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BURDENS OF MOTHERS TOWARD CHILDREN WITH CORONAVIRUS PANDEMIC AT KERBALA TEACHING HOSPITAL FOR CHILDREN

Zeki Sabah Musihb
zaki.s@uokerbala.edu.iq
Instructor /Pediatric Nursing Department/College of Nursing/ University of Kerbala, Iraq1

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Abstract:

Coronavirus is the source of the infectious disease known as SARS-CoV-2 (COVID-19). Most COVID-19 virus-infected individuals were experience a mild to severe respiratory infection and may recover without the need for special care. On May 4, 2021, 3,209,109 deaths and 153,187,889 confirmed cases of COVID-19 had been reported to WHO globally. A total of 1,047,709,623 vaccine doses have been given as of May 4, 2021. (WHO, 2020). As of yet, there is no specific treatment for the coronavirus. Vaccines have recently been created. The study aims to assess burdens on mothers with child infected by COVID-19. Study sample were 50 mothers of children with coronavirus admitted in the hospital. SPSS version (22) 2020 was used to analyze the data. According to data analysis to mothers' demographic data were found the age group were (16-25) years represented (36%). Mother's level of education high percentage (42%) from secondary school. majority of mothers were house wife represented (40%). The majority of the study sample were from urban area represented (64%). There is a significant statistical relationship between mothers' age with mothers' anxiety concerning COVID-19 at $P < 0.05$. Also there is no significant statistical differences between mothers' anxiety with social status, educational level and economic status concerning COVID-19 at $P > 0.05$.. Recommendations: Increasing parents' awareness about the nature of infection with the COVID-19 virus and how to manage it. Increasing knowledge of the importance of maintaining preventive measures to prevent infection with COVID-19.

Keywords: Burdens, Coronavirus Pandemic, Mother

INTRODUCTION:

The severe acute respiratory syndrome coronavirus (SARS-CoV-2) is the source of the coronavirus disease 19 (COVID-19), a highly contagious and dangerous viral illness that led to a worldwide pandemic and a substantial loss of human life. The main reservoir may be bats, according to a genetic analysis. SARS-CoV-2 is phylogenetically related to bat viruses that resemble the severe acute respiratory syndrome (SARS). Although the origin and method of transmission to humans are unknown, it has been universally established that human-to-human transmission occurs quickly (Catrin et al., 2020). The mild respiratory diseases caused by the worldwide endemic human coronaviruses HCoV-229E, HCoV-NL63, HCoV-HKU1, and HCoV-OC43 as well as the zoonotic Middle East respiratory syndrome (MERS-CoV) and severe acute respiratory syndrome (SARS-CoV) coronaviruses can all infect humans. The new coronavirus illness 2019 (COVID-19) epidemic started in early December 2019 in Wuhan, Hubei Province, People's Republic of China, and spread swiftly over the world, resulting in a global pandemic. There were more than 9 million confirmed cases of this disease as of June 25, 2020, spread throughout more than 215 nations, with more than 480 600 fatalities. The Middle East respiratory syndrome (MERS-CoV) outbreak in 2012 and the severe acute respiratory syndrome (SARS) outbreak in 2003 were both caused by coronaviruses, which were initially identified in the 1960s. The most recent SARS coronavirus to be identified is SARS-CoV-2. Patients with COVID-19 could be asymptomatic (Xufang, et al.,2022). The World Health Organization (WHO) declared a public health emergency in late January 2020 and described the COVID-19 infection as a pandemic in March 2020 as a result of the virus spreading to include more than 81.552 cases in China and rising cases (>1.400.000) worldwide (Thonmoy et al., 2020). While epidemics have grown in several countries, increasing numbers of cases have also been reported in other nations from all continents, with the exception of Antarctica. Outside of China, especially in the USA, Italy, and Spain, the rate of new cases has outpaced that in China. The WHO designated the illness as COVID-19 in February 2020. Formerly known as 2019-nCoV (the COVID-19 virus), the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the virus that causes COVID-19 (WHO, 2020). Haider and Hassan, (2021) stated that COVID-19 causes numerous problems and complications in all body organs. It causes alterations in

cardiopulmonary parameters such as coughing, the difficulty of breathing, and hypoxia as well as a variation in peripheral oxygen saturation (SpO2) and/or arterial oxygen saturation (SaO2), respiratory rate (RR), partial pressure of oxygen (PaO2), partial pressure of carbon dioxide (PaCO2).

THE RESEARCH DESIGN: A descriptive study was conducted in Kerbala Teaching Hospital for Children. The study started on 27 of March 2021 to the end of May 2021.

ADMINISTRATIVE ARRANGEMENTS: The administrative permissions were obtained from the Ministry of Health, Holy Kerbala health directorate, Also taking agreement from mother's during interview.

THE SETTING OF THE STUDY: The study was conducted in Kerbala Teaching Hospital for Children in Holy Kerbala City.

THE SAMPLES OF THE STUDY: Non-probability (convenience) samples of (50) mothers were chosen randomly from emergency unit and medical ward in Kerbala Teaching Hospital for Children in Holy Kerbala city.

INCLUSION CRITERIA: Mothers with children suffered from coronavirus were at Kerbala Teaching Hospital for Children who agree to participate in the study .
EXCLUSION CRITERIA: Pilot study sample (10) parents.

THE STUDY INSTRUMENT: Descriptive study to measures of burdens on mothers with child infected by coronavirus pandemic. The data was collected through-out the questionnaire format to achieve the objectives of new current study. Used the literature, societal knowledge, and field experiences to design our own data collection tools, which may not be comprehensive.

The tool of the study consists of six parts: Part I: A demographic characteristics, consisted of (10) items for mothers members and (6) items for infected child , which included: Demographic characteristics of the mother, including (age, place of residence, marital status, educational level, occupation, economic status, do you own a home, number of family members, chronic diseases and who cares for family members). Part II: The second part of the questionnaire was consisted of (21) items to assess the level of fear. Part III: The 3rd part of the questionnaire was consisted of (10) items to assess the level of anxiety.

Validity and Reliability: Content validity was determined for the questionnaire through the use of a panel of (9) Experts from the college of nursing\ University of Kerbala, and AlSafwa college University\ department of Nursing. Reliability (internal constancy) was determined through the correlation coefficient and split-half technique, The result of the reliability for fear was (r = 0.728) and the result for anxiety was (r= 0.847) such an estimation was statistically adequate which means that the questionnaire had adequate level of internal consistency and equivalence measurability.
Data Collection Methods: The data was obtained by presenting a questionnaire to the mothers after obtaining consent to participate in the study, and the mothers filled out the structured questionnaire form that was developed for this study. All information provided by the mothers has been kept confidential and was used only for the purpose of this study. On average, each survey time was taken between 15 to 25 minutes.
Data Analysis: The data of present study were analyzed through the application of statistical procedures and using the package of SPSS version (24) 2020. The following statistical procedures are used in present study: This part presents the statistical result and findings of the current study in tables and their correspondence with the objectives of the study as shown in the tables:

Table (4-1): Distribution of participants by their demographic characteristics of parents.

Variables		*n = 50	
		N	%
Age (Years) **Mean ± SD 31.44 ± 7.519**	16-25 y	18	36
	26-34 y	14	28
	34-45 y	10	20
	45-54 y	8	16
Place of residence	Urban	32	64
	Rural area	18	36
Social status	Married	22	44
	Divorce	13	26
	Widows	10	20
	Separate	5	10
Educational level	Illiterate	6	12.0

	Primary	6	12.0
	Secondary	21	42.0
	Diploma	6	12.0
	University and above	11	22.0
Occupation	Employee	16	32
	Housewife	20	40
	Student	14	28
Do you own a house	Yes	30	60
	No	20	40
Economic status	Sufficient	25	50
	hardly enough	10	20
	Insufficient	15	30
Number of family members	3-5	18	36
Mean ± SD	6-10	20	40
5.96 ± 1.881	10-15	12	24
Does the mother suffer from chronic diseases?	Yes	20	40
	No	30	60
Is there someone to take care of the rest of the family on your behalf?	Yes	15	30
	No	35	70

M = mean of score, SD = Standard Deviation, f.: Frequency, No.: Number, %Percentage,

The results in table (1) reveal that the most of caregivers were (36%) from age group (16-25) years old with Mean ± SD 31.44 ± 7.519, and (64%) were living in the city, regarding the marital status the most of mothers were Married represented (44%), (42%) study sample from secondary school as level of education, (40%) were Housewife, (60%) were own homes, regarding the income half of the sample were sufficient, and (60%) of sample didn't suffer from chronic diseases, also (70%) there is no one to take care of the rest of the family.

Table (4-2): Assessment of the mother's fear of the child with COVID 19

Items		M	SD	Eva.
Are you facing difficulty in social life because of your fear for your child infected with the Corona virus?	.1	2.82	.388	H
Thinking that you might have the coronavirus because you came into contact with an infected child?	.2	2.52	.580	H
Have a constant fear when thinking about the Corona virus?	.3	2.64	.525	H
Are you afraid of spreading the Corona virus among others and harming them?	.4	2.74	.443	H
Are you taking more precautions in your family because you are afraid that the elderly will get sick?	.5	2.92	.274	H
Are you afraid that your children will be infected with the Corona virus?	.6	2.78	.418	H
Do you wash your hand after completing your child care?	.7	2.72	.454	H
Are you careful when approaching your child?	.8	2.38	.567	H
Did you feel changes in behavior?	.9	2.06	.682	M
Are you afraid of the worsening of the Corona virus on your child?	.10	2.68	.471	H
Do you fear that your child will die from this virus?	.11	2.54	.503	H
Do you feel that you tend to get angry quickly?	.12	2.24	.687	M
Afraid to enter the child's place without wearing masks and medical gloves?	.13	2.28	.607	M
Do you feel nervous and afraid hearing your child crying?	.14	2.46	.542	H
Do you stay away from your family members (because you are in contact with the injured child)?	.15	2.44	.541	H
Are you afraid to go to the hospital?	.16	1.92	.695	M
Are you afraid of transmitting the virus to your family members, especially the elderly and those who have chronic diseases?	.17	2.92	.274	H
Do you feel scared when hearing about the spread of the Corona virus among members of society?	.18	2.58	.499	H
Are you afraid because there is no cure for the Corona virus?	.19	2.38	.567	H
Do you feel restless and upset?	.20	2.04	.493	M

Do you feel afraid when you see the high statistical figures of injuries and deaths in the country?	.21	2.36	.485	H
Total		**2.49**	**.210**	**H**

M = Mean of score, S.D=Standard Deviation, Eva=evaluation level, L = poor (1 – 1.66), M= Moderate (1.67- 2.33), H = High (2.34- 3).

The results showed in table (4-2) there were elevated levels of fear for the mothers with Mean ± SD 2.49 ± .210 of a sick child with COVID-19 during the time of infection.

Table (4-3): Assessment of the mother's anxiety of the child with COVID 19

Items		M	SD	Eva.
Are you worried when your child sneezes?	.1	2.56	.541	H
Are you worried when your child has diarrhea?	.2	2.96	.198	H
Are you worried about being away from your family and children?	.3	2.54	.542	H
Are you worried when your child's temperature rises?	.4	2.94	.240	H
Do you feel anxious when you hear about a child infected with the virus?	.5	2.58	.499	H
Are you worried when people don't wear a mask or paws?	.6	2.36	.485	H
Do you feel anxious when seeing mothers who are not interested in their children?	.7	2.44	.501	H
Do you feel anxious all day because of the fear of infection with the Corona virus?	.8	2.36	.485	H
Are you worried that personal protective equipment (such as masks and gloves) is out of the market?	.9	2.12	.328	M
Are you concerned about getting close to or mingling with people who work in the health care system?	.10	2.12	.558	M
Total		**2.49**	**.180**	**H**

M=Mean of score, S.D=Standard Deviation, Eva=evaluation level, L = poor (1–1.66), M= Moderate (1.67-2.33), H = High (2.34- 3).

The results showed in table (4-3) there were elevated levels of anxiety for the mothers with Mean ± SD 2.49 ± .180 of a sick child with COVID-19 during the time of infection.

Table (4-4): The relationship between mothers' anxiety with their demographic concerning Corona virus pandemic

Variables		*n = 50		Analysis	
		M	SD	Statistic	Sig.
Age (Years)		2.49	.165	Cc= .426	.002
Marital status	Married	2.46	.213	F= 2.159	.106
	Divorce	2.60	.198		
	Widows	2.67	.135		
	Separate	2.55	.101		
Educational level	Illiterate	2.48	.303	F= .822	.518
	Primary	2.63	.134		
	Secondary	2.47	.250		
	Diploma	2.52	.113		
	University and above	2.47	.126		
Economic status	Sufficient	2.55	.176	F= 2.565	.088
	hardly enough	2.49	.213		
	Insufficient	2.31	.256		
Number of family members		2.49	.165	Cc= .076	.602

P=probability value, NS: Non-Significant at P > 0.05, S: Significant at P < 0.05, HS: Highly Significant at P < 0.01.

The results showed in table (4-4) there was significant statistical correlation between mothers' age with mothers' anxiety concerning corona virus pandemic at P < 0.05. The results also showed there were non-significant statistical differences between mothers' level of anxiety and marital status, educational level and economic status concerning Corona virus pandemic at P > 0.05.

Table (4-5): The relationship between mothers' fear with their demographic concerning Corona virus pandemic

Variables		*n = 50		Analysis	
		M	SD	Statistic	Sig.
Age (Years)		2.49	.165	Cc= .151	.294
Marital status	Married	2.48	.192	F= .574	.635
	Divorce	2.60	.200		
	Widows	2.55	.084		
	Separate	2.50	.141		
Educational level	Illiterate	2.42	.147	F= .624	.647
	Primary	2.50	.089		
	Secondary	2.50	.175		
	Diploma	2.58	.232		
	University and above	2.50	.219		
Economic status	Sufficient	2.55	.232	F= 1.458	.243
	hardly enough	2.46	.136		
	Insufficient	2.48	.130		
Number of family members		2.49	.165	Cc= .012	.935

P=probability value, NS: Non-Significant at P > 0.05, S: Significant at P < 0.05, HS: Highly Significant at P < 0.01.

The results showed in table (4-5) there was non-significant statistical correlation between level of mothers' fear and their ages, marital status, educational level and economic status concerning corona virus pandemic at P > 0.05.

Part I: (5-1) Discussion of demographic characteristics of parents

Table (4-1) shows that the demographic data concerning mother's child with COVID 19 , reveal that the most of caregivers from age group (16-25) years old represented (36%) with Mean ± SD 31.44 ± 7.519, (64%) of study sample were living in the city, regarding the marital status the most of mothers (44%) were Married, (42%) of them from secondary school as level of education, (40%) were Housewife, and (60%) of sample didn't suffer from chronic diseases, also (70%) there is no one to take care of the rest of the family with Mean ± SD 5.96 ± 1.881, (60%) didn't mother suffer from chronic diseases, and finally (70%) there is no one to take care of the rest of the family. Our results are in agreement with the study conducted by (Zhang et al., 2020) that which indicated mothers of participants (89.0%) were married. (50.5%) attained secondary school as level of education. and disagrees with the study conducted by (Chan et al., 2020) which that mentioned (68.8%) of the mothers were graduates, and age (53.9%) of the mothers were in the (30–40) years as age group, and the majority of the mothers were living in the countryside (67.2%).

Part (5-2): Discussion of Assessment of the mother's fear of the child with COVID 19

Table (4-2) show there were high levels of fear for the mothers with child suffered from COVID-19 during the time of infection. Also this result consistent with the results of the study reached by (Celik, 2021), that was conducted on children with disabilities, which showed that the vast majority of them have anxiety and fear of the COVID-19. Mothers reported that the burden of caring for their children increased during the pandemic period by (81.9%).

Part (5-3): Discussion of Assessment of the mother's anxiety of the child with COVID 19

Table (4-3) show there were high levels of anxiety for the mothers with child infected by COVID-19 during the time of infection. This result agrees with the study conducted by (Takasuka et al.,2020) which indicated that about (78%) of the study sample had severe anxiety among family members of infected with COVID-19. This result disagree with the study conducted by (Osinibi et al., 2021), which revealed that most of the study sample hadn't fear from COVID-19.

Part (5-4): Discussion of relationship between mothers' anxiety with their demographic concerning Corona virus pandemic

Table (4-4) show there was a significant statistical correlation between mothers' age and mothers' anxiety concerning corona virus pandemic at P < 0.05. The results also showed there were non-significant statistical differences between mothers' anxiety with marital status, educational level and economic status concerning corona virus pandemic at P > 0.05. Because of pandemic had a negative impact on all segments of society as well as the children and their mothers who were responsible for their care burden, this result agree with (Xu et al., (2020).

Part (5-5): Discussion of relationship between mothers' fear with their demographic concerning Corona virus pandemic

Table (4-5) show there was non-significant statistical correlation between mothers' fear with their ages concerning Corona virus pandemic at P **>** 0.05. The results also showed there were no significant statistical differences between mothers' fear with social status, educational level and economic status concerning corona virus pandemic at P > 0.05 , this result agree with (Soldati et al., 2020) which indicated that the level of fear is not affected by the level of education or economic status.

CONCLUSIONS: Demographic data concerning mother's child with COVID-19, reveal that the most of caregivers (36%) from age group (16-25) years old and (64%) were living in the city, most of mothers are married (44%). High level of fear for the mothers with a sick child infected by COVID-19 during the time of infection. High level of anxiety for the mothers with child suffered from COVID-19 during the time of infection. A significant statistical correlation between mothers' age and level of anxiety concerning corona virus pandemic at $P < 0.05$. Non-significant statistical correlation between mothers' fear with their ages concerning corona virus pandemic at $P > 0.05$.

RECOMMENDATIONS: Increasing mothers awareness about the nature of infection with the COVID-19 virus and how to manage it. Follow the guidelines of the World Health Organization in terms of preventing infection with corona disease. Increasing mothers' knowledge of the importance of maintaining preventive measures to prevent infection with COVID-19. Mothers should teach children to use a mask in crowded places, especially in schools. The Ministry of Health should pay attention to encouraging people to take vaccinations through television programs and social media programs to educate people about safety and prevention through vaccination. Emphasizing the concept of nosocomial infection controlling measures by medical and paramedical staff inside hospitals.

REFERENCES

Celik, M. Y. (2021). Assessment of Have Problems and Care Burdens of Mothers with Handicapped Children in COVID-19 Pandemic. Social Work in Public Health, 36(6), 638-646.

Haider N. and Hassan A. (2022). Benefits of Prostrate Position and Coughing Exercises in the Management of Cardiopulmonary Parameters Alteration among Patients with COVID-19, P J M H S Vol. 16, No. 03, PP.680-685.

Xufang Li, Bing Zhu, Huiying Liang, Chunxiao Fang, Yu Gong, et al. Characteristics of pediatric SARS-CoV-2 infection and potential evidence for persistent fecal viral shedding. Nat Med, 26 (4) (2020 Apr), pp. 502-505.

Catrin Sohrabi, Zaid Alsafi, Niamh O'Neill, Mehdi Khan, Ahmed Kerwan, Ahmed Al-Jabir, Christos Iosifidis, and Riaz Agha. Corrigendum to "World Health Organization declares Global Emergency: A review of the 2019 Novel Coronavirus (COVID-19)" [Int. J. Surg. 76 (2020) 71–76].

Thonmoy Dey, Ankit Sinha. Ethnicity and COVID-19 - A commentary on "World Health Oganization declares global emergency: A review of the 2019 novel coronavirus (COVID-19)" (Int J Surg 2020;76:71-6).

World Health Organization. (2022). COVID-19 weekly epidemiological update, edition 80, 22 February 2022. https://apps.who.int/iris/handle/10665/352199.

Zhang, T., Q. Wu, and Zhang, Z., Probable pangolin origin of SARS-CoV-2 associated with the COVID-19 outbreak [published correction appears in Curr Biol 2020;30:1578].

Chan JF, Yuan S, Kok KH, To KK, Chu H, Yang J, Xing F, Liu J, Yip CC, Poon RW, Tsoi HW, Lo SK, Chan KH, Poon VK, Chan WM, Ip JD, Cai JP, Cheng VC, Chen H, Hui CK, and Yuen KY (2020) A familial cluster of pneumonia associated with the 2019 novel coronavirus indicating person-to-person transmission: a study of a family cluster. Lancet 395:514–523.

Takasuka, N. Fujii, H. Takahashi, Y. Kasai, M. Morikawa, S. Itamura, S. et al. A subcutaneously injected UV-inactivated SARS coronavirus vaccine elicits systemic humoral immunity in mice Int Immunol, 16 (10) (2020), pp. 1423-1430.

Xu, J. Liu, M. Lu, D. Yang, and Zheng, X.. Liver injury during highly pathogenic human coronavirus infections. Liver Int. 3(20) (2020), pp.346-352.

Soldati, G., Smargiassi, A., Inchingolo, R., Buonsenso, D., Perrone, T., Briganti, D., Perlini, S., Torri, E., Mariani, A., Mossolani, E., Tursi, F., Mento, F., and Demi, L. (2020). Is There a Role for Lung Ultrasound During the COVID-19 Pandemic?. Journal of ultrasound in medicine : official journal of the American Institute of Ultrasound in Medicine, 39(7), 1459–1462. https://doi.org/10.1002/jum.15284.

Osinibi, M., Gupta, A., Harman, K., and Bossley, C. (2021). Passive tobacco smoke in children and young people during the COVID-19 pandemic. The Lancet. Respiratory medicine, 9(7), 693–694. https://doi.org/10.1016/S2213-2600(21)00231-9.