandemic. Not every nurse is endowed with the ability to employ psychological self-care, some may need to be made aware, taught, and encouraged to practice these skills, so that they are self-reliant and empowered on their mental health rather than solely dependent on the healthcare system for sources of support. For health systems and organizations to function optimally, they must pay attention to the needs of their employees, in particular the nurses who are the largest group of front-line workers.

## Conclusions

Many studies over the past two years of the COVID-19 era pinpointed that nurses' mental health was adversely affected due to the unprecedented event, and lack of organizational preparedness to provide care during the pandemic. The supply of PPE was insufficient, there was inadequate staffing, limited knowledge, and limited skills in dealing with the disease. Substantial recommendations emphasise strategies for addressing the limitations identified, which may not be wholly fulfilled. This study highlighted that positive psychological self-care practices contributed significantly to supporting and maintaining the mental health of nurses during chaos and crisis such as COVID-19. Although some of these positive psychological self-care practices are natural reflex action responses inherent to the daily routine, religious rituals, and spiritual practices, not all nurses may realize, or even have the skills underlying positive psychological self-care practices. Nurses should be made aware of positive psychological self-care practices and encouraged to learn and practice accordingly. This could be through, special educational offerings, reading, or online programs as well as included in professional education. For health systems and organizations to function optimally, they must pay attention to the needs of their employees, in particular the nurses who are the largest group of front-line workers. Addressing and developing resources to promote positive psychological self-care practices will not only benefit individual nurses but will help promote the wellbeing of patients and employees and improve the health of all.

## Abbreviations

FGDs = Focus Group Discussions

IHSREC = Institute of Health Sciences Research Ethics Committee

MHREC = Medical and Health Research and Ethics

WHO = World Health Organization

## **Declarations**

### **Acknowledgements**

The authors would like to express sincere appreciation to all the participants who have joined and supported the project.

### **Authors' contributions**

KHA and AAM contributed to the conception or design of the study. KHA and DRI contributed equally to writing and drafting the manuscripts. All authors were involved in the acquisition of data/or interpretation of data, participated in revising the manuscript, and agreed to be accountable for all aspects of the work and any issues related to the accuracy or integrity of any part of the work.

### **Funding**

The Government of Brunei Darussalam via the Prime Minister's Office fully funded AAM to undertake the BHSc Nursing programme. Although there is no direct funding for the research, the research is conducted by AAM under the supervision of the research team, as part of the fulfilment of the BHSc Nursing.

### **Availability of data and material**

The datasets generated and analyzed during the current study are not publicly available due to institutional data sharing policy but are available from the corresponding author on reasonable request.

### **Ethics approval and consent to participate**

The study protocol was designed and performed according to the Declaration of Helsinki. Ethical clearance was provided by the joint committee of the Pengiran Anak Puteri Rashidah, Institute of Health Sciences Research Ethics Committee (IHSREC), Universiti Brunei Darussalam and Medical and Health Research and Ethics Committee (MHREC), Ministry of Health (ERN: UBD/PAPRSBIHSREC/2020/49). Written informed consent was obtained from all participants.

### **Consent for publication**

Not applicable.

## Competing interests

The authors do not have conflict of interest to declare.

## References

1. World Health Organization. (2020) Coronavirus disease (COVID-19) pandemic. In: World Health Organization. <https://www.who.int/europe/emergencies/situations/covid-19>. Accessed 2 Oct 2022.
2. LoGiudice JA, Bartos S. Experiences of Nurses During the COVID-19 Pandemic: A Mixed-Methods Study. *AACN Adv Crit Care*. 2021;32:14–26.
3. Maideen AA, Idris DR, Lupat A, et al. Nurses' mental health and coping strategies throughout COVID-19 outbreak: A nationwide qualitative study. *Int J Ment Health Nurs*. 2022;31:1213–27.
4. Sampaio F, Sequeira C, Teixeira L. Nurses' Mental Health During the COVID-19 Outbreak. *J Occup Environ Med*. 2020;62:783–7.
5. Carriero MC, Conte L, Calignano M, et al. The psychological impact of the Coronavirus emergency on physicians and nurses: An Italian observational study. *Acta Biomed*. 2021. <https://doi.org/10.23750/ABM.V92IS2.11575>.
6. Mental Health America. (2022) The mental health of healthcare workers in Covid-19. <https://mhanational.org/mental-health-healthcare-workers-covid-19>. Accessed 2 Oct 2022.
7. Martin-Rodriguez LS, Escalda-Hernandez P, Soto-Ruiz N, Ferraz-Torres M, Rodriguez-Matesanz I, Garcia-Vivar C. Mental health of Spanish nurses working during the COVID-19 pandemic: A cross-sectional study. *Int Nurs Rev*. 2022. <https://doi.org/10.1111/inr.12764>.
8. Arnetz JE, Goetz CM, Sudan S, Arble E, Janisse J, Arnetz BB. Personal Protective Equipment and Mental Health Symptoms Among Nurses During the COVID-19 Pandemic. *J Occup Environ Med*. 2020;62:892–7.
9. Neto MLR, Almeida HG, Esmeraldo JD, et al. When health professionals look death in the eye: the mental health of professionals who deal daily with the 2019 coronavirus outbreak. *Psychiatry Res*. 2020;288:112972.
10. Jackson D, Bradbury-Jones C, Baptiste D, Gelling L, Morin K, Neville S, Smith GD. Life in the pandemic: Some reflections on nursing in the context of COVID-19. *J Clin Nurs*. 2020;29:2041–3.
11. Gonzalez D, Nasser S. (2022) Patients Have Panic in Their Eyes: Voices from a Covid-19 Unit. In: The New York Times. <https://www.nytimes.com/2020/04/29/nyregion/coronavirus-nyc-hospitals.html>? Accessed 2 Oct 2022.
12. Maslach C, Leiter MP. Understanding the burnout experience: recent research and its implications for psychiatry. *World Psychiatry*. 2016;15:103–11.
13. Ulrich B, Barden C, Cassidy L, Varn-Davis N. Critical Care Nurse Work Environments 2018: Findings and Implications. *Crit Care Nurse*. 2019;39:67–84.

14. Ogińska-Bulik N, Michalska P. Psychological resilience and secondary traumatic stress in nurses working with terminally ill patients—The mediating role of job burnout. *Psychol Serv.* 2021;18:398–405.
15. Orem DE. *Nursing: Concepts of practice*, Fifth. St. Louis: C. V. Mosby.; 1995.
16. Denyes MJ, Orem DE, Bekel G. Self-Care: A Foundational Science. *Nurs Sci Q.* 2001;14:48–54.
17. Aqtam I, Darawwad M. Health Promotion Model: An Integrative Literature Review. *Open J Nurs.* 2018;08:485–503.
18. World Health Organization. *Self care for health: a handbook for community health workers & volunteers.* World Health Organization; 2013.
19. Melnyk BM. Burnout, Depression and Suicide in Nurses/Clinicians and Learners: An Urgent Call for Action to Enhance Professional Well-being and Healthcare Safety. *Worldviews Evid Based Nurs.* 2020;17:2–5.
20. Nie A, Su X, Zhang S, Guan W, Li J. Psychological impact of COVID-19 outbreak on frontline nurses: A cross-sectional survey study. *J Clin Nurs.* 2020;29:4217–26.
21. Rushton CH, Pappas S. Systems to Address Burnout and Support Well-being: Implications for Intensive Care Unit Nurses. *AACN Adv Crit Care.* 2020;31:141–5.
22. Yu F, Raphael D, Mackay L, Smith M, King A. Personal and work-related factors associated with nurse resilience: A systematic review. *Int J Nurs Stud.* 2019;93:129–40.
23. Restubog SLD, Ocampo ACG, Wang L. Taking control amidst the chaos: Emotion regulation during the COVID-19 pandemic. *J Vocat Behav.* 2020;119:103440.
24. Hofmeyer A, Taylor R, Kennedy K. Knowledge for nurses to better care for themselves so they can better care for others during the Covid-19 pandemic and beyond. *Nurse Educ Today.* 2020;94:104503.
25. Phiri LP, Draper CE, Lambert E, v, Kolbe-Alexander TL. Nurses' lifestyle behaviours, health priorities and barriers to living a healthy lifestyle: a qualitative descriptive study. *BMC Nurs.* 2014;13:38.
26. World Medical Association. World Medical Association Declaration of Helsinki. *JAMA.* 2013;310:2191.
27. Nieuwenhuis J. Introducing qualitative research. In: Maree K, editor. *First steps in research.* 3rd ed. Braamfontein: Van Schaik Publishers; 2020. pp. 56–78.
28. Corbin J, Strauss A. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory.* New York: Sage Publications; 2014.
29. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care.* 2007;19:349–57.
30. Fryer CE. An Approach to Conducting Cross-Language Qualitative Research with People from Multiple Language Groups. In: *Handbook of Research Methods in Health Social Sciences.* Singapore: Springer Singapore; 2019. pp. 1653–74.
31. Charmaz K. (2021) *The Genesis, Grounds, and Growth of Constructivist Grounded Theory.* In: *Developing Grounded Theory, Second.* Routledge, Second Edition. | New York: Routledge, 2021. |

Series: Developing qualitative inquiry | Revised edition of Developing grounded theory, c2009., pp 153–187.

32. Charmaz K, Thornberg R. The pursuit of quality in grounded theory. *Qual Res Psychol.* 2021;18:305–27.
33. Lloyd C, Champion DP. Occupational stress and the importance of self-care and resilience: focus on veterinary nursing. *Ir Vet J.* 2017;70:30.
34. Wei H, Roberts P, Strickler J, Corbett RW. Nurse leaders' strategies to foster nurse resilience. *J Nurs Manag.* 2019;27:681–7.
35. Sun N, Wei L, Shi S, et al. A qualitative study on the psychological experience of caregivers of COVID-19 patients. *Am J Infect Control.* 2020;48:592–8.
36. KIM EY, CHANG SO. Exploring nurse perceptions and experiences of resilience: a meta-synthesis study. *BMC Nurs.* 2022;21:26.
37. Foster K, Roche M, Giandinoto J, Furness T. Workplace stressors, psychological well-being, resilience, and caring behaviours of mental health nurses: A descriptive correlational study. *Int J Ment Health Nurs.* 2020;29:56–68.
38. Mills J, Wand T, Fraser JA. Exploring the meaning and practice of self-care among palliative care nurses and doctors: a qualitative study. *BMC Palliat Care.* 2018;17:63.
39. Prince M, Patel V, Saxena S, Maj M, Maserko J, Phillips MR, Rahman A. No health without mental health. *The Lancet.* 2007;370:859–77.
40. World Health Organization. User empowerment in mental health—a statement by the WHO Regional Office for Europe; 2010.
41. Wang H, Fu J, Lu Q, Tao F, Hao J. Physical activity, body mass index and mental health in Chinese adolescents: a population based study. *J Sports Med Phys Fitness.* 2014;54:518–25.
42. Hegberg NJ, Tone EB. Physical activity and stress resilience: Considering those at-risk for developing mental health problems. *Ment Health Phys Act.* 2015;8:1–7.
43. Clegg AP, Barber SE, Young JB, Forster A, Iliffe SJ. Do home-based exercise interventions improve outcomes for frail older people? Findings from a systematic review. *Rev Clin Gerontol.* 2012;22:68–78.
44. Forbes D, Forbes S, Morgan DG, Markle-Reid M, Wood J, Culum I. Physical activity programs for persons with dementia. *Cochrane Database of Systematic Reviews.* 2008. <https://doi.org/10.1002/14651858.CD006489.pub2>.
45. Is EE. (2021) Effect of COVID-19 pandemic on physical activity habits, musculoskeletal pain and mood of healthcare workers. *SiSli Etfal Hastanesi Tip Bulteni / The Medical Bulletin of Sisli Hospital.* <https://doi.org/10.14744/SEMB.2021.87523>.
46. Barni D, Danioni F, Canzi E, Ferrari L, Ranieri S, Lanz M, Iafrate R, Regalia C, Rosnati R. Facing the COVID-19 Pandemic: The Role of Sense of Coherence. *Front Psychol.* 2020. <https://doi.org/10.3389/fpsyg.2020.578440>.

47. Labrague LJ. Resilience as a mediator in the relationship between stress-associated with the Covid-19 pandemic, life satisfaction, and psychological well-being in student nurses: A cross-sectional study. *Nurse Educ Pract.* 2021;56:103182.
48. MacIntyre CR, Chughtai AA. A rapid systematic review of the efficacy of face masks and respirators against coronaviruses and other respiratory transmissible viruses for the community, healthcare workers and sick patients. *Int J Nurs Stud.* 2020;108:103629.
49. Haegdorens F, Franck E, Smith P, Bruyneel A, Monsieurs KG, van Bogaert P. Sufficient personal protective equipment training can reduce COVID-19 related symptoms in healthcare workers: A prospective cohort study. *Int J Nurs Stud.* 2022;126:104132.
50. Moreira-Almeida A, Koenig HG, Lucchetti G. Clinical implications of spirituality to mental health: review of evidence and practical guidelines. *Revista Brasileira de Psiquiatria.* 2014;36:176–82.
51. Perera CK, Pandey R, Srivastava AK. Role of Religion and Spirituality in Stress Management Among Nurses. *Psychol Stud (Mysore).* 2018;63:187–99.
52. Gray AJ. Resilience, spirituality and health. *Psyche Geloof.* 2017;28:32–40.
53. Coppola I, Rania N, Parisi R, Lagomarsino F. Spiritual Well-Being and Mental Health During the COVID-19 Pandemic in Italy. *Front Psychiatry.* 2021. <https://doi.org/10.3389/fpsy.2021.626944>.
54. Balboni MJ, Puchalski CM, Peteet JR. The Relationship between Medicine, Spirituality and Religion: Three Models for Integration. *J Relig Health.* 2014;53:1586–98.