The role of Saudi women in crisis management within the family: The COVID-19 pandemic as a model

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Abstract:
BACKGROUND: Women play a pivotal role in managing crises and diminishing their serious consequences both in the family and society. In the first place, the spread of coronavirus disease 2019 (COVID-19) is one of the most severe crises in the world. Accordingly, many precautionary measures have been taken in many countries, including Saudi Arabia, such as border closures, lack of movement, and quarantine procedures, leading to an unprecedented impact on the daily lifestyle, and contributing significantly to increasing pressures on women because of her multiroles in family and work. This study aims at identifying the role of women in managing family crises during COVID-19.

MATERIALS AND METHODS: This was a descriptive, cross-sectional study. An online survey was conducted using self-designed electronic questionnaire consisting knowledge about the role of Saudi women in managing family during COVID-19 crises. The questionnaire was applied to 324 Saudi working women in Riyadh and Najran, with an average age of 33 years.

RESULTS: The results indicate that the role of Saudi women during the COVID-19 crisis was approximately 82%. Moreover, results showed that the prevalence of the social, psychological, and professional role of Saudi women during crisis was 82.24%, 83.40%, and 78.80%, respectively, which indicates the importance of the role of Saudi women in managing family crises during COVID-19.

CONCLUSION: Based on these results, the study emphasizes the importance of urging responsible persons to provide a package of rescue and stimulus, including social protection measures. Furthermore, it empowers Saudi women in all sectors of society and provides them with all means of support to help them achieve their mandated role in society generally and in their families particularly.

Keywords: COVID-19 pandemic, crisis management, family, role of women, Saudi Arabia, Saudi women.

Introduction
Crisis have become a part of the fabric of life and more acute in our time generally, which has been dominated by crises with internal and external impacts by the external environment and human nature.\[1\] In particular, customs, traditions, unstable economic conditions, and lack of resources in their various forms, which is called human error and scarcity of information, leading some scientists to describe our current age as an era of crisis.\[2\] Cascella et al.\[3\] state that viral diseases continue to emerge and represent a serious public health issue. In the past 20 years, many viral epidemics have been recorded such as severe coronary virus severe acute respiratory syndrome from 2002 to 2003, as well as, H1N1 in 2009.

Pursuant to Rasmussen et al.,\[4\] recently, the coronary virus of the middle east respiratory syndrome was first identified in Saudi Arabia in 2012. Despite that, Saudi Arabia has experienced many crises resulting from the spread of such viruses, the outbreak of the new coronavirus in 2019 is one of the most severe in Saudi Arabia. The virus began to emerge from Wuhan City, Hubei...
Province, China, and then spread very rapidly around the world. As a result of the fact, the virus is highly contagious, with no treatment and prevention strategies yet, requiring the World Health Organization to declare it as a global pandemic.[5] After that, The world’s nations hastened to take many precautionary and extraordinary measures, according to Wilder-Smith and Freedman,[6] to confront the pandemic and to curb its spread within States.

Saudi Arabia is one of the first countries that seek several bold and early precautionary measures. On February 27, 2020, the Kingdom decided to suspend access to Al-Umra and visit Al-Masjid an-Nabawi from outside the Kingdom.[7] As well as, Argaam[8] states that It has taken many other precautionary measures sequentially, such as the temporary suspension of Umra from within the Kingdom, the suspension of the study, suspension of domestic and international flights, suspension of sports activities, and closure of halls and sports centers. Besides, the closure of business parks and all activities, suspension of attendance at workplaces, suspension of Friday prayer, and Congregation prayers, the prohibition of movement between cities within the Kingdom, and an evening curfew.

In line with recent Ministry of Health statistics compared to many countries in the world, health.[9] Although, these effective and rapid precautionary, and extraordinary decisions have contributed to a significant reduction in the incidence of infection and the diminution of the spread of this pandemic within the Kingdom. However, these proceedings have had the effect of changing the daily lifestyle, both within the family and at work, not only in Saudi Arabia; yet, globally. Cao et al.[10–14] indicate that this is one of the repercussions of a society’s crises such as coronavirus disease 2019 (COVID-19).

In compliance with Morgan,[1] crises can cause misalignment and dissolution of the family due to the pressures caused by these crises. More specifically, it may cause conflicts between spouses, increasing the burden of child care, and pressures on women’s work. Consequently, it may pose a risk to family life; subsequently, women’s role in the family during the crisis is evident; their success in managing family affairs and the validity of their decisions to face the crisis which they are exposed to with minimal casualties are the most substantial elements.[15–19]

Phumzile Mlambo-Ngcuka, Under-Secretary-General of the United Nations, and Executive Director of the United Nations Women’s Commission explain that the role of women during the COVID-19 crisis is very crucial. In other words, women have a higher resilience than men. Therefore, women should be allowed to participate in the development of plans and solutions from relevant institutions that seek to avoid the social, psychological, and professional effects of this crisis on families within society.[20]

Buonsenso et al.,[21] emphasizes that, since institutional and community-based child care was not available to many families during the closure period, the provision of childcare was more the responsibility of women, which limited their ability to work. Besides, recent data show that adolescent girls spend far more hours on household chores than boys of the same age.[22] Furthermore, Moreira da Silva[23] illustrious that women worldwide are responsible for 75% of domestic work within the family. In addition, The International Labour Organization indicates that women worldwide have an average work of 4 h and 25 min of domestic work compared to an hour and 23 min for men.[24]

The coronavirus global crisis depends mainly on general quarantine procedures, and elements of the values of obedience and social discipline, whereas this goes beyond the family’s status as the nucleus of society; to play the function of synergy and interdependence as the basis of social and economic order.[18] Thereby, Saudi public authorities call on people to stay at home is a difficult equation for the family’s function to face the virus outbreak, putting the burden on women and how to deal with quarantine.[25] Moreover, Aldarhami et al.[26] study confirms that the 2020 coronavirus epidemic requires Saudi society to reshape existing social patterns, since “farness” or “closure” is not the only way to achieve protection; yet, by profiling families and social life within the family with some salubrious social habits to live and mingle together with containing the effects of the COVID-19 pandemic. Thus, he emphasizes the role of women as mothers and wives in socially guiding their families; to achieve both salubrity protection and a vigorous social relationship.

Hence, several studies confirms the importance of maintaining mental health in families during the COVID-19 pandemic.[27,28] more specifically, the role of Saudi women during crises may be crucial for the preservation of the family and its structure, as well as, for coping with social and economic changes that may occur due to the circumstances of the COVID-19 crisis, including quarantine within certain societies, or through the working conditions and economic changes that may arise from this crisis in the labor market and employment conditions.[29–31] In addition, the psychological and social role of maintaining sensible and decent psychological raise for children to pass the COVID-19 crisis, with the least psychological problems that may affect the mental health of family members.[32,33]
Theoretical framework
Corresponding to Koikari,[34] women have managed and handled crises well in many countries around the world, for instance, women across Japan are responsible for crisis management at home, while men are largely absent because of their work obligations. More specifically, Anonymous[35] states that women received notable support and contribution during the 2009 conference of Leaders of Non-Aligned Countries to reinforce the role of women in the management of global economic and food crises. Furthermore, In the United Nations international peace missions, women are seen as a solution to better crisis management and an essential element in achieving operational efficiency.[36]

Another important point is that women are more resilient to crises, have the skills to deal with the challenges of crisis management, and assist in better crisis management and an essential element in achieving operational efficiency.[37] Expounds; in Italy, Italian Prime Minister Giuseppe Conte promised more women to participate in the team that advising the Government on managing the COVID-crisis 19. Moreover, a request was conducted to the Chief of Civil Protection to join “a sufficient number of women” in the Scientific-Technical Committee Against Coronavirus. Furthermore, the Head of Government said that he would ask all ministers to “take into account the equality of men and women in the formation of different working groups because of their ability to deal well with crises.”

Yari and Zarezadeh[38] emphasize the role of women in crisis management. In the first place, although women are highly vulnerable to crises, they have the skills to be more resilient in crisis times. Besides, they emphasize that women have the capacity to visualize risks, provide protection, and diminish risk crises within the home, they also have the ability to teach other family members how to deal with risks in crisis times. In other words, women are much more affected by crisis risks than men through death, injury, or separation, but their resilience helps them protect themselves from crisis risks and improve the elasticity of societies to crisis and disaster risks.[39]

Reviewing the response to the family pandemic in April, the United Nations (2020) has issued a report confirming that unpaid care work has increased, with the exit of children from school, growing care needs for the elderly, and sunken health services; yet, the epidemic and closure have not been equally experienced: for some people, there are advantages to the constant COVID-19 pandemic.[17] For instance, Japan had a lower suicide rate of 20% in April 2020 compared to April 2019. Another contributing point that Blair[40] believes this is because people spend more time at home with their families, reducing mobility to work, and the late start of school – a time usually associated with increased pressure on children in the state.

In the United Kingdom, a survey of parents has found that 80% build stronger ties with their families due to further time together over the closure, despite the challenges of reconciling home-based work and home schooling.[41] However, Alhas[42] claims that similar stories have been reported from other countries, including Turkey, where parents state that closure gives them an opportunity to improve their marriage and family lives. Another study conducted by Alon et al.,[43,44] explores that the boundaries of work and family are becoming blurred, and the gender distribution of responsibilities within the family is becoming clearer; nevertheless, Minello[45] point out the worsening gender inequality during the closure.

As well as, emerging research also suggests that the COVID-19 crisis and beyond will have many negative effects on women and families for years without proactive interventions by many governments. This clearly implies that many families need to raise and educate their children without institutional support, which will put a lot of pressure on mothers inside the home.[17,46]

The researchers argue that the closure caused by the COVID-19 epidemic has demonstrated the critical role of women during the COVID-19 crisis. More specifically, Jessen and Waights[47] account that working mothers combine childcare, home education, and paid work during this period by working long hours in the evening. Similarly, Andersen et al.[48] illustrate that the pandemic has led women to devote more time to childcare and home-education responsibilities, as men remain relatively less affected. Hence, it is clear that the pandemic had a blatant impact on the importance of women’s role at the family level over the COVID-19 crisis. Therefore, this manuscript joins this growing body of research in trying to illustrate the important role that Saudi women role in the family during the COVID-19 crisis. Accordingly, the problem of the study could be formulated in the following main question: What’s the role of Saudi women during the COVID-19 crisis in the family?

Materials and Methods
Study design and participants
The quantitative method (social survey) was appropriate for the nature of this study. In this case, the researchers obtained approval for their quantitative study from the Centre for Promising Research in Social Research and Women’s Studies at Princess Noura bint Abdulrahman University in Riyadh. The timeline of this study was concurrent with the lifting of restrictions applied nationally. The researchers sent a questionnaire online between 3 and 14 January 2021. In addition to commonly used sociodemographic questions, the questionnaire
contained a wide range of questions on how to manage the COVID-19 crisis within the home that have been posed to respondents. The researchers have published the questionnaire online and on social media pages at faculty members sites in Princess Noura and Najran university, through snowball sampling technique to provide an equal and independent opportunity of selection for the sample. Hence, participants in the sample voluntarily filled out the questionnaire without any pressure, ensuring the confidentiality of information. Accordingly, The sample comprised a total of 450 women respondents. All participated in the survey, which was 72% completed. Then, the study sample became (324) female workers at Princess Noura University and Najran University (age: 24–60 years) with an average age of 33. The institutional ethical committee clearance was obtained from the Centre for Promising Research in Social Research and Women’s Studies at Princess Noura bint Abdulrahman University in Riyadh prior to application of study tools.

Data collection tool and technique
A questionnaire was made by researchers after reviewing relevant literature; has been used to collect data, for instance. The questionnaire contains four main parts: In the first place, the first part is designed to collect basic data such as sex, age, educational level, residence, marital status, occupation, and income. In the second place, the social role in managing the COVID-19 crisis within the family and contains nine items. In the third place, the psychological role in managing the COVID-19 crisis within the family and contains eight items. In the fourth place, the professional role in managing the COVID-19 crisis within the family and contains seven items. The Likert 5-point scale was used (I strongly agree – I agree–neutral – I don’t agree – I strongly agree); the scores were distributed from 5 to 1; 1 to “I strongly disagree,” and 5 to “I agree very strongly.” The questionnaire was tested in terms of face, content, and validity by an arbitration panel composed of five experts in the social, economic, and mental health field. Content validity ratio and content validity index measurements were also used in the quantitative method. Furthermore, the reliability of the tool was performed using the testing of the Alpha Cronbach coefficient for the three dimensions and the total grade of the questionnaire; it indicated high reliability of the three dimensions (0.87, 0.90, 0.88, 0.85, and 0.89), the total degree of the questionnaire ($r = 0.901$).

The researchers applied descriptive and inferential statistics to analyze the data. These were analyzed using SPSS Statistics V21 (IBM SPSS Inc., Armonk, NY). The importance of the social, psychological, and professional roles of women was arranged through average, standard deviation, and percentage. The participants’ response to each dimension of the questionnaire was analyzed through frequency, percentage, average, and standard deviation.

**Ethical consideration**
The institutional ethical committee clearance was obtained (PNU-CPRSOW-20-4126) from the Centre for Promising Research in Social Research and Women’s Studies at Princess Noura bint Abdulrahman University in Riyadh prior to application of study tools. Participants in the sample voluntarily filled out the questionnaire without any pressure, ensuring the confidentiality of information.

**Results**
The standard deviations and ratios of the participant’s responses to the items were extracted in the first dimension of the questionnaire.

The results in Table 1 reveal the average high score for all dimensions in the questionnaire. More specifically, the participants demonstrated a high degree of agreement on the prominence of Saudi women’s role in managing the COVID-19 crisis within the family; all dimensions were agreed upon (81.62%), illustrating the substantial role of Saudi women in managing the COVID-19 crisis within the family. However, the most important role was the psychological role, where the proportion of female participants agreed (82.24%), while the lowest indicator was the professional role, which was 78.8%.

The distribution of participants’ responses to items in the three dimensions of the questionnaire is presented in Tables 2-4.

**Findings in Table 2** show that the relative weight for items in the first dimension, namely, *social role* was ranging from 87.2% for the item that “I realized that it’s important to give our children a large part of our time to avoid them from gaining negative behaviors” to (77.4%) for the item that “I have benefited from the lockdown to strengthen my relationship with my husband.” While the relative weight for the first, dimension was (82.24%) indicating that importance of the social role of women in managing family crises during COVID-19.

Table 3 reveals that the relative weight of all items in the second dimension “The social and psychological role” ranged between (89.2) for the phrase that *I tried to stay away from a lot of my acquaintances and sit at home after the epidemic spread for fear of getting infected.* Moreover,
73.8% for the statement that “I often seem tough or harsh in my feelings for others, so no one would visit us at my house for fear of being infected.” Whereas the relative weight of the second dimension as a whole was (83.4%) indicating that importance of the psychological role of women in managing family crises during COVID-19.

Table 4 indicates that the relative weight of all items in the third dimension “Professional role” are between (81%) for the fact that “Although it’s hard to reconcile work with looking after children, I’ve tried to make a double effort to get through this crisis.” Moreover, 75.6% for the statement that “I have compelled to complete my works at night when children go to sleep.” Whereas, the relative weight of the third dimension as a whole was (78.8%) indicating that the importance of the professional role of women in managing family crises during COVID-19.

Discussion

The results of the study point to the effective role of women in family crisis management during the COVID-19 pandemic. In particular, it demonstrates by their social, psychological, professional, and sample responses to questionnaire dimensions. The psychological role obtained first-order responses from the sample study. This clearly implies that the ability of Saudi women to cope with psychological stress within the family, resulting from the spread of COVID-19 based on the factors surrounding their environment, in which
Table 4: Presents the distribution of participants’ responses to items in the third dimension of the first field of the questionnaire namely “professional role”

| Items (professional role)                                                                 | Mean | SD  | Percentage | Rank |
|------------------------------------------------------------------------------------------|------|-----|------------|------|
| I managed to reconcile home and professional work                                        | 3.94 | 0.91| 78.8       | 5    |
| I didn’t put the tasks that were assigned to me off in my job                             | 3.99 | 0.94| 79.8       | 3    |
| I have compelled to complete my works at night when children go to sleep                  | 3.78 | 1.01| 75.6       | 7    |
| Although it’s hard to reconcile work with looking after children, I’ve tried to make a double effort to get through this crisis | 4.05 | 0.92| 81.1       | 1    |
| Although child care and schooling have increased my duties besides my professional work, I have reduced my conversations and relationships with my colleagues to save time | 3.96 | 0.88| 79.2       | 4    |
| I made a well-organized schedule to finish my professional and domestic work well        | 4.01 | 0.93| 80.2       | 2    |
| I used the time I was going to work and wear uniforms to finish a lot of professional work| 3.84 | 0.96| 76.8       | 6    |
| Total                                                                                    | 27.58| 4.66| 78.8       |      |

SD=Standard deviation

they live, where cultural and social factors, including the culture, customs, and traditions of individuals, based on which most women are developed in an environment that is considered best suited for women to be home and reproduction.[52] The results from this study are consistent with several prior studies, which indicated an increase in psychological stress among members of society, especially women during the COVID-19 crisis.[18,32,44,53,54] In such circumstances, Saudi women have a double responsibility to protect their families from the pandemic. Regardless of their inner sense of fear of the unknown, they wear a mask of power and indifference; therefore, they can rest assured, and try to manage the psychological crises caused by quarantine. Furthermore, working to create a healthy environment at home and use isolation times as precious time and entertainment for the family. In conformity with Durankuş and Aksu, [59] women in the COVID-19 crisis; they try to curb her feelings and passions hoping that the crisis will pass peacefully. In this case, women’s concerns in this matter are greater than men’s, compounding their psychological troubles, because they face fear not only for their lives but also for the lives of their children, husband, and family.

Di Giorgio et al.[56] indicate that mothers often get “panic and scare” when a disease, a microbe, or a virus spreads. This clearly implies that she fears for her children in normal times, and she would not rest until gets assured physically and psychologically. As warnings of the spread of the coronavirus intensify, and global fears rise, so do mothers, family members, especially children. Another contributing point that the role of Saudi women in raising awareness and emulating the right model of behavior; in adhering to preventive measures and applying necessary precautions in all areas is growing, for the sake of the emotional persistence and psychological stiffness during this crisis in front of her family. This has been confirmed by the results of some studies.[17,24,30,53,57,58] The second dimension, on the social role of Saudi women in crisis management during the COVID-19 crisis, came in second place. Particularly, the family responsibility of Saudi women has become greater in the crisis of the COVID-19 pandemic; their stamina and awareness ensure the success of the state’s precautionary measures against the spread of the virus. According to,[18,59,60] in Arab culture in general and Saudi Arabia in particular, women are the first line of defense of the family, shielding it from the harm of COVID-19. As well as, Chen et al.[61] declare that the mother is instrumental in getting her children used to practice healthy behaviors that are essential for protecting her family from coronavirus; by inducing and reminding her children of the prominence of personal hygiene, washing hands, using napkins for sneezing and scraping, and then washing hands with water and soap.

Furthermore, women contribute to raising the immunity of family members by providing healthy and adequate food (children and the elderly), as well as, their ability to provide attractions that encourage them to stay at home during the ban to avoid infection. In line with,[16,30,58] women’s commitments during the COVID-19 crisis have multiplied and increased their responsibilities between household tasks, aware the family, prepare food, and take care of family members, along with, guiding the family to preventive measures, meeting the demands, paying attention to distance education for children, also, with their intelligence, they were able to invest time for whatever is fruitful. For instance, reading books, doing different hobbies, playing sports, and writing.

At the same time, the importance of the social role of Saudi women has been demonstrated by the unequal distribution of family welfare work between men and women. Clearly, in normal times, women and girls bear the responsibility of providing care and support for the family and the home. Nowadays, during the COVID-19 crisis, they are likely to abide by increased responsibility for care work, resulting from school closures, isolation of the elderly, and increasing numbers of sick family members, with potentially long-term negative effects on female participation in the workforce.[17,44,58]
The professional role dimension had a third and final ranking in the three-dimensional level, also had a high average calculation, demonstrating the importance of the professional role by women in crisis management during the COVID-19 crisis. Despite the considerable pressures, Saudi women face both in their family and in their work, they have played a vigorous role in reconciling to a certain extent their role in the home as a mother with responsibility for their family and their care, with the professional tasks required of them in their work. The results indicate that Saudi Arabian women had priority over their families then performed their functions.\cite{97}

Farré et al.\cite{62} emphasize that, with the closure of schools and childcare facilities during the pandemic, families with children were left with childcare responsibilities, including home education. Accordingly, the closure may have forced women to prioritize care responsibilities, in line with, the cultural ideals of good mothers to stimulate traditional gender roles in the home.\cite{61}

King et al.\cite{63} highlight that women and girls already perform most of the unpaid care work-domestic care in the world. More specifically, women perform 76.2\% of total unpaid care hours, three times more than men. This figure rises in Asia and the Pacific to 80\%. Therefore, the prevalence of COVID-19 suggests that many people suffering from it will require care at home, which will increase the overall burden on women, as well as, their care for their families and professional obligations.

Limitation and recommendation
The limitations of the present survey are to be viewed with following key points. This study was done in the city of Riyadh and Najran in Saudi Arabia. The timeline of this study was concurrent with the lifting of restrictions applied nationally; hence, it needs to be cautious to generalize the results. Similar research needs to be conducted in other cities of Saudi Arabia. Furthermore, the current study is limited by self-reported bias. Since participation being voluntary in nature, the nonrespondent’s views might not have been captured in the study. Finally, based on results of this study, we suggest to urging responsible persons to provide a package of rescue and stimulus for working women including social protection measures. Furthermore, it empowers Saudi women in all sectors of society and provides them with all means of support to help them achieve their mandated role in society generally and in their families particularly

Conclusion
The paper reviews the results of research on the role of Saudi women in managing the crisis within the family during the COVID-19 pandemic. Therefore, The roles of

Saudi women were measured during the crisis within the family; these measurements were applied to a group of working mothers at Princess Noura University in Riyadh and Najran University. This clearly implies that the main contribution of this research is that it provides a deeper understanding of the role played by Saudi women, in the family during crises and particularly during the COVID crisis 19. From this perspective, this issue is new to the international community including Saudi society. Thus, this study endeavors to emphasize the vital role of Saudi women in managing the crisis in the family during the COVID-19 pandemic, and the importance of the social, psychological, and professional role they play in the family. Based on these, in this crisis, the role of women and their family responsibility has increased, and fallen upon their shoulders, as their endurance ensures the success of the precautionary measures taken by the state; to counter the deadly spread of the virus. Accordingly, her responsibility is compounded by the application of the distance learning system, she is in charge of various labor positions where is keen to perform her roles with sincerity and devotion too. Hence, couples have to share these burdens as long as they’re quarantined at home with each other.

We hope that the results of this research will stimulate officials to view this vital issue in greater depth, and to provide full support to Saudi women; in order to help them fulfill their mandated role during this crisis, by a range of relief and stimulus packages, including social protection measures that reflect an understanding of women’s special circumstances and recognition of the care economy. Consequently, ensuring health insurance benefits for those most in need, paid leave, and/or sick leave for people who cannot come to work because they care for children or the elderly at home during a crisis.

Acknowledgment
We are thankful for provide all facilities for the application of the research project by Center for Promising Research in Social Research and Women’s in Princess Nourah bint Abdulrahman University in Kingdom of Saudi Arabia.

Financial support and sponsorship
We are thankful for Funding by Center for Promising Research in Social Research and Women’s in Princess Nourah bint Abdulrahman University in Kingdom of Saudi Arabia in 2020.

Conflicts of interest
There are no conflicts of interest.

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