

QUALITY OF LIFE IN ARAB SOCIETIES DURING COVID-19 QUARANTINE

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ABSTRACT

The effect of COVID-19 pandemic reached most countries by 2020. The aim of this research was to investigate the quality of life in Saudi Arabia during COVID-19 quarantine. To reach the objective of this research, the questionnaire was used to collect data. Under the curfew and the Defense Orders to minimize crowds, the questionnaire of this research was distributed through different electronic sources using email, WhatsApp, and messenger. The collected data were entered and statistically analyzed using SPSS. The results showed that all the quality of life was dramatically affected for all family members. The highest effect was for women and family leaders' life habits. The study recommended that the protection procedures should take into consideration the minimizing of the people pattern of lives psychologically and physically.

Keywords: COVID19, Quality of Life, Life Habits, Psychological, Physical Effects

INTRODUCTION

The rapid and random distribution of COVID-19 within the same country and among countries cause the governments to take protection procedures to slow down its distribution and to protect individual lives. Most countries enforce complete curfew to mitigate and respond to COVID-19 pandemic. These procedures caused economic overburden for governments and individuals. For individuals, the applied procedures left much people without any source of income, leaving families and individuals suffering to provide the basic needs. On the other hand, generally, the curfew affected the families and individuals' quality of life (Varshney et al., 2020).

The effect of COVID-19 on quality of life varied according to the demographic characteristics of individuals. The effect of life quality varied according to age. Different ages behave differently while staying at home all of time (Varshney et al., 2020). The effect on quality of life for young members was different from the effect on elder ages (Haleem et al., 2020). Moreover, the behavior of males and female were affected differently through the times of curfew (RepiSti et al., 2020). The effect of COVID-19 pandemic varied according to the family structure and the culture of the country. The effect of COVID-19 was different in families of Eastern countries compared to Western countries due to different family structure.

The sector of work (private or public) produces different responses for COVID-19 and so the quality of life. The effect on quality of life varied according to type and extent of effect produced.

The effect of COVID-19 varied from changing the life habits through the curfew periods to the extent of leaving psychological or physical diseases. One of the major changes left was the food habits. (Mumena 2020) has shown that the food habits have change dramatically and the

type of food taken has been changed completely depending on the type of available food and easiness of food cooking inside home. (Varshney et al., 2020) reported that COVID-19 left physical and psychological effect on individuals.

This research will investigate the life quality during COVID-19 quarantine using the different constrains affects the life quality. The research will investigate the effect of demographic characteristics on the quality of life under the effect of COVID-19 quarantine.

LITERATURE REVIEW

After the increase of incidences number in Saudi Arabia, the applied protection procedures and quarantine started in mid of March 2020. The protection procedures started by starting Defense Orders which applied in unusual circumstances. Defense Orders give the government the right to apply orders by forces. The Defense Orders started with announcing the complete curfew for all sectors except those related to medical sector. Leaving home for any purpose requires previous permission issued by the government. The lockdown continued for several weeks (UN, 2020). The curfew was minimized partially after weeks. After three months, the hours of curfew were minimized and the economic sector started to return to its usual work partially. The curfew left most of families affected in different attitudes.

United Nations (2020) reported that the effect of COVID-19 in Saudi Arabia left dramatic effects on different economic sectors and medical sectors. The effect also included all the society structures and individuals. The effect was on children, women, elder people and family leaders. The economic effect reached all society sectors and economic activities. The sources of income for most families depend on their own business ceased at the curfew times. On the other hand, the pressure on the medical sector was increased widely and getting medical care of individuals became a big issue at the times of curfew. These indirect consequences affected the quality of life of citizens (UN, 2020).

The effect on children was through the difficulties to access online learning. The lack of internet at the family or the low experience of family to deal with technology left their children in trouble with receiving their learning. Moreover, the families with low level education were not able to follow up the process of their children. Despite the fact this situation produces low commitment of students for learning; it increases the fathers worries about their children learning (UN, 2020).

The effect of COVID-19 on women was in different ways. The first effect was through fair of working women at the time of curfew to take the infection to their homes. The other effect was on losing income for the women managing their SMEs which creates more troubles for the families. After the allow for some economic sectors, working women were forced to leave their children at home without high care because of the closure of kindergartens (UN, 2020). All the previous consequences left psychological negative impact on women.

The effect of pandemic on older people was different. The scare that older people may infected produce high worries for older people and families too. The curfew slowdown the medical services that required by old people who has previous medical problems. The high pressure on medical sector caused the stop of some of services that introduced for old people (UN, 2020).

In general, the effect of COVID-19 pandemic despite the aspect of effect was high on families. The non-clear future that is produced by this pandemic made most of families worried about the coming times under the continuity of COVID-19 infections. Also, the government choose to protect community of disease rather than applying the herd immunity theory made the people more worried about the future and the consequences under the economic pressure they live.

METHODOLOGY

The objective of this research is to investigate the effect of COVID-19 on quality of life for individuals in Saudi Arabia after living long periods of curfew and the lockdown of all industrial and social activities outside households. Questionnaire was used as a tool to collect data. The questionnaire was designed and distributed electronically to a group of specialists and individuals to measure its validity. Notes were collected and corrected to finalize the questionnaire for final distribution. The final questionnaire form was designed using GOOGLE website. The participation link was distributed for a random sample using chain series using mobile messages, WhatsApp, messenger, and other chatting software. It was possible to fill the questionnaire by more than one family member. The responses for the questionnaire continued for a month. The total number of respondents reached 1500 individuals. The data was downloaded and cleaned. Some questionnaires had missing data. About 60 questionnaires were excluded from the analysis due to high missing items. The number of included questionnaires was 1440.

The designed questionnaire included four parts. The first part was concerned with the collection of demographic data, the second concerned with the collection of life habits changes, the third one concerned with the psychological changes of individuals, while the fourth questionnaire concerned with physical effects on individuals. Five Likert scale was used to measure the trends of effect for individuals. The studied effect was concentrating on adult males and females. The study of children behavior was measured through their parents.

The demographic part of the questionnaire included gender, age, sector of work (private, public, business owner), number of family members, family income, consistency of income over the curfew period. For the life habits changes the study was concerned with the changes of sleeping hours, time of sleeping, changes of food habits, changes of sports practicing, and changes of household management patterns. The psychological variable was concerned with psychological depression, scare of the future, the applied procedures to protect family members of COVID-19, the scarcity of food at home, and fair of dealing with people other than the family members.

The third variable is concerned with the physical effects of individuals. The items measured in this variable included the increase of weight, feeling of regular headache, low acceptability to reach physicians or medical centers, and other physical complains.

The reliability of the questionnaire using Alpha Cronbach was measured using the pilot survey results. The results showed that the values of Alpha Cronbach exceeded 60% for the three variables of the study reflecting the reliability of the questionnaire.

THE RELIABILITY ANALYSIS OF VARIABLES USING ALPHA CRONBACH	
Variable	Alpha Cronbach
Life habits	0.94
Psychological effects	0.92
Physical effects	0.93
All tool	0.95

This research will focus on the effect of COVID-19 on individuals' life due to the complete or partial curfews. The research will concentrate on the consequences on the families' quality of life and will introduce recommendations to minimize these effects. The research will highlight other factors to be considered when applying curfews and the procedures that can be followed to minimize the consequences of these curfews.

RESULTS AND DISCUSSION

Demographic Characteristics of Respondents

The results showed that the studied sample contained males and females with higher percent for females. The percentage of females of the sample formed 55.21%, while males formed 45.49% of the sample. As the questionnaire targeted both males and females in the family, the questionnaire was allowed to be filled by family man and woman. This is caused almost the existence of equal percentages of male and females. The ages of respondents ranged from 18 to more 60 years. The higher age distribution was from 31 to 50 years. This age formed more than 79% of the sample. This age represents the fathers' age of the sample. The higher or lower ages represent the ages of sons or grandfathers that live with the family (Table 2).

Most of the sample respondents are employees either in the public or private sector with percentage more than 83%. The percentage of business owners was only 0.76% of the sample, while the housekeepers' percentage reached 16.04% of the sample. This variation of the work sector will help the assessment of responses to curfew as a result of COVID-19.

The number of family members ranged from less than five members to more than eleven members depending on the nature of the family. The most dominant families in the sample have members from 5 to 8 persons with percentage 50.07%. The increase of family size is expected to increase the overburden on the family man and women due to the increase of duties needed to serve most family members especially the children.

The most dominant family income ranged from 500 to 700 JD with percentage 47.08%. There is still considerable percentage of income less than 500 JD with percent 12.57% and high incomes exceeded 700 JD with percent more than 37%. This variation in income will raise the different attitudes concerning the effect of COVID-19 on quality of life. The results showed that all the families' income has been affected by the curfew applied in Saudi Arabia. The income of governmental employees was affected as the government stopped the promotion given at the beginning of 2020 for all governmental employees. On the other hand, the private sector works income has been affected also due to the stop of work and business owners decreased the wages

in some cases to 50% to be able to face the pay of ages for their employees for three months with any income.

Characteristic	Frequency	Percentage
Gender		
Male	655	45.49
Female	795	55.21
Age		
18-30	210	14.58
31-40	684	47.50
41-50	458	31.81
51-60	65	4.51
60+	23	1.60
Sector of work		
Public	523	36.32
Private	675	46.88
Business owner	11	0.76
Housekeeper	231	16.04
Number of family members		
Less than 5	336	23.33
5- 8	721	50.07
9-11	271	18.82
11+	12	0.83
Family income		
Less than JD500	181	12.57
JD500 – JD700	678	47.08
JD701- JD900	421	29.24
JD900+	120	8.33
The family income was affected as a result of curfew		
Yes	1440	100
No	0	0

Effect of COVID-19 on Life Habits and Behavior

As a result of the complete curfew at the beginning of pandemic for weeks and the move to apply partial curfew, individuals' thinking and interests has been changed dramatically. The first complain and of concern for all individuals especially the family men and women is how to provide the household needs. The specific hour limited for movement make the individuals to modify their life to be free in these hours to provide the family with their needs. At this stage of curfew, the life pattern was represented in paying to get the life needs without any income especially for the workers in private sector. These conditions changed the life pattern and habits for most individuals.

On the other hand, tension the individuals lived at the first times of curfew increased the worries about the disease itself and the methods can be applied to protect the individual himself and to protect the family of infections. These worries caused most of families cared for the infection situation to change some habits at home to adapt with the new conditions. Most of

families increased the use of sterilizing tools and high protection procedures were applied for any person leave home for some time for any reason. These worries changed the life habits dramatically at the times of curfew.

The change of learning procedures to online learning increased the worries of family men and women about the right procedures should be followed to guide their children to obtain regular education to fulfill their educational year. These new educational attitudes resulted of COVID-19 increased the overload of family men and women to follow up their children and to help them to connect to online platforms to access their lessons. These procedures changed the habits of family men and women.

At the time of curfew, all the private medical clinics were closed. Only the concentration was on the public hospital to follow COVID-19 cases and the very urgent medical cases. This increased the family's worries to deal with any emergency cases at the times of curfew. All medical visits and regular medical appointments have been postponed. This issue forms another source of family tension. It calls the family men and women to deal with most urgent cases at home.

The previous explanation explained the different life conditions the individuals live at the time of curfew. These conditions affected the life habits dramatically and so the quality of life. Most individuals changed their life habits to adapt with the life changes resulted of curfew. The change of life habits in most cases is a response for the change of quality of life. The drop of quality of life called most of families and members to cooperate to improve the quality of life as much as possible to minimize the pressure they live.

The ambiguous close future of businesses and the times for the end of curfew lead many families to tolerate financial overburden and keep worried about the coming times. This effect was highly for business owners' males and females. The expenses increase with no income.

Table 2 shows the respondents of individuals for the change of life habits. There was a complete agreement from all sector of demographic characteristics on these changes. The first effect of COVID-19 and the curfew was on the increase of working hours at home to improve the quality of life with mean 4.61. The time needed to prepare food or to follow up children lessons has been doubled. Besides, the existence of all family members at home for lone hours increased the demand for food to fill up their free times. This increased the pressure on family women in specific.

One of the habits that have been changed is the food habits. The concentration on the type of food to be prepared has been minimized due to the lack of required material for specific food all the times at the times of curfew. The specific food habits followed by individuals have been ended which reflected negatively on the quality of health.

The dramatic change the individuals' lived is the change of sleeping hours and the time of sleeping. Apparently, these changes were a response for the curfew, but physiologically these changes will affect the individuals' life negatively. Most of individuals changed their sleeping habits through night and day to adapt the long times of curfew. Moreover, the absence of children from school increased the overburden and their change of life habits such as sleeping and awaking time affected the life habits of their parents.

Habit	Mean	St. Dev.
Working hours at home increased to improve the quality of life	4.61	1.10
The type of food prepared at home was changed due to lack of different food items	4.40	0.83
The concentration on the effect of type of food on body has been decreased	4.22	0.71
The complete and partial curfew caused dramatic changes of sleeping hours	4.21	1.10
The care of my children to follow up their classes has been affected	4.21	1.02
The curfew affected the practice of sports at home	4.10	0.52
I preferred to sleep for long hours through the day to minimize the side effects of curfew	3.90	0.91
I spent much time following up my children classes	3.90	1.03
Curfew changed my children habits which affected me	3.82	0.91
Total	4.15	0.81

Effect on Psychological Aspects

It is clear that COVID-19 left psychological effect on individuals. Table 3 shows that some psychological effect on individuals. The first position effect is that individuals are continually worried about the suitability of procedures applied to provide suitable sterilization inside home. When the complete curfew was ended and the attitude to apply partial curfew, at least one member of the home should leave to bring the household needs. In most cases family men used to take this responsibility. Through the media, people were informed that COVID-19 can be existed on any surfaces included bags, money, clothes and even the doors. This created high tension and worry for household members to sterilize all things brought from outside and sterilizing the individual contacted the outside context.

The second psychological impact was the continuous scare that the available food will be enough to satisfy the needs over the curfew periods (mean =4.53). Moreover, the family men and women were worried about the availability of money to cover these needs. This created continuous psychological stress for elder family members especially for the families that depend on daily income to satisfy their needs.

General psychological depressions were common phenomena individuals live at the times of curfew (mean=4.51). These general depressions resulted to the unknown close future and the times these controls will be ended with the absence of cure for COVID-19. This suffering kept in individual minds all the times.

The increase of applying sterilization processes inside home increased the overburden over family men and women creating new psychological suffering (mean=4.41). The extensive sterilization procedures and its suitability justify the individuals' believes that their lives are at risk (4.33). The ambiguous source of infection and the random distribution of COVID-19 increased the risk feeling. This increased the cautiousness of methods of dealing with others and increased the tensions also.

Income decrease or stop for families created new negative psychological impact. The government procedure to minimize salaries to support the national box to help the families without any income increased the complain about the financial sources to meet the family needs. The complete stop of income increased the dept of different families especially the household

lease depts. For some families this situation increased the psychological effect for family men and women.

The human is socialism in nature. The pandemic affected the ability of individuals to contact or react with others physically. Social visits were not allowed for any reason. This brings individual for new suffering as they were not able to visit their parents or friends at the times of curfew as a response to protect themselves and their families. These attitudes decreased the contact and maximize psychological suffering.

Some individuals' psychological suffering was a result of the increase of their weights and the patterns of food intake has been changed dramatically which was increased without the control of the type of food (mean=4.21). Moreover, the risk individuals live caused them to avoid touching any surfaces outside home (3.98). This behavior is expected under the ambiguity of the source of infection and the possibility to have such infection of source besides the contact of individuals. Moreover, the behavior of others was very important. Individuals tried to avoid any individual that contacting different people through the day because of the more possibility to transmit infection for others.

Effect	Mean	St. Dev.
The suitability sterilization procedures applied at home increased my tension	4.61	0.65
I was nervous from the exposure of food shortage at home	4.53	0.92
I had deep psychological depression at the times of curfew	4.51	0.91
The application of the sterilization inside home increased my nervousness	4.41	0.74
Personal safety at risk	4.33	0.66
I was worried much about the future of life due to effect on family income	4.32	0.81
I have minimized the base of my social deals outside home	4.23	0.93
I had increase of weight which affected me negatively through the curfew	4.21	0.84
I had psychological impact of touching or dealing with people outside home	3.98	0.72
I spending much time observing the others protection procedures to avoid any infection	3.89	0.56
Total	4.30	0.81

The Physical Effect of COVID-19

The physical effect of COVID-19 on individuals was less. The effect was existed by it was connected to special cases but not all individuals. The mean physical effect was 3.64 which was the least compared to other effects. The highest effect was on nervousness. Most individuals felt nervous because of the existed conditions. Most of individuals left tense most of times because of the existed conditions, the lack of safety and the application of safety procedures that they did not used to apply in usual conditions.

The effect on producing headache existed but with less regularity than other effect (mean=3.2). This indicates that this condition faced some individuals of the sample. Also, the lack of the ability to visit clinics or other private medical centers form a suffer for individuals.

Effect	Mean	St. Dev.
I have complained of temporary headache	3.2	1.10
I have complained the use of medical services from private sector	3.1	1.20
I had overweight due to high food consumption without life activities	4.1	0.92
I have experienced physical illness	3.3	1.13
I felt tense more than times before COVID-19	4.5	0.81
Total	3.64	1.12

CONCLUSIONS AND RECOMMENDATIONS

The objective of this research is to investigate the effect of COVID-19 on quality of life through the investigation of the effect on the changes of life habits to meet the new conditions and the psychological effects reflected on individuals' behavior at the times of curfew. The data was collected electronically using questionnaire. More than one member of the family was allowed to participate in the survey to collect different point of views even from the same family. The results showed that the curfew and the risk of COVID-19 changed the individuals' lives dramatically. Under the curfew, the daily habits have been changed which reflected negatively on the psychological conditions of individuals. Most of the sample respondents reported the same effect of COVID-19 on life habits and psychological effect. The least effect was contributed to physical effect which was depending to some extent of the physical conditions of individuals. The study found that it is very crucial to apply curfew to protect people from infection, but it is also crucial to take other life quality aspects in consideration. The curfew and protection procedures can be applied while providing accepted area for individuals to move to minimize its psychological effect on them. The consideration of economic conditions of families would change the applied curfew procedures that allow the minimum join of work specially for business owners to minimize their suffering.

FUTURE WORK

According to the results of this research, the author recommended the execution of survey that study the changes left on children lives' quality. The survey could include the children attitudes for education, their understanding of protection procedures application, their life patterns under curfew, the experience they gained of these exceptional circumstances.

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REFERENCES

- Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, 287.
- Haleem, A., Vaishya, R., & Javaid, M. (2020). Effect of COVID-19 pandemic in daily life. *Current Medicine Research and Practice*, 10(2), 78-79.
- Hashem, K., Bataineh, M., Al-Nawayseh, A., Atiyat, K., Obeid, O., Abu-Hilal, M.M., ... & Kilani, A., (2020). Healthy lifestyle behaviors are major predictors of mental wellbeing during COVID-19 pandemic confinement: A study on adult Arabs in higher education institutions. *Research Square*, 15(12), 1-22.
- Holmes, E., O'Connar, R., Perry, V. Tracey, I., Wessely, S., Arseneault, L., ... & Bullmore, E., (2020). Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. *Psychiatry*, 7(6), 547-560.
- Liang, L. Ren, H., Cao, R., Hu, Y., Qin, Z., Lil, C., & Mei, S., (2020). The effect of COVID-19 on youth mental health. *Psychiatric Quarterly*, 1-12
- Morrow-Howell, N., Galcucia, N. & Swinford, E., 2020. Recovering from the Covid-19 pandemic: A focus on older adults. *Journal of Aging & Social Policy*, 32(5), 526-535.
- Mumena, W. (2020). Impact of COVID-19 curfew on eating habits, food intake, and weight according to food security status in Saudi Arabia: A retrospective study. *Progressive in Nutrition*, 22(3).
- Nations, U., (2020). Policy Brief: The impact of COVID-19 on older persons. United Nations.
- Organization, W.H., (2020). Strengthening the health system response to COVID-19, United Nations.
- Pietrobelli, A. Pecoraro, L., Ferruzzi, A., Heo, M., Faith, M., Zoller, T., ... & Heymsfield, S.B., (2020). Effects of COVID-19 lockdown on lifestyle behaviors in children with obesity living in Verona, Italy: A longitudinal study. *Pediatric Obesity*, 28(8):1382-1385.
- Qian, X., Ren, R., Wang, Y. Guo, Y., Fing, J., Wu, Z., ... & Han, T., (2020). Fighting against the common enemy of COVID-19: A practice of building a community with a shared future for mankind. *Infectious Disease of Poverty*, 9.
- RepiSti, S., Jerotic, S., Ristic, I. & Kuzman, M., (2020). COVID-19 Impact on quality of life (COVID19-QoL) scale (v1.5). *Impluse*.
- UN, 2020. Socio-economic framework for COVID-19 response, Amman: United Nations, Saudi Arabia.
- Varshney, M., Parel, J., Raizada, N. & Sarin, S., (2020). Initial psychological impact of COVID-19 and its correlation in Indian community: An online (FEEL-COVID) survey. *PloSOne*, 15(5).
- Yuksel, B., & Ozgor, F., (2020). Effect of the COVID-19 pandemic on female sexual behavior. *Int J Gynaecol Obstet*, 150(1), 98-102.
- Zhang, Y., & Ma, Z., 2020. Impact of the COVID-19 pandemic on mental health and quality of life among local residents in Liaoning province, China: A cross-sectional study. *International Journal of Environmental Research and Public Health*, 17(7), 2381.