

Study of representations of the causes of Covid 19 epidemic and its impact on the representations of therapeutic itinerary on a sample of Algerian society

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Abstract:

This research paper aims to study the cultural representations of the causes of corona pandemic (Covid 19) on the representations of the therapeutic itinerary on an among sample of Algerian society. These representations reveal the inter-relationship between the medical and the cultural representations through beliefs, ideas, and behaviors .

Within this context, we applied EMIC questionnaire (The Explanatory Model Interview Catalogue) . (MITCHELL G. WEISS, 1992) We used an online form in which a sample of 70 individuals (M, F), aged from 20 to 50 years old, answered to. We relied on the quantitative and qualitative method in analyzing and interpreting the results. We came to the following results: in the absence of a medical treatment, family solidarity and prevention measures are key treatments. In addition, the causes tend to be purely human, in the absence of all guaranteed treatments, whether therapeutic or traditional .

Key Words: representations, corona pandemic, covid 19, medical anthropology, EMIC questionnaire.

المخلص

يهدف هذه الورقة البحثية الى دراسة التصورات الثقافية لاسباب جائحة كرونة (كوفيد-19) على تصورات المسار العلاجي للوباء لدى عينة من افراد المجتمع الجزائري. التصورات تعكس تلك العلاقة المتداخلة بين الطبي والثقافي من خلال المعتقدات و الأفكار و الممارسات. ضمن هذا السياق قمنا بتطبيق استبيان (The Explanatory Model Interview Catalogue (EMIC) (M.Weiss, 1997)) دليل المقابلة لنموذج التفسيري. استعملنا نسخة رقمية أجابت عليها عينة مكونة من 70 فردا (ذ، أ) من 20 الى ما فوق الخمسين سنة.. اعتمدنا في تحليل و تفسير النتائج على المنهج الكمي و الكيفي. توصلنا الى النتائج التالي: في عدم وجود علاج بيوطي، يبقى التضامن الاسري و ما ينجر عنه من وقاية اهم علاج بالضافة الى ان الاسباب بشرية محضى و عقاب من الله، في عدم وجود ضمانات علاجية سواء في العلاجات الطبية و التقليدية.

الكلمات المفتاحية: التصورات، جائحة كورونا، كوفيد 19، الانثروبولوجيا الطبية، استبيان EMIC

Introduction:

Since the announcement of the world health organization in 11th March 2020 of Covid 19 to be a pandemic, due to its wide, concerning spread with an unavailability of a vaccine or potential treatments discover, the world crumbled dealing with the unknown emerging disease, both the medical world, and the human body. Consequently, 66 369 433 people was affected, 1 529 746 person died, (European Centre for Disease Prevention and Control, 2020) within critical social, economic and psychological circumstances, which created a new type of blockades through quarantine, prevention measures, the fear of transmission, and the excessive use of hygiene products. This prevention protocol seems to be obligatory to each

individual to cut down the risk of transmission, while the economic, social, and psychological schemes get complex enough to rise queries and confusion .

Covid 19 characteristics:

This virus was discovered in Wuhan, china in December 2019. It is of corona virus types, that is infectious to both humans and animals. This type causes respiratory infections from a simple flu to MERS or SARS (WHO, 2020). Most common symptoms of Covid 19 include: fever, fatigue, and a dry cough. Other patients may suffer from pain and nose congestion, sore throat, diarrhea, lack of smell or taste. These symptoms are mild and appear progressively. Other patients notified to be asymptomatic, but were tested corona virus positive. About 80% of the cases recover without the need of a special treatment protocol. One of 6 people suffer from severe symptoms, such as: dyspnea. It is likely that seniors and chronic illnesses patients (high blood pressure, heart diseases, diabetes) suffer from severe symptoms (WHO, 2020). Each person noticing a fever, coughing, and a dyspnea should consult the doctor immediately .

The virus is transmitted from a person to another by an expulsion of respiratory droplets when coughing or sneezing. These droplets can be found on the objects or surfaces surrounding the person. To prevent and limit the virus's spread, the WHO has announced a preventive protocol concerning individuals represented in prevention measures and quarantine, in addition to a therapeutic protocol for those infected by the virus using the medicine "Chloroquine". Within the daily monitoring of the pandemic development, by WHO the number of cases reported today is 66 369 433 lead by the US, India and Brazil, which is constantly increasing. This epidemic has shut down the world and made it go through a virtual dynamic that lead to the disruption of the economics which affected the economic and social system, of both countries and families, thus aggravating the situation .

Nevertheless, Algeria did its best to restrict and monitor the spreading of the virus by going back to WHO precautionary measures and strategies, yet people remain in a state of panic.

This study aims to research the cultural representations of people's interpretations of Covid 19's causes, how it created a social sense of panic and confusion, made them survive through prevention tools as a means of a treatment. This situation led individual to represent different causes of the pandemic, and the different possibilities of treatment that they see more efficient.

This subject is one of the themes of medical anthropology considering Arthur Kleinman works. Elodie Girard (Elodie, 2016) proved that representations are answers to the disease, its causes, and therapeutic guidelines. "People form representations and knowledge to answer to a certain disease and create processes of psychological equilibrium facing a critical event or a danger." The primary representations seem to be the danger of the new event of Covid 19, that created a significant amount of psychological suffering to people, that led to their representations and queries about: its source, the prevention measures to avoid transmission, the therapeutic measures in case of infection. These queries form representations about the disease, prevention, and treatment. If the medical field does not give guarantees and solutions to people (T. Parsons), the latter will rely on the cultural therapies available. In the absence of a treatment or a vaccine and the property of the wide spread of the transmission of the virus, Does the representation of the pandemic have a role in forming the representations of its causes and therapeutic itinerary?

Hypotheses :

The epidemiological profile made the individuals represent different causes that led to the emerging of the disease.

In the absence of a vaccine, the individuals represent that the different therapeutic itinerary; medical and traditional; are complementary.

Objectives:

1. To know how individuals, represent the objective and subjective causes of the pandemic.
2. To know possible therapeutic processes in case of infection.
3. To understand the reasoning of the epidemiological reality related to the knowledge of the disease and its prevention.
4. To know the role of Emic method in research and investigation of these representations to explore the epidemiological awareness in controlling the prevalence of the epidemic .
5. How individuals cope with the current situation of the pandemic.

Literature review:

Representations and medical anthropology :

Durkheim identified representations in 1889 to be:” shared beliefs and values among all community members, fundamentally distinctive than the representations of these individuals.” ((Danic, 2006)), Danic, 2006 and classified it to individual and collective representations. However, Serge Moscovici developed and distinguished social representations to three dimensions:” Attitude, information, and field of representation; as a way of interpreting the world and thinking of reality. ” (Carlos, 2015,). As for Denise Jodelet (Michel, 2008)), she considered it to be: A form of knowledge that is socially shared and elaborated, having a practical and constructive vision of a common reality to a social group. “According to J-Claude Abric 1976: “A social representation is organized around a central core, a fundamental component that determines the meaning and the organization of representation. This core is collectively shared, and characterized by coherence and, stability that makes it resistant to change. The surrounding elements- the so called “peripherals”- are arranged around the central core, and are distinguished by their instability and unimportance in representation; which has four essential functions: knowledge, identity, orientation, and reasoning.“

From this perspective, we aimed to investigate the sum of meanings and expressions that individuals have about the pandemic’s impact on their mental, social, and physical health. How did it impact their behaviors and daily practices? We can also investigate the new side through the social representations, and the established side through the cultural representations.

The relationship between disease and representations is ancient considering the interpretations surrounding it, its meanings, and its therapeutic processes, that is found in all the world’s cultures about the primitive beliefs of disease. “Medical anthropology analyses field data, theoretical thinking of the relationship between culture and its impact on health and diseases (clinical reality). Kleinman on 1980 focused on “ the latter through the criticism of disease believes in the development of biomedicine, treatments, and the relationship with doctors ». (Joly, 2005). Kleinman in refer to Eisenberg (Ventriglio, 2016) proved the difference between an “illness” and a “disease” « The transformation of disease into a human

experience and an object of medical attention occur through a process of attribution of meaning (illness), and expression of symptoms (sickness). The authors further proposed that the construction of a clear understanding of the triad requires the participation of several disciplines: ethnography, clinical, epidemiology, history, sociology, psychology, politics and economics, among others (W.C, 2014). A disease is a set of symptoms that the doctor examines objectively, as for an illness, it is a subjective experience that the patient feels. Mitchel Weiss has developed accordingly on 1977 the Emic (Explanatory Model Interview Catalogue) through a questionnaire that aimed to obtain results on the beliefs and practices culturally and related to mental health on Leprosy in Mumbai((Mitchel, 1992 .(

How does the “disease” and “illness” duality manifest itself through the pandemic? According to Kleinman theory, there are two models that deal with the pandemic:

- 1- Interpretational model (Meaning(
- 2- Therapeutic system (behavior and treatment discovery(

Weiss focused in his method on the subjective experience of the patient “the illness” and his representations. ((Mitchel, 1992.(

The aim is to figure out the interpretations and interactions surrounding the pandemic, where the only way of cutting its prevalence down is through quarantine .

Therefore, medical anthropology is the study of the relationship between representations of the disease and the therapeutic behaviors of the individuals. This, what is the influence of their representations on their behaviors? What is the nature of that correlation in reality? Once the close correlation is proven, we can identify the logic of that expression .

Method :

The study relied on analyzing the answers of the individuals through Weiss questionnaire (Mitchel, 1992) to evaluate, compare, and confirm the interpretational models of a certain disruption among different groups. It analyses the relationship between representations, theories of the causes of the disease, and the variables of public health care system ((Joly, 2005)). The study focuses on the three fundamental dimensions of:

- Illness and its meaning.
- Behaviors
- The way of expression of suffering : (pattern of distress, perceived causes, and help seeking(

Method description :

The sample is composed of 70 individuals, aged between 20 to over 50 years old. The questionnaire was translated to keep its primary measuring goals. It was divided to two halves in which one was digitalized through Google forms, posted it online from 27th March to 22 April 2020. The questionnaire contained 31 questions, devised to four dimensions on: the expressions of suffering, interpretations and causation, social stigmas, therapeutic processes. We have primarily focused on two dimensions, which are the relationship between: interpretations and causation, and the therapeutic processes .

The following table indicates the characteristics of the sample:

Gender	Age				Sum	Academic level				
	20-	31-40	41-	50 \geq		Univer	High	Mid	Sum	%

	30		50			sity	school	dle scho ol		
Male	09	08	13	02	32	29	01	02	32	54.3%
Female	10	21	07	00	38	36	02	00	38	45.7%
Sum	19	29	20	02	70	65	03	02	70	100%

Table 1: the characteristics of the sample

Results and discussion:

Through the research, we found that individuals responded -according to their convictions, beliefs, emotions, behaviors- to identifying the causes, therapeutic option in the absence of a specific vaccine and treatment. Broadbent E, et al (Elodie G. , 2016) model listed five dimensions to representations, which are: Identity, cause, temporality, treatment, and disease control. These led to shaping a new representation about the disease, its causes, experience, treatment, process, and it's becoming for the patient and the doctor.

At first, we noticed the emerging of severe fears of the disease and an avoidant behavior, as noted in the research of Goubert, Crombez, Waddel & Burton, 2005, 4De Bourdeaudhuji, 200, Which is a model of avoiding fear; fear of the physical, and fear of the consequences of pain.(Raymond Baril, 2008) Kori, Miller, & Todd, 1990. (Baril, 2008)

Within this context, results showed that: Causes exploration

1- Individuals' representations of Covid 19 causes :

This table indicated the most significant expressions that individuals identified through the causes that led to Covid 19 emergence (Weiss model)

Expressions	I don't know	Metaphysical interpretations	Animal source	The human element	Economic and political	Environmental	Sum
Number	13	11	0.4	29	09	0.4	70
%	18.5	15.7	5.7	41.42	12.85	5.7	100%

Table 2: Indicated the most significant expressions

How do you represent the causes behind Covid 19 outbreak? To which the answers varied significantly. Results showed that the highest percentage was that the human element (41.42 %) had an important role in the emergence of the virus and thus its prevalence. The second-high percentage was "I don't know" option 18.5%, that indicated that the reason is unknown to this category. 15.7% answered that the reason behind the pandemic is the "Metaphysical interpretations" option, indicating that the disease was a punishment from God, a test, or an affliction. 12.85% answered that the causes are economic and political. Lastly a percentage of 5.7% answered that its causes are environmental. This shows that the human element and the lack of vaccine-medical reasons- are important factors in the spread of the virus.

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These answers were somehow different from the study of (Teh Exodus Akwa, 2020) that identified the source and emergence of Covid 19 to be the human element and not the animal element as indicated in the study of Cameroon.

According to George M. Fosser 1976 (Marc, 1996), there are two medical systems used to explain what causes illness –personalistic (illness is caused due to acts or forces of people or metaphysical realms) ,and naturalistic (illness is caused due to mechanistic causes in nature)

2-Responses of individuals’ representations on Covid19 therapeutic process:

	Family solidarity	In search of a traditional treatment	In search of a medical treatment	In search of a traditional and a medical treatment	Transitioning between the two alternatives
Yes	66	23	15	14	23
No	4	34	47	51	25
-	0	13	8	6	19

This dimension included questions that aimed to identify the itinerary that Kleinman identified about individuals’ representations of what could help them heal: “behaviors of seeking a cure (HSB: Health care seeking behavior), that seeks explanations of the disease, and the healing process”. Kleiman developed the concept to be a sum of cultural and social systems that formed the clinical reality. (Patricia Joly, 2005)

1- Prevention measures and procedures taken since the beginning of the pandemic:

Responses showed that individuals adhered to the prevention guidance that included: quarantine, hygiene, being supportive towards their family members and helping them cope through it. They provided their food supplies to avoid grocery shopping regularly (Bleach product, hand sanitize..). Some individuals committed to praying, Duaa, consistently sanitizing their homes, and doing research about the virus.

2- Family solidarity:

94.28% of individuals responded with a yes. It was due to their upbringing, the shared experience of Covid 19, the importance of giving guidance and support to their families. “We can all be affected”, “Family support is key in times of crisis”, were their reasoning behind it.

3- In search of a traditional treatment:

32.85% responded yes, as a means to boost their immune system and avoid complication.

4- In search of a medical treatment:

21.42% responded that yes they search for it to boost their immunity.

We notice that individuals focused more on traditional treatments.

5- In search of a traditional and a medical treatment

20% responded yes due to their belief that any option is inefficient

6- Transitioning between the two alternatives (Traditional or medical treatment):

32.85% approved of it due to their lack of hope in finding a precise treatment to the disease.

Analyzing the results, we realize that individuals searched for all possible treatments due to a lack of a vaccine despite their conviction that the medical treatment is key, they also searched for a traditional one.

- 1- Sources of information in search of a therapeutic option:

	Source of information		
	Internet	Experts	None
Percentage	30	10	26

Table 3: indicate sources information.

40 individuals required to sources that are available on the internet and through experts and consultants, which was natural due to quarantine, sensitization campaigns- videos, websites on medical and traditional treatments.

Through the research, it is clear that the representation of the causes of transmission of Covid 19 is of a human source, and the lack of vaccine in the medical world. These noted reasons led to: individuals' need for family solidarity and a therapeutic option, the search of a medical and/or traditional treatment in order to boost their immunity system as a preventive measure in the absence of a vaccine. “Everywhere, there is what we call “recovery”;x the experience that allows the feeling of regaining one's physical and mental health, balance, and perfection... In every society, people who suffer seek healers to recover. Everywhere, it empowers the healer (1996, Amarasingham Rhodes, 1996, Fassin). According to Bruddy (1992), the strength of a doctor is not only medical- related to his knowledge- and charisma- but related to his charismatic personality.” (Bourdon, 2011)

Through the results, it is clear that the representations of Covid19 causes affect the therapeutic itinerary of individuals, since it focuses on the objective element- the human

element- in addition to the medical world's inability to develop a vaccine. This has led families to find support and solidarity in each other, to seek traditional treatment instead of a medical one due to its unavailability, which only included immunity-boosting supplements to safeguard them in case of infection.

Conclusion:

It appears through the analysis of the results that the study of the representations of the causes of Covid 19 and therapeutic itinerary, especially with the unavailability of a vaccine, that they vary, focusing mainly on the human element, with the transition between traditional and medical treatments in the absence of therapeutic possibilities.

Each individual's representation emerged from their experience that the cause was human due to the latter's interventions, research, and neglect, which is an objective perimeter that reveals the degree of consciousness of the sample that is consisted of college students. There is also the belief that the pandemic is a punishment from God as explained in The Exodus Akwaet all, 2020 ((Teh Exodus Akwa, 2020)

As for the therapeutic itinerary, the anxiety and fears formed by the properties of the new virus led individuals to live in panic, avoiding any possible infection of the disease, boosting their immunity, and a certainty of the completion of tradition and medical treatments, especially with the unavailability of a vaccine.

There are two discourses provided, one of them is scientific that insisted on quarantine, hygiene measures, and prevention- that have become obsessive- due to the unavailability of a treatment. This medical speech declares its inability to develop a vaccine against the outbreak. The second discourse is traditional seeking treatment in nonconventional treatments.... The duality- that the medical anthropology, especially Kleinman's, confirm- arises the question: How do we understand the representations of individuals of the pandemic?

There are social representations related to the dynamics of the relationship between individuals, and the dynamics between the representations, that showed the novel consequences-as a perception of the events that occur through relationships and institutions amid the pandemic. The cultural representations consist of the definition of the pandemic according to the culture, and the structures that deal with emergencies as a model of explanations, and providing a set of tools, and materialistic and symbolic means to intervene.

There is a significant difference in representations of the disease, especially with the absence of a vaccine, and the auto-vaccine of representations of the disease and treatment.

Even though the disease is physical, it did not prevent relying on traditional treatment such as medicinal herbs, and thus individuals reverted to old treatment customs; prophetic medicine. The inability of the medical world to provide a treatment led to the use of the traditional one, such as a Youtube channel advocating for the treatment of lemon and clove infusion.

We can thus understand the duality of discourses between the medical one –advocating for prevention, quarantine, and symptoms explanation- and the traditional one that explains the mystery behind the pandemic to be a punishment from God.

Individuals think that there is a secret behind the pandemic, and thus try to seek explanations outside the objective realm constructed by media. Therefore, the objective explanations do not provide any change against the secretive one.

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