

An Anthropological Demographic Study on the Sociocultural Causes of Covid-19 Spread among the Highly Educated in Egypt: Five Case Studies from Cairo

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Abstract

Covid-19 is a disastrous pandemic that broke out into the world in 2019, and continued to spread until the date of this paper in 2021. However, the prediction of the onset of its symptoms did not always mitigate its spread. Though it was believed that the highly educated, with their hygienic precautions and health awareness were far from being infected by most infectious diseases, they could not escape its psychological and social effects. This paper aimed to uncover some of the possible reasons behind the infection of five cases from three traditional families chosen as examples to share in explaining the causes of the spread of this pandemic among a vulnerable cross-section of the middle aged and elderly highly educated, where the researcher passed through that experience in Cairo Egypt, since the early of April to the late of May 2021. Through the theory of Jennifer Johnson-Hanks with its application of demographic anthropology perspective, this study highlighted the importance of social and cultural factors in explaining causes and effects of demographic data, in addition to potential solutions as future precautions for that Pandemic.

Keywords

Causes of Covid-19, Demographic Conjuncture, Construals, Proximity, Social Space

1. Introduction

COVID-19 started in late 2019 and outbroke as a Pandemic by the spring of 2020. Visibly or invisibly it has affected the whole world. By January 2021, the

pandemic of Coronavirus has affected around 102 million people and caused around 2.2 million deaths worldwide (Ali, 2021: p. 1). These medical data are demographic significant epidemiological data that had great implications on everyday life. Demographic data alone could not reflect the structured vulnerability and politics at play on the international or the national level. This study was more a socio-cultural interpretation of demographic data to the increased causes of spread of this disease among vulnerable middle and elderly ages and the increase in their death rate in the period of a peak of the pandemic in its third wave in Egypt, than only a mere medical anthropological study of pandemic. Since, “the pandemic is a multiple one (Ibid, 2): ‘Economic pandemic’ as the financial resources related impacts on the whole world, ‘social pandemic’ as the undeniable implications of COVID-19 on the social systems worldwide concerning values, norms and mores; that have had a great impact on individuals and families”, as the study of Inayat Ali expounded (Ali, 2021: p. 3). “Structural pandemic” as it referred to the social, and economic stratification of countries, as well as within countries; as the impact of the disease affected the developing countries utmost, since medical precautions in hospitals, as well as the awareness of the population, were not at their maximum level. “Emotional/psychological level” in this study pointed to the feeling of threat one had when others were close to him, and the COVID Phobia the educated had lately suffered from with the rapid increase in infections and deaths of well-known figures, famous stars and close relatives; a fact that could not be denied by governments, as one lived the real and correct numbers of the data that reached the peak of the third wave of the pandemic in Egypt by late of April to early of May, that coincided with the end of Ramadan and the Muslim *al-fitr* (ending of fasting) feast. This spread of the disease could be explained by pointing to the consequences of social traditions and Islamic rituals practiced these days; such as group family *Iftar* (the evening meal that Muslims have after their fasting), group prayers performed in mosques and the uncontrollable expression of emotions between Egyptians such as kisses, hugging and shaking of hands especially in feasts, which are all against the hygienic precautions of Covid-19, that The Ministry of Health adds propagated in Egypt in this period: “I don’t hug, I don’t kiss, I don’t spread the virus.”

2. Problem

Covid-19 is a fatal disease; it is a pandemic that caused dysfunction to rich as poor people and countries as well. Amazingly enough, the disease was caught by the highly educated, who lived in a habitat; that was thought to be protected from dangerous infection of epidemics. This research was a lived experience of five cases in the third wave of Covid-19, living in two close upper-middle class neighborhoods in three separate households in Heliopolis and Nasr City, which were supposed to be an advantageous habitat. But living in such a habitat and under the precautions taken by the Egyptian government, was not enough to protect them from being infected. This paper tried to explore the different possi-

ble causes of the infections of five cases in three families that suffered, a month or even more, to recover from Post-Corona symptoms. The aim of this paper was to uncover some of the most important socio-cultural factors of such infection in the light of Jennifer Johnson-Hanks's theory on anthropological demography (Johnson-Hanks, 2007).

3. Importance of the Study

The applied importance of this study lay in the fact that it dealt with a crucial topic that greatly interested scholars, as well as the public, today and in the future to come, as it casted light on some unpredictable sociocultural causes of Covid-19 spread, even among the highly educated. So, this research might help others to put into consideration some important precautions in the future. It also addressed the international, as well as the national institutions, hoping that they might overcome such pitfalls; holding hands with biomedical perspective on epidemics, so that it might provide guidance to some social and cultural precautions to lessen human sufferings.

This study had also theoretical importance, since it was an attempt to apply Johnson-Hanks's anthropological demography theory, a new developing theoretical approach in a discipline that "has the potential to generate important rethinking of population, culture, and their interaction" (Johnson-Hanks, 2007: p. 1). This paper suggested a framework based on the related socio-cultural perspectives of "Demographic Conjuncture" and "Construals" as were expounded in the anthropological demographic theory of Jennifer Johnson-Hanks (2007).

4. Method

The researcher applied the case study methodological design; analyzing the fieldwork data in the light of kinship relations, close proximity, social space, customs and traditions exemplified by the researcher's and kinship relatives' family life, as well as participating and following, all through the period before and after the symptoms of the disease, the time of the cases' infection, and the Post-Corona recovery period. This study raised questions on the socio-cultural causes of the spread of Covid-19 among highly educated in traditional families. In addition, it suggested the potentiality of anthropological methods and tools to reach some answers to the unknown possible reasons for this pandemic. Besides, it questioned the possibility of avoiding these pitfalls in the future to come?

The researcher applied case study design and anthropological methodological tools in the analysis method; using telephone interviews, participant observation and observation of incidents surrounding them, in addition to applying flashbacks of past medical history of the infected cases and the analysis of related institutional reports and social media and academic articles presented online in the time of the research. The researcher embodied a lived experience that casted light on the details of the daily life experience of five cases; one of them was the researcher herself, while the other cases were close relatives. The study analyzed

the socio-cultural factors that depended on “*Demographic Conjuncture*”, and “*Construals*” as two main analytic dimensions of the theoretical perspective of anthropological demography applied in this research.

The study was performed on five middle aged and elderly highly educated cases from three traditional families; that were close relatives and lived in *close proximity* as they had strong *kinship ties* and visited each other twice or thrice a week encouraged by their close neighborhoods. The cases consisted of three women and two men; their age ranges from 54 to 80 years old. They lived in three nuclear families in separate independent households. The first family consisted of a mother and her younger daughter, the researcher herself, while the second family consisted of the elder daughter and her husband, and the third family was represented by a widower who was the maternal uncle of the younger and elder daughter and the brother of their mother.

The first infected case, the researcher herself; a female professor of 54 years old that represented the daughter in the first family, an Alumni of the American University in Cairo and worked in a national university. The second infected case, a male of 70 years old, husband of the elder sister of the first case, lived with his wife in a nuclear family in a separate household in a close neighborhood, which represented the second family in this study. He was a consultant in the World Bank, who might have caught the symptoms of Covid-19 nearly by the time of the first case. The third case was a 60 years old female; whose symptoms appeared a week after her husband. She was the Director of Student Affairs and professor in a private university. The fourth case was an American University Alumni, 78 years old widow, having two daughters the third case as her elder daughter and the first case as the younger one, a professor on pension, who could not leave home for health reasons. Both the third and fourth cases symptoms appeared by nearly the same time, although they did not belong to the same household. The fifth case, the brother of the fourth case, a widower of 80 years old, an ex-general manager and engineer on pension, who lived alone in a separate household. He was infected, though he took the first shot of *AstraZeneca* (one of the vaccines available for the disease in Egypt in this period of time), while still waiting to take the second shot.

The study applied “the family approach methodology”, that was firstly introduced by Oscar Lewis as a case study method on five families in 1950, but was developed and critiqued by anthropologists to reach the conclusion that his cases were extreme cases that did not reflect the population or the poor to whom he was studying, but still his work of *The Five Families* was a classic, that the researcher has benefitted from his methodology which reflected the social, cultural and psychological causes of a segment in the society that was thought to be blamed for their habits and customs, or in other words their culture. The critique of his methodology was evaluated as important, as it reflected “the culture of poverty”, but was criticized for its generalization to the population; because his cases represented extreme cases. Another contemporary critique to this metho-

dology was that he was “blaming the victim” for his/her culture, see (Varenne & Scroggins, 2015: pp. 590-591). This paper borrowed his family approach methodology without trying to prove that the cases represent all Egyptians, but a cross-section from a segment that is mostly vulnerable to the infection. The study tried not only to reflect “the culture of traditional families” but also the socio-cultural factors of the causes of covid-19 infection of these highly educated families as well. The study applied the case study method on traditional families not only because their customs, traditions and daily habits are the best representation of “the culture”, but also because they are the “protectors of culture”. This study raised the question of whether the cultural factors only made these cases victims, or that the interaction of social and cultural factors went a bit further to cause the spread of this Pandemic?

As the three families were the best examples of the Egyptian traditional family, they believed in the importance of customs and traditions and practiced them; especially when they had to do with a fixed social time of celebration as the Christian Easter, Ramadan, and the feasts of Egyptian Christians and Muslims, as well. The Egyptian traditional family had a quite *Big Social Space*, as it had a great social net of warm relationship ties, usually enjoyed group celebrations with delicious meals with their relatives, Christian and Muslim neighbors, and friends. As traditional families, they had close relations with each other, that they did not question or take it as a burden, though it seemed to them as an obligation due to kinship ties. As these closed bonds were obvious; especially in the patriarchal responsibility that the second case felt towards the first case; as her brother-in-law; especially after the death of her father, and the third case towards her family of origin, despite living in a separate nuclear family in a completely independent household. It was the *collective conscience*, that though it seemed to be *coercive*, in *close traditional families* it was really a kind of expression of *warmth and solidarity*.

These cases were more vulnerable, because of their *Big Social Space*, represented in their network relations of acquaintances, friends, neighbors, relatives, disciples, students, colleagues and past schoolmates; especially that their working conditions obliged most of them to have close personal contact with a big number of students under the age of vaccination, and they frequently had to move the mask to transmit important messages and to have rapport with them. Moreover, the male cases, who were not working in contact with students, also had close personal space with *big social space*, as they had a big net of social relations with common Egyptian people; who rarely wore the mask.

It is worth considering, that while studying the cases, the researcher followed ethical rights of anonymity. Though Covid-19 in its third wave has no more been a stigma in Cairo Egypt among highly educated, still the researcher kept the name of the cases, and details related to their place of work undeclared to avoid any sense of embarrassment. However, oral consents were taken from the cases before writing the report, and they all welcomed without hesitation. Moreover,

the researcher considered their opinions and speculations concerning the reasons of their infection, before writing their emic approach (the interpretation of the researched participants) in the discussion of the research.

5. Literature Review

The following lines presented a review of the previous studies of related contemporary articles and reports, followed by a review of the theoretical anthropological demographic perspective used in the analysis of the fieldwork data gathered in the research.

5.1. Socio-Cultural Anthropological Literature of Contemporary Previous Studies on Covid-19 Pandemic in (2020-2021)

The researcher in the following lines gives a glimpse of the contemporary socio-cultural literature on Covid-19 written the last years (2020-2021). As, this Pandemic is considered as a living experience till now, this literature is presented from the most contemporary to the previous studies according to the level of its importance to the period to follow.

5.1.1. Erni & Striphas (2021) "Introduction: Covid-19, the Multiplier"

This article was published on 4 May 2021, and viewed by 1226 on the first of June 2021. It tried to explain how Covid-19 had deprived us from our normal life. Much cultural research had started to merge biochemical research with demographic data (Erni & Striphas, 2021: p. 1). This study attempted not to emphasize the importance of biochemical research, but instead intended to clarify cultural interpretation to such global pandemic. Aside from reactivating and thinking of disciplinary specificities, this crisis had exceeded public health studies to epidemiological, social, cultural and geopolitical implications all through 2020-2021. It attempted to offer some intellectual guidance for the way forward. It explained the panic pandemic that had been created globally and Covid-19 localities of the research. It examined cultural life of Covid-19 as pathogenic disease trying to emphasize how modern technology played a role in creating and spreading it. Besides, Covid-19 Vulnerabilities were not confined to "potential harm of another" disease, but they also exceeded to harm our "interdependent character of our bodily and social lives".

5.1.2. Joshi & Swarnakar (2021) "Staying Away, Staying Alive: Exploring Risk and Stigma of COVID-19 in the Context of Beliefs, Actors and Hierarchies in India"

This article was first published on 24 February 2021. It "examined the media discourse of risk and stigma; which developed in response to the Covid-19 pandemic in India, employing the theoretical frameworks of Mary Douglas and Erving Goffman". The results of the study "exhibited a clear difference in opinion on various stigma-related beliefs among individuals diagnosed or assumed susceptible to Covid-19. In India, domestic actors dominated the media discourse, par-

ticularly national government agencies, rather than intergovernmental organizations or foreign governments.” Discrimination was emphasized in the article associated with superstitions and myths related to Covid-19 in India, media discourse, risk and stigma.

5.1.3. Hahn & Schoch-Spana (2021) Anthropological Foundations of Public Health; the Case of Covid-19

This study represented a report in which its first objective pointed to “the complex spread of COVID-19 in US indicated a need to recognize sociocultural forces to best understand and respond to the pandemic.” The second objective was to describe “four principles of anthropology and sister disciplines that underlie the theory and practice of public health.” The research applied the anthropological method besides some related approaches to give examples of the four principles from Covid-19 in the U.S: Conceptualization and framing sickness, social determination of health, health determination of society, and responses to social issues. The results of the study showed that, “sickness, disease, injure, pathology were fundamentally a matter of historically situated social ideas and values.” Moreover, the study deduced that, “the way in which societies were organized was a fundamental source of pathologies and their distributions within societies. Conversely, health conditions could substantially alter the organization of societies.” Finally, the research concluded that, “Public health responses were social processes that affect intervention outcomes” and that, anthropological approaches were recommended to “address several facets of public health practice: problem analysis, intervention design, evaluation, and public health enterprise itself.”

5.1.4. Winiger (2020) “More than Intensive Care Phenomena’: Religious Communities and the Who Guidelines for Ebola and Covid-19”

This article, first published on 24 June 2020, was an anthropological fieldwork study; expounded the role of religion played in the control of the infectious disease of Ebola that broke out in West Africa (2014-2016) and the ongoing crisis of Covid-19. As hospitals and caregivers faced the same challenges as local communities, sometimes they reacted negatively to infectious disease and control measures. The article reflected the risks associated with religious practices and the systematic exchange between anthropologists and the faith-based organizations in the provision of healthcare. The study showed that, the religious actors proved safe comfort, in the midst of the profound alienation significance. Moreover, some religious practices were believed to reduce the spread of the virus, such as adaption of prayers, and the integrity of religious rituals that led to cohesion and well-being of communities, see (Winiger, 2020: p. 250, p. 253). Kisses, hugging and touching were replaced by leaning and signs; for fear of infections (Winiger, 2020: p. 252). “Spirituals” represented in institutional, social and political macro-social dimensions “erode the ties of social fabric which bind humans to each other.” In 1990 the relationship between spirituals, religions, and personal beliefs

on subjective qualities of life began to be recognized. Religious leaders, faith communities and the world's leading public health authorities approached the public recommending health precautions (Winiger, 2020: p. 253).

5.1.5. Suyadi, Nuryana, & Fauzi (2020) "The *Fiqh* of Disaster: The Mitigation of Covid-19 in the Perspective of Islamic Education-Neuroscience"

This study was an article that aimed to examine Classical Islamic Jurisprudence in time of disasters. It proved that the theological movement was a form of application to classical religious provision of the rule of worship to adapt to an emergency. Besides, this research was a fieldwork study; that was performed to examine medical movement in Indonesia. It studied the total cases in Standby Hospitals, followed by distribution of masks, gloves and food to affected victims. Islamic preachers' efforts tried to circumvent religious provisions with their vital statements on social media that were realized by developing neuro-science Islamic education. This kind of education movement "tried not to use the dogmatic-monolithic approach as in classical education", and applied visual schemas as more attractive means to spread Islamic rituals and medical precautions as part of the Islamic rituals in various innovative forms of education as comics, cartoons..., etc. to transmit their messages of preaching.

The previous studies reflected the need of analyzing the cultural factors affecting our bodily and spiritual life. The studies presented also, how Covid-19 deprived us from our normal life and created discrimination and stigma in some communities as a result of supernatural beliefs. The studies also emphasized the social factors of health intervention that were dedicated by governments and health institutions to control the risk as far as possible. Academic Scientific Studies pointed to the importance of prevention as the solution of the spread of the virus, as no vaccine could prevent the infection and no drug guaranteed the definite cure of the disease (Salehi-Aban & Khazaeli, 2020; Shervani et al., 2020). Previous studies, also, reflected the importance of integrity of Health organizations and faith-based ones in creating sense of solidarity and cohesion in communities.

After presenting some of the most recent previous studies on Covid-19 in the last couple of years, highlighting the importance of cultural and social factors affecting the social life in the time of the Pandemic, the researcher selected the anthropological demographic theory of Jennifer Johnson-Hanks (2007) as the main suitable theoretical perspective for analysis of the socio-cultural causes of the spread of Covid-19.

5.2. Anthropological Demographic Theoretical Perspective

This paper applied Jennifer Johnson-Hanks Theory, an Anthropological Demographic perspective, which is considered an "old discipline and new one" in the meantime. It was an old one, since the core of the intellectual project was the understanding of cultural practices and demographic rates; as demography was a

discipline known for more than two centuries (Johnson-Hanks, 2007: p. 2), while this perspective is considerably new, since contemporary anthropology as a discipline started for the latest two decades to be interested in anthropological demographic data. Thus, this new perspective tried to merge contemporary practice of cultural anthropology with demography in an attempt to reach “mutually productive intellectual exchange” (Johnson-Hanks, 2007: p. 3). This would be obvious in this paper in applying *demographic conjunctive* data to explain the importance of such a study in this period of time, and “*the construals*” as interpretation of the sociocultural causes of such a great number infected by this pandemic.

The roots of Johnson-Hank’s Demographic anthropology went back to Durkheim in his study of “social facts”. He visualized “social facts” as “the compelling relationship between individual and collective, agency and structure, intentional action and *conscience collective*. Demographic rates in Durkheim’s view were ‘collective and coercive’”, see (Johnson-Hanks, 2007: p. 3). They were collective in the sense that they were not personal, mainly produced and reproduced in collectivities. This meant that an individual did not take his decisions on a completely free will or even as unexpected ones independent from his community, family or even his historical past decisions.

Johnson-Hanks considered, too, the aggregate systems as viewed in the works of Levi-Strauss (1969) and Fortes & Evans Pritchard (1940) that was in a more complex way than Durkheim. She expounded in the *Demographic Conjunctive* as the first component of her perspective that C. Levi-Strauss, and E. E. Evans-Pritchard believed that “Populations are structured and structuring; as culture in the mutual engagement between Cultural Anthropology and formal demography” (Johnson-Hanks, 2007: pp. 3-4).

These were some of the problems tackled in anthropological demography. “But what makes a population real?” Johnson-Hanks asked, “What are its boundaries?” what are the boundaries of culture? Namely, culture and society (Johnson-Hanks, 2007: p. 9). She answered, “Rates should be seen as the product of the distribution of the conjunctures (that is specific, local contexts of the action) and the culturally-configured processes of construal, through which actors make sense of, and engage with, those conjunctures.” Hence, “A theory of demographic conjunctures focuses on events in context (Johnson-Hanks, 2007: p. 12).” By social context she meant life circumstances rather than traits of individuals. She argued that in processes of construal “in specific times and places, that claim may be more or less empirically true, but it is always analytically clear and theoretically coherent (Johnson-Hanks, 2007: p. 12).”

“*Construals*” the second component of this model of Johnson-Hank’s theory was represented as “the actor’s interpretation of, and his engagement with, the conjuncture in the form of demographically relevant action. The ‘schema’ were what one constituted to the world around oneself that was derived from the trees, the light, the framework the individual ‘predilections in making ‘*Construals*’,

which might be more or less conscious, more or less consistent, more or less effective”; “*Construals*” were interpretations of context...they are routinized and normalized that they never surface as mental schemas, let alone as “decisions”, see (Johnson-Hanks, 2007: pp. 12-13).

As, Johnson-Hanks expounded her theory, she answered the most important question: “What are the sources of conjunctures and the process of construal?” She saw that it was the habitat as Bourdieu put it, or the daily experiences, and habits. We did not *maximize utility*, rather because “we are habituated or predisposed to act in this way. These predispositions are the product of our past experiences, which took place in a social world of people who themselves have similarly structured predispositions (Johnson-Hanks, 2007: pp. 15-16).”

Conjunctures, in Johnson-Hanks view were short-term configurations for social actions, we could consider them as “situations”, we faced in our daily life. These situations were “the context of vital events” (Johnson-Hanks, 2007: p. 16). I thought, we might borrow this model, apply it on our contemporary situation of the infection of Covid-19 to try to reach some answers on the possible sociocultural reasons that caused the infection of the five cases in this research who were examples of the highly educated.

6. Discussion

6.1. Conjunctive Data and the Culture of the Highly Educated in Egypt towards Covid-19

Living in Egypt in 2020, it was easy to observe the terrifying stigma of Covid-19, since the people knew little about the disease and the causes of its infection. Mass media presented the stories of people who suffered from Corona, and were treated cruelly and deserted as bearers of death, and some reached the extreme to the extent that their relatives refused to bury their dead bodies. However, highly educated mostly were more moderate in their fears than the uneducated common people. The highly educated dealt with this stress in a more reasonable way, by sharing information through social media and WhatsApp on the health precautions, specialists as “Corona followers” and physicians.

In Egypt, by April 2021, few members took the vaccine compared to the great total number of the population. Some did not take the vaccine because they were under the age of 18 years old, while others had health reasons. Sometimes people even refrained from being vaccinated believing that the disease was not worse than the vaccine. Many rumors went around that spread fear from some kinds led to death of the injected; as a side effect of the vaccine, or in case of going to the dentists before passing 15 days from being vaccinated. It seems that Covid-19 causes high fever, fatigue, ache in the bones, headache, liver problems, dimer problems...and other problems that appear on blood analysis, besides the depression, anxiety and the feeling of being sick forever in case of severe cases, and shut down in case of mild cases.

Living among the highly educated, the researcher was aware of the threat more

by May 2021, as it was the peak of the third wave in Egypt. Though, Corona was no longer considered a stigma, as no-one in Egypt had not known somebody who was a friend or a close relative who was infected or at least passed by the experience with one of his relatives. The number of the infected of Covid-19 who were cured increased by time.

According to the latest documents and reports published by *The Information and Decision Making Center* in Egypt under the title. “The Number of those Consider Corona Virus as a Threat”, the researcher analyzed the graph presented in the report shown in **Figure 1** according to the latest statistics in October 2021. It reflected the rise in infections to reach nearly the same rate of April 2021. It was expected to increase by time according to conjunctive data of the Egyptian Cabinet in its reports published to the public in the internet. It was a kind of declaration of the coming risk that was estimated for the future to come and warning of the importance of following the health precautions in the next period.

The culture of the highly educated was manifested, on their daily life experiences and their increased usage of social media, in their solidarity and awareness in facing such crisis (Egypt-USAID, 2021). Relatives and friends kept in touch with their acquainted patients through telephones and mobiles. They even sent them hot meals that were known to be healthy. Since usually all the members of the family caught the disease nearly by the same time and they needed help from somebody outside the household. Moreover, in Egypt’s markets specialists in nutrition prepared special meals for Covid-19 patients; who sold them, and sometimes sent them for free as charity work or for their friends as gifts. Some highly educated send gifts to the friends and relatives from these catering centers, which publicized

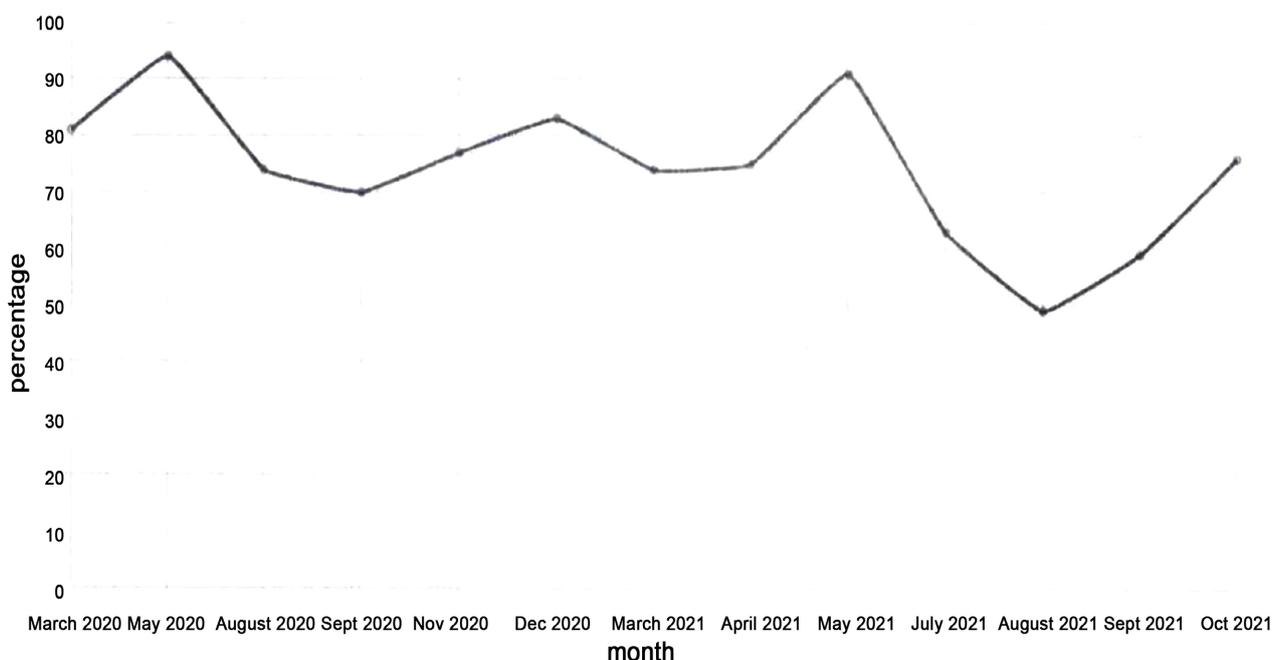


Figure 1. The Egyptian cabinet: the information and decision making center (<https://www.idsc.gov.eg/>).

for their food on social media. Their gifts of hot meals were left by the door of the infected friend's or relatives' residents without being in direct contact till the fifteen days of transmitting the virus passed. They minimized their meetings in gatherings except to close relatives and friends and usually followed precautions as much as possible.

6.2. Towards Social Demographic Conjunctures

Demographic conjunctures (Demographic social structures) were a matter of probability of the habitat that coexisted with Covid-19. The first component of Johnson-Hanks perspective '*demographic conjunctures*' focused on events in context. She expounded that demographic rates were events divided by exposure to the risk of events, accordingly, we gave models to the social conjunctures in which events occurred. She argued, "Rates should be seen as the product of the distribution of conjunctures (that is specific, local contexts of action) and the culturally-configured processes of construal, through which actors made sense of, and engaged with, those conjunctures." We must analyze the association of the sense that lied behind "the context in which the conjuncture of the event occurred" as a primary step that should be taken, see (Johnson-Hanks, 2007: pp. 12-13).

Egypt as part of the world lived in the risk of Covid-19 since 2019 till now (2021). The whole world witnessed an awareness of such a risk manifested in the pages of the social and mass media. The World Health Organization and the Egyptian Ministry of Health stressed measures to confront Corona up to the moment of writing this research; the time when the five cases started to suffer from the symptoms of Covid-19 was in Ramadan 2021 (late April-the beginning of May) (Daily Counts of COVID-19 Confirmed Cases and Deaths (JHU CSSE COVID-19 Data, 2021). Though there were no definite announced national statistics for rates of infections in Ramadan and the feast to follow by CAPMAS, according to the Egyptian Minister of Health. The Electronic media reported that Ramadan witnessed drastic increase in number of infections and expected more increase in the weeks to follow due to reckless precautions (see (Saed, 2021)). Updated guidance to safe the practices of that month in the light of the Corona pandemic included recommendations: "physical distancing measures should be followed during prayers, group *iftar*...and other social or religious activities." The Egyptian Government represented in the Ministries of Health and Endowments issued several decisions to implement precautionary measures to confront the Corona pandemic during this month. The Egyptian Minister of Health and Population said that precautionary and preventive measures to confront the Corona virus were taking place in Egypt during the holy month: **"We are taking more precautionary and preventive measures to confront the Corona virus, especially during the Easter holidays for Christian brothers and prayers for Muslims. Despite receiving Corona vaccinations, this should not prevent us from taking all precautionary measures, especially in gatherings and holi-**

days, and we advise families to reduce or prevent *iftar* gatherings, and if necessary, we must be careful to keep physical distance and remain in open and not closed places.” (The Egyptian Ministry of Health and Population, 2021)

All these announcements did not prevent the cultural and traditional customs of Ramadan: the warm group gatherings of Egyptians; sharing food in family gatherings; exchanging boxes of *kahk* (kind of cookies baked in feasts), and joining group prayers in mosques every night and in the prayer in the early morning of the first day of the feast. Egyptian Muslims and Christians met on *Iftar* every evening to celebrate their breaking of fasting. Their meetings with their relatives were even more frequent. They joined in long visits with their relatives before and after the meals and sometimes even without previous appointments. This was obvious in the cases studied, where *close social and personal spaces* that were observed all through the holy month as well as in the feast, even when the first case was known to be infected and during the fifteen days prone to disease transmission. These observations clarified that *close social space* might have been one of the main sociocultural causes of transmitting the disease.

Religious institutions played a great role in justifying the precautions to the mundane practices. In Egypt, as in other communities as presented in the literature review; mosques, churches and State religious preachers in Egypt gave recommendations and pieces of advice either formally or informally to common people. “The hadith is very relevant to the mitigation of Covid-19, such as lockdowns, self-quarantine, self-isolation, staying at home, maintaining distance, and soon (Suyadi, Nuryana, & Fauzi, 2020: p. 1).” The role of Islamic religion in Covid-19 was not of a pessimistic one, but it was of a form of recommendation (Suyadi, Nuryana, & Fauzi, 2020: pp. 1-9). Moreover, *Sheikhs* preached before the Friday prayer pointing at the necessity of being vaccinated, so as not to harm others or even oneself as part of the Islamic responsibility towards the public. “Most of the time, conjunctures are mundane” thus changes in people’s behavior began to be gradually noticed. So, “vital conjunctures” having an influence of ordinary common changes in life circumstances on demographic practice” (Johnson-Hanks, 2007: p. 14), could be applied on most of the people in general.

There is a big risk of high rate of death between those who do not take the vaccine. According to the latest statistics presented on social media report, “the death rate between those who are in the 50s who did not take the vaccine is equal to those who are in the 80s and took the vaccine. That is why the world is trying to reach the herd immunity to face the speed of virus mutation “((The Egyptian Ministry of Health and Population, 2021) Egyptian Prime Minister’s Center for Support and Decision Making).” Nowadays, the whole world and the cases, in particular, are racing to take the vaccine for Corona Virus to minimize the consequences of this Pandemic. “There is no vaccine that prevents the infection 100%, still if 90% of the people were vaccinated, we would reach a secure situation (see (The Egyptian Ministry of Health and Population, 2021) Egyptian Prime Minister’s Center for Support and Decision Making).” Egypt plan was to

inject all those who work as professors, staff and students in Universities, since lately, The Government had taken the decision to return face-to-face education in all Universities by October 2021 (Ministry of Higher Education & Scientific Research, 2021).

However, till late April 2021, the social conjuncture had protected most the two cases working as professors from Corona due to the general precautions taken by the Supreme Council of Universities that stressed the application of hybrid education and the reduction of the number of students in classes in public, private, and national universities. “The coronavirus challenged traditional education methods and paved the way for blended teaching at universities” as announced in mass media, social media, and the institutions’ regulations dedicated to the university communities; “blending traditional classroom experience with online courses. To facilitate the online component of the program, the ministry laid out a plan to upgrade the technological infrastructure of universities at a cost of LE 4.8 billion (Hybrid learning for Egypt’s upcoming academic year (Abdel-Hafez, 2020a, 2020b)).” Everybody on Campus was supposed to wear masks and maintain distance, though these precautions were not taken seriously by most students and even a few staff members. Vaccine was offered for free in many different spots to Egyptian citizens, giving priority to professors in Universities. This gave us the feeling that Covid-19 was rather controlled in Egypt. Though, worldwide numbers dropped since February 2021. Many countries, were still struggling with sparse vaccine supply, the spread of variants, and overburdened health systems due to the World Health Organization (WHO) (Global COVID cases continue decline, though many countries still struggle WHO (2021)).

6.3. “*Construals*” as the Cause of Spread of Covid-19

The second component of Johnson-Hanks perspective “*Construals*”, in this paper, was first applied to the cases studied in their working habitat. Johnson-Hanks used the term “*Construals*”, which were not actions taken as a result of abrupt decisions, but “refer to these actions because they interpret the complex set of relevant structural elements into a concrete behavioral stance” (Johnson-Hanks, 2007: p. 14). As to first case, she began to suffer from the symptoms of Covid-19 in the 16th of April. At that time, education started to be only online, due to detecting some infections among students. But, how can we explain the reason behind the first case infection? Before, the education was totally online, the case had given a class to a big number of students without wearing the mask, and some of them were in *close personal space*, as students were used usually to have personal talks after the lecture with their professors. This might have caused her infection by that time.

Moreover, the first case had a bigger social space than any other professor, as a breast cancer patient used to take radio-therapy in an international medical center for twenty days. According to *Construal* in Johnson-Hanks demographic theory: “Social actors can neither experience, nor respond to the world except

through some set of schemas that, like the cognitive processing necessary for vision, interpret an unordered array of dark and light into trees, vistas and faces....” “The Schemas are unavoidable components of ordinary human engagement with the world (Johnson-Hanks, 2007: p. 14).” And so, were the schemas the case had experienced in such charming appearance of this international medical center, she had to go to everyday for twenty days. She had been an American University student, and passed her undergraduate and graduate years following the American system. She had to take radio-medical treatment in this center and had trust in it and believed that its attractive appearance implied best service. Most environmental studies implied that the lately increase of greenery and gardens was considered as a way to prevent pollution, and infectious diseases especially in the intervention of such Pandemic (Rezaeitavabe, et al., 2021).

As to the second case, the brother-in-law of the first case and the husband of her elder sister, he was infected nearly by the time of the first case infection. It was viewed not according to work habitat but actually as a result of social habitus. As, a close traditional family, the case saw that part of his obligations towards his sister-in-law was to accompany her to the medical center as a *patriarchal authority*; especially that this Medical Center was outside Cairo, far from their neighborhoods. Since, the second case worked in 45 foreign countries as an International Consultant, he had the impression that this classy international medical center was a hygienic place. Both, the first and the second cases believed that the center was a high standard one and with a healthy atmosphere; especially with its air-conditioned waiting room overlooking a gorgeous trimmed garden. According, to Johnson-Hanks “We could theorize each individual construal as decisions” that were normalized and routinized that ends on actions that “never surfaced as mental schemas” (Johnson-Hanks, 2007: p. 15).

This misleading confidence in the place was the reason behind the negligence of the first and second cases in taking enough precautions, when they went to the Center. The first case used to take radio-therapy in this international center without wearing mask, and the second case used to pray in the hospital, while the first case took her radio-therapy session. One day they heard that the physician was sick and the session might be postponed, but it was not. It might be possible that the doctor caught the Corona and the first case might have caught it from him. At the same day, the second case borrowed the praying mat of the hospital as usual, and after praying entered a very crowded hall to get money from the banking machine. Both cases returned home not feeling well. The first case was in high fever, called her physician who prescribed somebody else who was called, “Corona follower” to follow the case. The second case, travelled to pass the week-end by the sea shore. After passing next morning swimming, he kept the rest of the day sleeping thinking it must be because of spending too much time under direct rays of the sun. But, when his wife heard that the first case caught Corona, she measured the second case temperature and discovered that he was in fever. Then, they packed and returned to Cairo, where they lived

and she followed with the physician. Now, we ask ourselves: “Had the first and the second cases been infected during their visit to this Medical Centre? Had the second case caught it from the first case, from the praying mat or from the crowded hall? Has the first case caught it from the second case? Or from those who were in contact with the sick physician? These were questions that could never be answered, but we might suggest some answers that might help others not to fall in these pitfalls. Could we speculate that the “*Construals*”, deriving in past experiences, habits and customs, might explain to us these probabilities?

As to the third case infection, it might be as a result of her social habitus derived from her working habitat or from family obligations. She was a business administration graduate, work as Director of Student Affairs office. She was obliged to be in close proximity with a great number of students, as well as her colleagues mostly in all day-time before her husband was infected, according to regulations and norms, she worked as she used the mobile, internet and other online tools with her assistants, colleagues, the Dean of the College, and the rest of the Department professors from home. As, when the physician had informed her that her husband had been infected, she recognized that she was a carrier to the disease, even if she was not still infected. However, she felt after a week, that she was infected, as she got high fever, she did blood test and she was sure that she caught the disease.

The third case and the second case belong to the second nuclear family, lived together as a married couple in an independent household in Nasr City neighborhood. Thus, the third case used to wake her husband up in close personal space to give him his drugs, and prepare meals for him. He used to sleep on the living sofa beside her, while they were watching TV, telling her “I have recovered, I’m no more sick.” Whether she was infected as a result of her residence *close proximity* with the first case infected house as she used to visit the first family or *close personal space* with her husband, in the second family, as a health caretaker? Whether she caught Corona from her husband, or from the first case when she went to visit her and helped in changing her sleeping bed blankets, no one could give a decisive answer?

During the first family infection, the fourth case, the mother of the first and the third case, used to be in direct contact with her daughters through mobile most of the time. The third case usually telephoned and visited her family of origin even before their infection. Her visits were even more frequent in time of need and mostly on special occasions. So, the fourth case put her elder daughter, the third case, in command of most of her decisions and actions; as a good manager in most cases. The third case was overconfident of herself, that she kept helping her mother, when her husband got the corona, till she herself knew that she caught it. Then, she brought her mother a specialist in Corona, who observed the four cases till they felt they became normal. But, whether the fourth case, the mother caught it from the first case i.e. younger shut-down daughter’s *closed proximity* of her room to her room? Or from the close personal space

with the third case, her elder daughter frequent visits to her mother till the blood analyses detected that they both were infected and got the Corona? We cannot reach a clear-cut answer.

The fifth case—a widower living alone in a separate household far from his own daughters—visits frequently the first family due to the *close proximity* of their home residence. Being the first case brother to the fourth case encouraged him to be in direct contact with his sister and her family. But, according to health precautions; he was obliged to stop his three visits per week, when the first case was detected as infected. After a month of the first case infection, as she was talking to him on the phone, she doubted that he was not in good health. She phoned his married daughter, she quickly made him do a blood test. Next day, he suffered from high fever and Corona symptoms appeared and his blood test showed that he had caught Corona. As he had the first shot of the vaccine, his case was a mild one compared to the four other cases, who did not take the vaccine. He wanted to leave his flat two days and to go out as usual after his temperature became normal. He felt that he was imprisoned for 15 days, the period of transmitting the disease to anybody.

The fifth case infection seemed to be for a different cause than the previous ones. He used to meet with his daughters' families once a week on weekend at lunch time. But since it was Ramadan, their meetings used to be more frequent, as he used to offer them special meals and to invite them with friends or relatives. As a widower, he had to bring all of his family needs, so he spent most of his time dealing with the grocer and the butcher, besides the maid and the cooker, while he was not with the first family or friends to whom he met usually in mornings on regular basis. In all of his movements he used minimum precautions; only when he had to. Dealing with common people in Egypt does not oblige you to wear the mask; except in banks and governmental institutions and in closed air-conditioned supermarkets, as he spent long time in purchasing his merchandise. Still, direct contact with the vendors and delivery workers, who did not wear the mask; or even wear it not in the correct way; not covering the nose and the mouth might have transmitted the virus to him. So, from where did the fifth case catch the disease? His elder daughter had the corona just before he had been infected and did not meet him till she was cured, but she might be a carrier. Whether, the infection was transmitted to him from the market place? Or even from his company's hospital—hospitals were thought to be the most infected places—where he tried to spend the shortest time as possible; just to take his medicine for his chronic high blood pressure prescribed by his physician. At this time of the year, it seemed that even the unstable weather spread the virus everywhere.

6.4. The Interaction between Conjunctures and “the Construals”

The interaction of the *demographic conjunctures* and “*the construals*” (our actions as a result of decisions in a special context) was what makes us susceptible

to Corona. According to Johnson-Hanks: “A theory of demographic conjunctures is fundamentally about the relationship between vital rates, social structure, and subject formation. And the locus of their interaction is the contingent, temporary, eventful conjuncture...(Johnson-Hanks, 2007: p. 15).” It was these occasions where social structure of the globe, the governments, the ministries, systems, and the family constituted pressure in vital situations on the actor; when he took his decisions in temporary situations; as the case of Covid-19 with its eventual conjuncture. For Bourdieu it was *the habitus* and *field*; “it is habits, or intuitions produced out of the daily experiences in social worlds where authority and capital are unequally distributed (Johnson-Hanks, 2007: p. 15).” *The habitus*, which anthropologists call *superego*, made the first case acted rashly putting off the mask as everyone acted in the radio-therapy, as the saying says: “If you are in Rome act as the Romans do.” It was not just the social structure; that could interpret our data, but its intersection with the culture that might explain our data. The system of the country and the universities regulations could not alone stop the spread of the epidemic. *Social structure* that was presented in the impact of big *social space* of professors; as the first case interacted with the big network of students, and patients, nurses and doctors without following the precautions, lest she should appear to be out of the group; out of the *field*, *habitus* and *culture* associated with the place.

It was *the traditions and social customs* that played the greatest role in transmitting the virus in the families in research. The first family, that constituted the mother and the younger daughter, was the center where the rest of the three families revolved around, since it had been the residence of the late grandfather and grandmother, and kept its importance due to the residence of the first and the third cases who kept their responsibility of protecting the traditional kinship ties. As a traditional family, the first family used to invite their other relatives and friends on regular bases in birthdays and special occasions especially traditional and religious feasts. However, as a highly educated family, they were aware of the consequences of following these traditions, they could not stop them totally. They reduced the number of their visitors in every gathering, but kept inviting their closest relatives trying to find excuses; as the third case invited her brother, the fifth case, in the first day of Ramadan on *iftar* saying: “I can’t leave my brother, who is a widower to pass this day alone.” As for the first case, who was sick in her birthday she said, “I can’t imagine passing my birthday alone without my sister; who has not been sick yet.” These examples explained that not all one’s habits and traditions should be taken for granted, but some must be questioned at times of crisis as pandemics.

The personal *habitus*—that is based on one’s ideology, habits, customs and traditions—is one of the most important reasons behind one’s behavior that is built on daily habits. As for the second family, the second case infection cause seemed to be as a construal result to his ideology. He borrowed the hospital praying mat, believing that it must be sterilized, besides praying close to a stranger in a group

prayer, which constitute more threat on his health. Moreover, he used the bank machine in the hospital for its *close proximity* to the micro-therapy center. As he did not wait to take his time and went to a remote less crowded place, but went to the nearest machine as usual. It was the *habits* that might explain his actions. Before all, it was the *Customs and traditions* that had been dictated to him as a patriarchal authority toward the family of origin of his wife as a traditional man in the absence of another patriarchal authority closer to her family; that made him consider himself the only male authority of his sister-in-law.

As to the *habitus and field*, due to Johnson-Hanksperspective, they are sometimes behind the reasons our actions in vital situations. Considering the third case reaction toward her family of origin and family of marriage, we might conclude that the cause of her infection could be as a result of being a member in a traditional family. It was the social habitus that is represented *in the culture and tradition of familial duties* toward her families. As to her family of origin; she played the role of a care taker and health taker to the younger sister and a mother. Moreover, she played the same role towards her family of marriage as a devoted wife. Besides, the *habitus and the habits and traditions* of the family, it was also *the personal habitus* of the existence of students and colleagues all around her that might transmit the virus, while it was latent in the incubation stage.

As for most of the cases did not consider the risk they are facing when they were following *their Construals*, both the fourth case, in the first family, as well as the third case, in the second family, acted as they were used to without *maximizing the utility* of their actions. They carried their responsibilities, as usual, believing in their enduring immunity system. They both were health takers of patients in their families and thought that it was their *duty* to act according to their *daily life experiences*. They believed that with their emotional care, they could be of more help better than a foreign nurse, who worked only for money. Besides, they felt that acting according to their daily *habits and traditions* was easier than having an intruder in their life, even if that they would not be *maximizing the utility* of their health precautions. The fourth case was even more reckless in wearing the mask; except after her infection herself. It was the *habitus that dictated our actions according to customs, traditions and habits or in a word as anthropologists call it our superego that sometimes does not maximize our utility in vital situations*.

Patriarchal authority, mostly represented in elderly male cases, dictated a stereotype of strong personal habitus of men that are never weak, or defeated. The fifth case, in the third family, as well as the second case in the second family, have sense of denial of their sickness, while they were infected. They considered being closed up in their rooms or flats the cruelest procedure, that accompanied Corona. They wanted to act as they were used to when they were normal. Moreover, all cases considered wearing masks a nuisance, though the younger female cases believed in its benefit as a precaution, as it was a must in most governmental institutions, banks and clubs. Both cases wore the mask only so as not to

be penalized or prevented from entering official places and banks. Wearing the mask seemed to shackle their freedom and a detection to their weakness that was against their patriarchy as strong and healthy men who protected others and not being protected as their *personal and social habitus* dictated them.

Close proximity played a great role in the *construals*, especially in elderly cases. The fifth case, as a widower, who felt lonely after his wife passed spent most of his time outdoors. As for *close proximity* of the first family home residence to his own. He had the habit of spending the whole morning with his sister, the fourth case, thrice a week. Once a week, he met with his ex-colleagues in the retirement association. He also bought all his merchandize himself from different merchants in the market place or from the street vendors who rarely did follow health precautions. He was also accustomed to meeting his daughters' families once a week on regular basis and spending the weekend with them. Moreover, he usually followed the tradition of celebrating *Iftar* with his family relatives and his passed wife's relatives and friends. Thus, no-one knew from where he was infected. Still, he was obliged to remain shut down in his flat for health precautions. Corona was psychologically very harsh for an aged widower especially when felt mild symptoms and was obliged to refrain from his *big social space*.

On asking the cases about the reasons behind their infection, the researcher found that their interpretation according to *the emic approach* (the cases interpretation to the cause) differed from *the etic approach* (the researcher interpretation); especially concerning the benefit of the mask as a kind of precaution; as the second case said, "I used the mask as I was praying on the hospital praying mat, which is supposed to be sterilized, since it belongs to a medical international center with good reputation, so I think the reason of my infection was the crowded hall that I entered, even with the mask, to use the bank machine." As to the third case, he, too expressed his doubts of the importance of wearing a mask as a precaution. He considered it as bounds to his liberty. He said "I am a widower on pension who lives alone so I leave my apartment nearly every morning and go to a different place, I usually buy from the man who sells vegetables on a cart, neither do I wear the mask nor does he, even more I never open the door of my flat wearing the mask, I wear it, only when I am obliged to in banks and in the club." He added sarcastically, "If anybody came of another age and saw the Careen everywhere with the masks, he would laugh at them. It reminds me of the people in the past, who used to believe that they could conquer the epidemics by cutting the microbes in the air with scissors; now we laugh at them!" The third case said, "I must have caught it from my husband or perhaps from anybody else, it is an epidemic, everybody is sick around me, I must not have been careful enough, my colleague's husband caught it, but she was careful enough and did not catch it, even after her husband was cured, her son caught it, still she isolated him in a room and followed the precautions and was not infected." "The spread of an epidemic needs much more precautions than taken in Ramadan in Egypt with the great social gatherings of both Muslims and Christians, celebrat-

ing the nights and exchanging boxes of sweets in the feasts.” While the fourth case was so afraid to catch it and was rarely in contact with the outside world, still she said, “I knew it is an epidemic, if anyone in the family caught it, no member of the family will not escape from the infection,” and added, “Epidemics, we witnessed in our life before the Corona were transmitted by food through the digestive system that spread among the poor and due to the shortage in cleanliness. But this time, this infection is in the air attacks the respiratory system, no one poor or rich, clean or not, can escape its infection, even the President of America and the Prime Minister of England caught it.” Thus, the researcher as a scholar of culture and as a member in a traditional family that was a preserver of culture reached the conclusion that confirmed with Johnson-Hanks words, “*these predispositions are the product of our past experiences, which took place in social world of people who themselves had similarly structured predispositions* (Johnson-Hanks, 2007: 15-16).”

7. Main Results

1) Decisions taken in vital situations by social actors due to their *habitus*, were the main cause of the spread of Covid-19 in the families of the research. These decisions were usually taken due to past experiences, even though they might not be of the best utility in such situations. They were the result of social/personal *habitus*, habits and customs, past experiences and traditions or the result of erroneous decisions taken by the cases.

2) *Social Habitus*, derived from *social customs*, played the greatest role in transmitting the virus to the cases in the traditional families studied. Since the first family believed in the importance of its role in protecting traditions, and it continued to live in the household of their family of origin, the other families revolved around it due to their respect for culture.

3) *Personal habitus*—that is based on one’s ideology, habits, customs and traditions—is one of the most important reasons behind one’s “*construals*”. The second family respected the customs and traditions of their familial duties, and they also followed their social and daily habits that were dictated in their opinion by their religious ideology.

4) Self-image of elderly male cases; as *patriarchal authority* was reflected in their personal *habitus*; stereotyped as the protectors that who are never weak, or defeated. In the third family, as well as, in the second family, they had a sense of denial of their sickness, while they were infected.

5) *Close proximity*, played a great role in taking our decisions concerning actions that are habits or based on past experiences, especially the elderly cases in particular, which might be considered sometimes as a cause to Covid-19.

6) *Close interactive social space* of Egyptians in general, and in traditional families in particular in specific occupations due to interactive close personal space cannot be denied as a socio-cultural threat in such a Pandemic.

7) *Not giving enough care to maximized utility*, was the main reason behind

most of the cases' reckless precautions, especially the elder cases. However, as highly educated, the cases of 50s - 60s followed the precautions to a considerable degree, but due to their *big social space*; as Egyptians in traditional families, or as professors in universities, or even in their daily life experience, so faced the risk of being infected; as they might feel fed up of such precautions in some occasions and act recklessly.

8) Elder cases of 78 and 80 years old, did not believe in masks as a means of protection from Covid-19, but they believed in the Vaccine due to their past experience of epidemics in Egypt; that infected the stomach, and not the respiratory system.

9) According to the cases interpretations, their infection was inevitable in an epidemic, where their precautions were not enough in such a risky time of the year, since the virus was everywhere.

10) Construals that cases composed eventually, the result of the schema of the elements of the image of trees and light; created by the cases to the place and situations, might be deceitful; surfaced their decisions, and made erroneous actions concerning health precautions; especially in luxurious centers.

11) In typical traditional families in Egypt, close kinship relations not only joined relatives, but also built ties of responsibility, that might lead to aggravating close personal and interactive social space. They were known for the familial responsibility of the elder son or in some cases of the elder daughter; especially in the case of an aged or passed parent, and in turn, this responsibility was transmitted in close families to the husband, as part of his patriarchal authority. Though pandemics were recognized as dangerous to highly educated traditional families, they kept close in the time of crisis, as we could find social solidarity still existed between them. The highly educated traditional families no more considered corona as a stigma, but dealt with the crisis reasonably, and believed that they should face it together.

8. Recommendations

1) Mass Media should value *Customs and Traditions* in traditional families as an embodiment of solidarity in times of crisis. However, some of them must be reconsidered in the time of pandemics as group prayers, big family gatherings, racing to visit patients before their complete recovery, or trying to give health care without complete precautions.

2) Planning authorities should put into consideration, that not only social structures are *the demographic conjunctures* that explain the case of the outbreak of the pandemic in Egypt, but it is their interaction with "*Construals*" that are based on the social habitus of daily habits and social customs and traditions.

3) Authorities should propagate through mass media the positive results of taking the vaccine, giving examples of such cases that benefitted from it, that even taking the first shot might minimize the effect of the virus.

4) Social media must transmit to everybody the crucial need to *maximize the*

utility of ones' actions, rather than acting according to his *past habits*.

5) Educational institutions must teach students that *Interactive big social space* is a gift to social capital, but they must be aware of its dangerous consequences in pandemic times. They must be cautious to limit their interactive social network with common people who do not follow health precautions.

6) Mass media should spread the culture of being aware of *Close proximity*, that is usually the reason of our actions, and display the suffering of different cases of Covid-19 in an impressive way to convince people to *maximize the utility* of health precautions.

7) Scholars should not neglect the study of socio-cultural causes of the mutants of Corona Virus Pandemic, but should study them thoroughly, hoping to reach the real unknown reasons of their spread.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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