Original article

SWOT Analysis on The Views of Midwives Assigned in The Delivery Room About The Effects of The Covid-19 Pandemic: A Qualitative Study

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Abstract:

Objective: The aim of this study is to examine the experiences of midwives working in the maternity ward during the COVID-19 pandemic by SWOT analysis. Materials and Methods: A descriptive qualitative study reported following the COREQ guidelines. For the purposes of this study, 40 midwives working in the delivery room throughout the pandemic were interviewed. Research data were collected using a Personal Information Form (PIF) and a SWOT analysis interview form. One-on-one and indepth telephone interviews were conducted with the midwives. All interviews were recorded with the consent of the midwives. Collected data were transcribed and a content analysis was carried out using the MAQDA 2020 program. Results: Data collected in the study were categorized under four main themes as "Strengths", "Weaknesses", "Opportunities" and "Threats". Conclusion: Midwives worked under difficult conditions during pandemi, so they were extremely tired and worn out. Midwives who could not go home during this difficult period gave psychological warfare because they were separated from their families. In addition, they thought that they could not provide adequate care and support to pregnant women at the time of delivery within the framework of social distance protection measures. This made them feel professionally inadequate.

Keywords: COVID-19; midwifery; qualitative study; SWOT analysis

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Introduction:

Health care professionals have assumed a key role in the execution of health services and in promoting public health. The work environment of health care professionals, who are responsible for improving and protecting the health of individuals and maintaining their well-being, is, by its nature, a stressful environment ¹. The tasks and duties they undertake have imposed heavy social and psychological responsibilities on health care professionals. Pandemic diseases encountered in the society not only increase the workload of health care professionals but also affect their mental health ^{2,3}.

Health care professionals have assumed critical roles with regard to protecting human life throughout the Covid-19 pandemic. The measures taken to minimise transmission and contact prevented people from doing their routine work, while health workers had to work at the forefront of the fight against the epidemic and put their own lives at risk ^{4,5}.

The Covid-19 virus can be easily transmitted through physical contact and droplets ⁶. This process have posed further risks for health care professionals providing care. Therefore, midwives who provide care and give birth to pregnant women have a much higher risk of encountering the Covid-19 virus. Studies revealed that the prevalence of pregnant

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women from being infected with Covid-19 during labor varies between 3-20% ^{7,8}.

Many health care professionals, including midwives, have died since the beginning of 2020 due to Covid 19 infection. Midwives, who are primarily responsible for women's health, are at high risk of infection and risk not only their own lives but also the lives of their families. In a study conducted on the subject, the hospitalization rate of the health care professionals and their family members due to Covid-19 was reported as 3.3 and 1.8 respectively ¹⁰.

Although antenatal follow-ups were sometimes delayed throughout the Covid-19 pandemic, this was not possible for labor 11. Therefore, midwifery services in the delivery room were not suspended during the pandemic. The procedures for scanning the virus could be applied in advance before the delivery in a planned labor, however this was not possible for unscheduled births. Midwives assigned in the delivery room continued to provide midwifery services by assuming active roles under these risks during the Covid-19 pandemic 12. Based on this essence, it is significant to know the strengths and weaknesses, opportunities along with possible threats in the work environment of midwives within the scope of solutions to be developed in the face of future pandemics or extraordinary situations.

The aim of this study is to examine the experiences of midwives working in the maternity ward during the COVID-19 pandemic by SWOT analysis. Future research on the weaknesses identified by the SWOT analysis will be helpful in avoiding threats and taking advantage of all future opportunities and effectively managing the decision-making process in case of possible future outbreaks and/or extraordinary situations.

Maretial and Method:

Design

A qualitative research method was used in this study as it gives the opportunity to deeply evaluate the views of midwives working in the delivery room on their status of being affected by the Covid-19 pandemic ¹³. The philosophy of Husserl phenomenology was adopted within the scope of the study. This study is an exploratory qualitative study that deals with examining the subjects in their natural environment, discovering the causes and understanding the views on the problem. The research was planned in line with the qualitative research paradigm based on a 32-item Consolidated Criteria for Reporting Qualitative

Research (COREQ), a guide for qualitative studies.

Data obtained from the midwives participating in the study were analyzed with a SWOT analysis, which is a strategic planning technique and examines four different factors (Strengths, Weaknesses, Opportunities, Threats) ¹⁴.

Setting

The population of the research comprised of midwives assigned in the delivery rooms of state hospitals, maternity hospitals, university hospitals and private hospitals in our country. Pursuant to the 2020 Health Statistics Yearbook, a total of 1.534 hospitals, 900 of which are Ministry of Health hospitals, 68 are university hospitals and 566 of which are private hospitals have been providing health care services in our country. A total of 59.040 midwives have been assigned in these health case institutions ¹⁵.

Participants

The sample of the study consisted of midwives who were working in the delivery rooms of state hospitals, maternity hospitals, university hospitals and private hospitals in Turkey before and during the pandemic and who agreed to participate in the study.

Research participants were determined by the snowball sampling method, which is the most frequently used Purposive Sampling Method within the scope of qualitative studies. The researchers created the first sample scope by answering the question "Who would it be appropriate to talk to about this issue?" among themselves. Then, the same question was asked to each participant and more participants were included in the sample list for the purpose of the research. The sample size was then determined by considering the theoretical sampling strategy 13. The sample size was considered to be sufficient at the point where the answers given to the questions asked by the participants fell into a repetition (reach the saturation point), hence a total of 40 midwives assigned in the delivery room were reached.

Data Collection

The research data were collected using a Personal Information Form (PIF) consisting of a total of 8 descriptive questions aiming to introduce the participants and a semi-structured questionnaire consisting of a total of 7 open-ended questions, developed by the researchers in line with the literature review. One-to-one interviews were conducted between January 2022 and February 2022

with the midwives who volunteered to participate in the research and the interviews were recorded. Each interview lasted an average of 15-20 minutes.

Questions in the Semi-Structured Questionnaire:

- 1. Have you had any concerns about executing your profession throughout the COVID 19 pandemic?
- 2. How were these concerns resolved?
- 3. What were the strengths of working as a midwife during COVID 19 pandemic?
- 4. What were the weaknesses of working as a midwife during COVID 19 pandemic?
- 5. What opportunities can be mentioned for a midwife working during the COVID 19 pandemic?
- 6. What do you think are the threats for a midwife working during the COVID 19 pandemic?
- 7. As a "midwife" assigned in the delivery room, what would you suggest in the context of practicing the midwifery profession during the COVID 19 pandemic and/or similar situations?

Data Analysis

The data were analyzed with the content analysis method, which is one of the qualitative research methods, using the MAXQDA 2020 program. After all the interviews were completed, the raw recordings were transcripted in the Microsoft Word program by assigning a number to each of the participants. These data were then transferred to the MAXQDA 2020 data management software and analyzed using qualitative content analysis and receiving expert support. The categorization matrix, suitable for the purpose of the study, was developed and the data were presented to the expert opinion. All data on the basis of categories were evaluated in terms of content and coded accordingly ¹⁶.

Ethical considerations:

Ethics committee approval for the study was received. All participants were asked to read the Informed Voluntary Consent Form, sign and send it to the researcher. Volunteer basis was taken into consideration for participation in the study. During the collection of the data, the rules in the Helsinki Declaration were followed.

Results:

Four main themes were determined as a result of SWOT analysis on the views of midwives assigned in the delivery room about the effects of the COVID-19

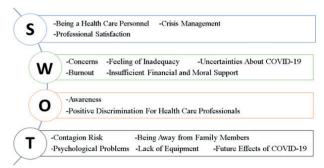


Figure 1. Main Themes and Categories

pandemic. These themes are Strengths, Weaknesses, Opportunities, and Threats. (Figure 1)

STRENGTHS

In line with the data obtained, three sub-themes were determined within the scope of Strengths: Being a Health Care Personnel, Professional Satisfaction and Crisis Management.

Being a Health Care Personnel

The midwives who participated in the study stated that, as a consequence of being a health care professional, they were more quickly informed about current developments and were more conscious compared to people who were not health care personnels.

"We were all aware of this process. I think we are the pioneers of this process guiding ignorant people." [MW 14]

"As we are in a hospital environment, we are getting more information about COVID. Our level of consciousness is of course different compared to a normal citizen." [MW 34]

Professional Satisfaction

Throughout the pandemic, assistant doctors working in the delivery room were assigned to different services in the hospital. Therefore, midwives have assumed an active role in the delivery. Midwives who followed the delivery from beginning to end stated that they have rather enjoyed this experience.

"Assistant doctors working in the delivery room were assigned to different services in the hospital throughout the pandemic. Accordingly, a midwife had the opportunity to manage the delivery from beginning to end." [MW 9]

"All births were our responsibility and this made us feel strong as midwives." [MW 32]

Crisis Management

Midwives reported that they have always worked in cooperation with the people they have worked with throughout the pandemic.

"We have supported each other. We were a team. We were not working alone. We, as midwives, secretaries, cleaning staff, assistants and specialist doctors, were a large team. Throughout this process, we all powered each other." [MW 15]

"We managed to work as a team during the pandemic. We learned to cope. I think we have succeeded in crisis management." [MW 31]

Weaknesses

In line with the data obtained, five sub-themes were determined within the scope of Weaknesses: Concerns, Burnout, Feeling of Inadequacy, Insufficient Financial and Moral Support, Uncertainties About COVID-19.

Concerns

Midwives who have provided care for COVIDpositive pregnant women stated that they had concerns about the uncertainties derived by the pandemic.

"At first, we were really anxious as this was a virus that we did not know and we could not predict on what could we experience." [MW 15]

"We had concerns about providing the necessary care in accordance with the conditions." [MW 39]

Burnout

Midwives who had to work for extra hours for various reasons throughout the pandemic stated that they were very worn out and tired.

"Due to the opening of the pandemic services, our personnel numbers have seriously decreased. Our friends had to be assigned to these clinics. For this reason, the number of our shifts increased and we had to stay on shifts every other day." [MW 19]

"We worked beyond our capacity. We were extremely tired. We really had burnout. The pandemic was very frustrating for us. So much so that we started to question the issue of efficiency. Because we couldn't really catch up and we were only prioritizing urgent tasks." [MW 23]

Feeling of Inadequacy

Midwives, who had to maintain social distance while providing care during the pandemic, felt that they could not adequately support pregnant women.

"I think not being able to help the mother to breastfeed the baby, not being able to support the pregnant woman while giving birth, not being able to massage, help walking, doing exercises and not being able to provide psychological support by saying that 'I am by your side as a midwife' puts a distance between the midwife and the pregnant." [MW 1]

"I felt like I had put my profession on the back burner. I thought I was less productive for patients." [MW 36]

Insufficient Financial and Moral Support

Midwives reported that they had to work extra hours throughout the pandemic but they could not get a fair wage in return for their efforts and yet they were ostracized by the people around.

"My family members, people around me, my neighbors didn't want to visit me, they didn't even want to see me. Even my beloved ran back to their homes after leaving a plate of food in front of the door from afar." [MW 15]

"Our wages are very low. A privilege could have been provided at least for our friends working in the COVID services." [MW 35]

Uncertainties About COVID-19

Midwives drew attention to the uncertainties about how to provide care for COVID 19 positive pregnant women and the future consequences of the pandemic.

"It was a newly released virus. We had no idea about what it would bring. We did not know the effects on the patient. Everyone tried to do something by guess and by golly." [MW 5]

THREATS

In line with the data obtained, five sub-themes were determined within the scope of Threats: Contagion Risk, Being Away from Family Members, Psychological Problems, Lack of Equipment, Future Effects of COVID-19.

Contagion Risk

Midwives who had to come into close contact with COVID positive people stated that they were afraid of carrying and transmitting the virus to the people around them.

"I was afraid of transmitting the virus to my relatives. I was afraid that I would infect my relatives and cause someone else's death." [MW 33]

"I was afraid of being infected with COVID and further infecting my family and children. Grandparents were taking care of my children. Our grandfather has a chronic disease." [MW 35]

Being Away from Family Members

The midwives, who were afraid of infecting the people around them with the virus, preferred to stay away from their family members and live alone.

"I restricted my contact with my family members. The hospital offered us accommodation. Health care personnel had the opportunity to stay in the guest houses. I stayed there for a while. Beyond that, I restricted my contact with individuals. I preferred to stay alone." [MW 17]

"In the first trimester, I lived alone in order not to infect the disease and not to make my family members anxious." [MW 19]

Psychological Problems

Midwives, who had paid attention to hygiene in order to prevent contagiousness throughout the pandemic, stated that these measures became an obsession and that they felt dirty all the time.

"I was washing my hands all the time, I was feeling dirty. I was taking a shower every day and I was constantly changing my uniform. Particularly throughout that period when everything was uncertain, I changed my uniforms both in the morning and after 16:00. I was feeling bad and dirty. I was feeling uneasy wondering whether I passed the virus on to someone, whether I had infected someone? We were uncertain about various issues." [MW 29]

"We were worried about everything. We were cleaning everything we touched over and over again. This situation became an obsession both in the hospital and at home." [MW 37]

Lack of Equipment

Midwives who have provided health care services mentioned that they had difficulties in reaching the personal protective equipment they had to use to prevent contamination throughout this process.

"At first, we couldn't change masks often. We didn't have N95 Masks" [MW 8]

"When we first faced the pandemic, we had a shortage of materials. We could not reach the materials such as masks, visors, aprons and overalls so easily." [MW 37]

Future Effects of COVID-19

Midwives also talked about the different future adverse effects of COVID 19 in the coming years.

Not all patients had fixed signs or symptoms. Everyone had different symptoms. The virus has constantly

mutated. How will the biggest threat of this disease affect the world population in 5-10 years, maybe 20 years from now?" [MW 17]

"We have decently experienced the fear of infection and death. Maybe we got over it easily, but it may pose a threat that may cause health problems in the future." [MW 33]

OPPORTUNITIES

In line with the data obtained, two sub-themes were determined within the scope of Opportunities: Awareness and Positive Discrimination for Health care Professionals.

Awareness

As health care professionals, midwives stated that they have followed the current literature and have taken precautions against the pandemic in line with evidence-based information.

"We have constantly followed the course of the disease and renewed treatment programs. We felt safe after learning the methods of protection from the virus and informing the patients accordingly." [MW 19]

"We resolved the issue by following up-to-date information, diversifying the health care process and trying alternative methods. After all, I am a health care professional." [MW 28]

Positive Discrimination for Health care Professionals

Throughout the pandemic, a number of exclusive rights have been granted to health care professionals. The midwives participating in the study considered to have free access to public transportation and to be prioritized for administering the vaccines as opportunities.

"Health care professionals were provided with facilities in terms of transportation. We were able to use buses and subways for free on the way to and from the hospital. This was perhaps the only great opportunity we had." [MW 13]

"Being the first to test preventive vaccines may be considered an opportunity." [MW 29]

Discussion:

Unreliable sources about Covid-19 may cause the disease to be transmitted faster, may delay treatments and care and may cause information pollution. The midwives who participated in the study thought that they were more conscious compared to other people

owing to the correct information and training provided to them in the hospital. Owing to the trainings and knowledge they received, midwives also talked about the pride of being the pioneers in providing reliable information and quality care to the society. However in a study on the knowledge and perceptions of health care professionals about Covid-19, it was determined that health care professionals had a lack of knowledge ¹⁷. While some of the health care professionals referred to reliable sources published by the government to obtain information, the majority were determined to rely on social media as their source and reached unreliable information ¹⁷. The referral of health care professionals to primary and reliable information sources is extremely important for the course of diseases.

Professional satisfaction is found to be affecting professional success. As the assistant doctors working in the delivery room under normal conditions were assigned to different services throughout the pandemic, midwives had the opportunity to personally manage the delivery of the pregnant women who applied to the hospital. Midwives who assumed an active role in childbirth stated that they were highly satisfied with this experience. A study investigating the professional satisfaction of nurses throughout the Covid-19 pandemic revealed that the increase in independence and responsibility improved the professional satisfaction at the same rate ¹⁸.

All health professionals had to work under intense conditions throughout the pandemic. Midwives expressed that throughout this process they had supported each other with all the service providers working in the multidisciplinary team. Different studies in the literature have pointed out that cooperation between colleagues has had a positive effect on coping with the pandemic ¹⁹⁻²¹. Contrary to these results, in a study conducted in Iran it was stated that the relationship between health care professionals in the hospital environment weakened due to the fear and anxiety caused by the pandemic ²².

Midwives participating in the study stated that they had difficulty and were worried in providing care to patients due to the uncertainties about Covid-19. Many studies in the literature have also yielded similar results. Patients with chronic diseases, the fear of experiencing financial problems in the future, the prolongation of the quarantine period and people who died due to Covid-19 have been cited by health professionals as the source of concern during the pandemic ^{20, 22, 23}.

Burnout, emotional wear due to stress, not enjoying life and depersonalization were defined as the reasons for decreased success ²⁴. Midwives participating in the study also stated that they were extremely tired and exhausted throughout the pandemic. In another study conducted with midwives and nurses throughout the pandemic, it was determined that midwives exhibited higher levels of stress and burnout compared to nurses ²⁵. Similarly, in the meta-analysis conducted by Galanis et al., burnout experienced by nurses throughout the pandemic was mentioned as a significant problem ²⁶.

Midwives participating in the study stated that they had difficulty in providing adequate and efficient care to patients due to Covid-19. And this situation professionally caused them to feel inadequate. Similarly, in a study conducted with 455 nurses in the USA, it was stated that patients felt inadequate and helpless during their treatment and care process ²⁷

Fear, stigma and isolation are common among people in the face of disasters ²⁸. Midwives working at the hospital throughout the pandemic complained that the people around them distanced themselves from them and that they could not receive any financial and moral support throughout this difficult process. Studies have also reported that nurses were not adequately supported, protected and were exposed to stigma and social isolation ^{29, 30}. It is extremely important for people to be evaluated, treated and supported in terms of their mental health in such disastrous circumstances³¹.

Throughout the Covid-19 process, which is full of many unknowns, patient care guidelines have constantly been amended. It took time to develop the most effective treatment. Updates to the health care instructions were introduced in line with the experiences gained as the process progressed. Midwives participating in the study stated that they were uncertain about the care to be provided for Covid-19 positive pregnant women, protective measures, the progress and the results. Similar results were also found in the literature. Nurses stated that they frequently experienced procedure changes with regard to patient care, drug use and the use of personal protective equipment. Health care professionals have been reported to have experienced confusion, stress and anxiety due to this uncertainty ^{32, 33}.

Midwives who have served women while giving birth, which is one of the most specific periods of their lives, have been in close contact with pregnant women due

to the nature of birth. This situation increases the risk of both becoming infected and transmitting the virus to their immediate surroundings. It has been stated that it is not possible to reset the risk of transmission although necessary precautions have been taken for reducing the risk of transmission of Covid-19 infection, apart from routine Covid-19 screening for pregnant women admitted to the delivery room ³⁴. Midwives assigned in the delivery room and participating in this study stated that routine screening is not applied to pregnant women who are hospitalized in the delivery room except for scheduled deliveries and that only the precautions specified in the guidelines are applied to these pregnant women and they usually witnessed that the pregnant women whose delivery they had helped were later diagnosed as Covid-19 positive. They further stated that this situation causes anxiety and fear as it increases the risk of infection and transmission to their relatives. In the study of Bradfield et al., which had similar results, it was determined that midwives were at increased risk of contracting with Covid-19 infection during care giving and they went to work every day with the fear of being infected with Covid-19 35. It is thought that midwives' perception of being infected throughout the pandemic and further infecting their relatives as a threat is based on the fact that they think that the precautions taken during care giving are insufficient and ineffective.

Another source of threat with regard to midwives working in the delivery room and participating in our study was that midwives preferred to live away from their families due to the high risk of being infected and transmitting the virus. Midwives who stated that they lived away from their families from time to time due to these fears further explained that they did not want to transfer the Covid-19 infection to their family members, that is why they have isolated themselves from their environment and they could not take care of their children when they went home and could not visit their elders as they had chronic illnesses. Similar results were found in another study conducted with healthcare workers in the literature¹. The risk of contamination, which is the reason for all the measures taken throughout the pandemic, was found to lead the midwives consider living away from their families.

Working conditions throughout the pandemic negatively affected the psychology of midwives and their communication with pregnant women. The midwives participating in our research faced

a dilemma when they thought that they could not provide adequate care when they paid attention to social distance while caring for pregnant women and that they would increase the risk of contamination when they did not pay attention to social distance. They stated that this situation significantly affected their mental health. Midwives stated that they paid more attention to hygiene and developed a hygiene obsession because of the fear of infecting their close relatives or the pregnant woman they have cared for. Küçüktürkmen et al. stated that the midwives who have provided care for Covid-19 positive pregnant women described the working conditions as "difficult" and that they felt "emotional confusion" throughout the pandemic ³⁶. Health care professionals are thought to require psychological support more than ever throughout the periods such as pandemics, disasters and crises.

Midwives participating in this study stated that they experienced a shortage of equipment at the beginning of the pandemic but the equipment became more easily available over time. Similarly, there are studies reporting that there were problems with the supply of personal protective equipment used to prevent health care professionals from being infected particularly at the beginning of the pandemic and that these difficulties have increased the rate of health care professionals contracting with Covid-19 infection ^{37, 38}. In the interviews conducted by the National Association of Nurse Practitioners in Women's Health (NPWH) with midwives and nurses in 2020, it was reported that there were problems related to material and equipment shortages 39. The Ministry of Health, in its Covid-19 (SARS-CoV-2) Infection Guide, determined the personal protective equipment that health workers should use and stated that these equipments were provided to all health institutions ⁴⁰.

Majority of the midwives who participated in this study stated that they had difficulty in coping with the uncertainties of the Covid-19 pandemic, their tolerance for uncertainty has decreased and they perceived this process as a threat because the future effects of the pandemic may lead to further negative consequences. Similarly, in a study conducted by Aksoy and Koçak in which they examined the psychological effects on nurses, it was found that prospective anxiety sub-scale scores were rather high ⁴¹. Likewise, in Huang and Zhao's study, it was stated that psychological problems were caused by uncertainties about the progress and future negative effects of the pandemic ⁴². It was revealed in this

study that the midwives participating in our study perceived the uncertainties experienced in the Covid-19 pandemic as a prospective threat.

Although the Covid-19 pandemic process has brought health care professionals face to face with multiple negativities, the participant midwives considered this process as an experience. They stated that they understood the significance of crisis management and being able to work as a team. They considered it an opportunity to realize their responsibility as midwives to follow the literature. Furthermore, they perceived some of the facilities offered to health care professionals in their locations as opportunities. No similar results were found in the literature review regarding the facilities or opportunities provided to health professionals throughout the Covid-19 pandemic, however there are studies indicating that they were able to cope with negativities in this process, they have managed to support each other within the team and they have successfully managed the crisis.

Conclusion:

This study revealed that midwives have analyzed the weaknesses and threats of the Covid-19 process under different headings, but they have also known the strengths thereof and could turn them into an opportunity.

This study emphasizes the importance of improving the working conditions of midwives in extraordinary situations such as pandemics. Birth is an event that cannot be postponed and requires care for maternal and newborn health. Poor delivery room conditions negatively affect midwifery care. Health care provided under poor conditions endangers the health of the mother and newborn. Midwives could not provide quality care during the COVID-19 pandemic for a number of reasons and felt inadequate. For this reason, it is very important to meet all the material and moral needs of midwives in order to provide quality care in extraordinary situations.

Although the easing of the measures for Covid-19 infection today indicates that the end of the pandemic is approaching, it is unclear when and how such pandemics and/or extraordinary situations will occur again. Based on the results of the current study, we recommend that midwives quickly access information sources about developments in emergency situations and ensure that they are assigned to tasks within the scope of their job descriptions in accordance with the measures to be taken.

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This study is not funded.

Conflict of Interest:

None declared.

Ethical clearence:

Ethics committee approval was obtained from Ege University Scientific Research and Publication Ethics Committee to carry out the study. (2021-12/08 Protocol Number:1165).

Authors's contribution:

ECT: Data gathering and idea owner of this study, study design, editing and approval of final draft. MO: Data gathering and idea owner of this study, data gathering, writing and submitting manuscript. NUB: Data gathering and idea owner of this study, study design, writing and submitting manuscript. All authors contributed to this work and read and approved the final version of the manuscript.

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