



## Coping amid Crisis: A Study of Field Midwives' Resilience Strategies during the COVID-19 Pandemic, Sri Lanka

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### ARTICLE INFO

#### Article History:

Received: 10 September 2023

Accepted: 01 November 2023

#### Keywords:

Field midwives; Resilience strategies; COVID-19 pandemic; Sri Lanka

#### Citation:

Pathirana J. M. P , Edirisinghe N. P. , Amarasekara T.D. (2023). Coping amid Crisis: A Study of Field Midwives' Resilience Strategies during the COVID-19 Pandemic, Sri Lanka. *Proceedings of SLIIT International Conference on Advancements in Sciences and Humanities, 1-2 December, Colombo, pages 460-465.*

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### ABSTRACT

The COVID-19 outbreak has significantly impacted people's physical and mental health. The use of coping strategies plays a major role in combating psychological stressors. The aim of the study was to describe the use of coping strategies among field midwives (FMs). A descriptive cross-sectional study was conducted among FMs in selected Medical Officer of Health (MOH) areas in the Matara district. Participants included FMs with at least six months of experience in the field, and those on maternity leave were excluded. Data were collected using a validated Brief COPE questionnaire and a pre-tested socio-demographic questionnaire. Data analysis was done using descriptive statistics. A total of 145 study participants had a mean age of 41.4±12.0. The majority of participants (64.8%) employed an avoidant coping style, while 44.8% utilized a problem-focused coping style, and 51% employed an emotion-focused coping style to maintain positivity in the face of challenges. The highest scores were reported on active coping, positive reframing, acceptance, and informational support, while the lowest scores were on substance use and humor. In conclusion, the majority of FMs

used problem-focused approaches as a coping strategy during the COVID-19 outbreak. Health policymakers might use this data to have a basic understanding of FMs' coping mechanisms.

## 1. INTRODUCTION

The COVID-19 outbreak has affected the physical and mental health of people in a significant way (Munawar and Choudhry, 2020). Despite the impact of COVID-19 on Sri Lankan lives in 2020, field midwives (FMs) have provided women and children with routine home visits and clinic visits. Numerous studies have demonstrated that the COVID-19 outbreak caused substantial psychological distress among Health Care Workers (HCWs). Field midwives during COVID-19 were at an increased risk of psychological distress as a result of their employment situation. Those facing uncontrollable circumstances, particularly stress levels that require appropriate coping mechanisms, need to maintain a balance of mental health. Individuals, the experience that creates stress, and the environmental context all influence stress management strategies and methods (Austefeld., 2004). Problem-solving, avoidance, and seeking social support were mentioned as coping mechanisms used by HCWs to deal with stress during a difficult time of the outbreak (Tahara et al., 2020; Sharma et al., 2020).

There are two types of coping strategies: problem-focused coping, where actions are taken to change the source of stress, and emotion-focused coping, where actions are taken to deal with the resultant emotional distress (Cooper & Quick., 2017). Problem-focused coping is usually associated with positive impacts such as improving psychological well-being, self-care, health-related quality of life, and low levels of emotional fatigue. However, emotion-focused coping is associated with maladaptive and ineffective causes such as poor psychological well-being, inefficient health-related quality of life, increased anxiety and dissatisfaction,

and increased risk of death (Mayordomo et al., 2016). Also with the COVID situation, coping strategies may be a real challenge for people (Man et al., 2020)

As a result of the epidemic, Sri Lankan healthcare facilities partially closed down and concentrated on preventing and treating COVID-19. In contrast, midwifery services continued to operate as usual. Inadequate contamination protection, increased infection risks, working fatigue, worry, anxiety, and depression are common problems for midwives who provide care to women in intimate and continuous contact. Despite this, there is limited information available regarding the psychological effects of COVID-19 among Sri Lankan midwives. Therefore, this study aimed to assess the use of coping strategies among field midwives in selected MOH areas in the Matara district Sri Lanka during the COVID-19 Pandemic.

## 2. MATERIAL AND METHODS

A descriptive cross-sectional study was conducted from December 2021 to February 2022, which was the months following the epidemic's peak spread.

### 2.1 Study Setting and Sample Recruitment

There were nine MOH offices from the Matara district chosen for the research. Participants were working FMs from the Matara district who were used as a representative sample. Those who were on maternity leave were excluded, but those with at least six months of experience in the field who are currently working in certain MOH divisions in the Matara district were included. The appropriate sample size was determined using the Taro Yamane equation, with a significance level of 0.05 being used as the precision. The final count for the sample size was 157. Given that potential non-responders were picked through simple random sampling method from nine MOH divisions in the Matara district, a final sample size of 165 was deemed suitable.

## 2.2 Data Collection

Before the interviewer administered the questionnaire, participants supplied informed consent in writing. A validated Brief COPE questionnaire (Weeratunga et al, 2021) was used for coping strategy evaluation. A socio-demographic questionnaire that had been pre-tested was also administered. The average time required to complete a questionnaire was approximately 15 minutes.

## 2.3 Data Analysis

Descriptive statistics were employed to summarize and present data on population characteristics. SPSS (Statistical Software Package for Social Sciences) version 26.0 was used for data input and analysis. Coping strategies among field midwives during COVID-19 were assessed by the Brief-COPE 28-item questionnaire on a 1-4 scale; 1- (I haven't been doing this at all), 2- (A little bit), 3- (A medium amount), 4- (I've been doing this a lot). The Brief COPE is comprised of 14 scales divided into three overarching coping styles. They are Problem-Focused Coping, Emotion-Focused Coping, and Avoidant Coping. Average scores indicate the degree to which the respondent has been engaging in that coping style.

In problem-focused coping, higher scores than the mean values indicate positive coping styles. In emotion-focused coping higher scores than the mean values indicate physical or cognitive efforts to disengage from the stressor. In avoidant coping, lower scores than the mean values were typically indicative of adaptive coping.

## 2.4 Ethical Considerations

The study was approved by the Ethics Review Committee, Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka (Nur/09/21). Informed written consent was obtained from participants before data collection.

## 3. RESULTS

### 3.1 Sample Characteristics

With a response rate of 87.8%, 145 out of 165 participants who were invited to participate submitted a completed questionnaire. The mean age of the participants was  $41.4 \pm 12.0$  years. A total of 35.2% of respondents were between the ages of 20 and 34. The majority of respondents were married, with 82.1%, having at least one kid, and 66% belonging to a nuclear family. Most participants resided in their own homes (90.3%) and in rural areas (94.5%). The majority of participants (53.8%) had more than ten years of experience, whilst 46.2% had less than ten years. In addition, 18.6% of the individuals reported suffering from chronic disease conditions.

### 3.2 Coping Strategies

The coping strategies used by participants are stated in Table 1. The mean values of problem-focused coping were  $(2.11 \pm 0.91)$ , emotion-focused coping  $(1.74 \pm 0.60)$ , and avoidant coping  $(1.53 \pm 0.5)$ . The highest scores were reported on active coping, positive reframing, acceptance, and informational support while least scores were on substance use and humor.

**Table 1. Coping strategies used by participants (n=145)**

Strategy	Mean	SD±
<b>Problem-focused</b>	2.11	±0.91
Active coping	2.23	±1.00
Informational support	2.02	±1.02
Planning	2.01	±1.04
Positive reframing	2.17	±1.05
<b>Emotion-focused</b>	1.74	±0.60
Venting	1.58	±0.69

Emotional support	2.01	±0.88
Humor	1.27	±0.51
Acceptance	2.24	±1.13
Self-blame	1.45	±0.64
Religion	1.88	±0.93
<b>Avoidant coping</b>	1.53	±0.51
Self-distraction	1.94	±0.88
Denial	1.59	±0.78
Substance use	1.11	±0.34
Behavioral disengagement	1.47	±0.77

According to Table 2, the majority of the participants had applied avoidant coping style 94(64.8%). 44.8% and 51% had applied a problem-focused coping style and an Emotion-focused coping style to be positive with the problems.

**Table 2. Frequency distribution of coping strategies among field midwives. (n= 145)**

	Problem-focused coping N (%)	Emotion-focused coping N (%)	Avoidant-coping N (%)
Greater than the mean value	65 (44.8%)	74 (51%)	51 (35.2%)
Lower than the mean value	80 (55.2%)	71 (49%)	94 (64.8%)

#### 4. DISCUSSION

This is a pioneer study done in Sri Lanka, which assessed coping strategies among field midwives during the COVID-19 outbreak. FMs are critical in reducing maternal and perinatal morbidity and mortality, yet they are an all-too-often overlooked human resource in healthcare systems. This study was conducted using a cross-sectional analysis among 145 FMs during the later part of the pandemic.

This study discovered that FMs had coping skills at a satisfactory level, indicating that they have learned to adjust despite their work being disrupted in new and unexpected ways. Present study findings show, based on mean scores commonly reported coping strategies by field midwives were active coping, informational support, planning, and positive reframing, which is comparable with the study by Yubonpunt et al. (2022). These approaches demonstrated that the FMs could manage their emotions on their own as HCWs. Further, a considerable number of FMs also have applied emotional support and acceptance as a coping strategy. Previous research has found that emotional support will become a resource for individuals, allowing them to deal with stressors and reduce distress levels (Yubonpunt et al., 2022; Akbar & Aisyawati., 2021). It was reported venting, humor, self-blame, and religion scored low mean values. Avoidant coping styles, self-distraction, denial, substance use, and behavioral disengagement were scored low mean values.

A similar study was done in India for undergraduate students of the healthcare profession and showed that the most commonly practiced coping strategies were acceptance, self-distraction, planning, active coping, positive reframing, emotional support, and instrument support. It showed the most used strategy was problem-focused coping compared to emotion-focused and avoidant coping strategies. And the lowest mean scores were recorded for denial, humor and substance use (Mishra et al., 2023).

A number of research have found that negative coping methods, such as escaping or avoiding stressful situations or overcommitting to too many activities, are associated with poorer mental outcomes (Wu et al., 2020; Mirzaei et al., 2022; Karabulak & Kaya., 2021). Positive coping mechanisms, such as a positive attitude toward the issue at hand, the presence of a social network, peer assistance, the ability to collaborate

effectively, self-care, problem resolution, and self-reliance, all play a constructive role in stress reduction and resilience enhancement (Karabulak & Kaya 2021; Kalaitzak & Rovothis., 2021; Babore et al., 2020).

In conclusion, the majority of FMs used problem-focused approaches as a coping strategy during the COVID-19 outbreak. Active coping, positive reframing, acceptance, and informational support were reported with high averages among positive coping methods. This study provides a basic picture for health policymakers to understand the coping styles of FMs. Thus, this study will be helpful to take measures to improve the psychological aspect of field midwives in Sri Lanka.

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