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Wixáritari with diabetes mellitus and their links with the disease: From the appearance of the symptom to a first explanation

Los wixáritari con diabetes mellitus y sus vínculos con la enfermedad: desde la aparición del síntoma hasta una primera explicación

Francisco Quiñonez-Tapia[1], María de Lourdes Vargas-Garduño[2], Rubén Soltero-Avelar[3]

[1]PhD in Psychology. Full-time professor, Universidad de Guadalajara, Jalisco, México.

[2]PhD in Social Sciences. Full-time professor, Universidad Michoacana de San Nicolás de Hidalgo, Michoacán, México.

[3]PhD in Public Health Sciences. Full-time professor, Universidad de Guadalajara, Jalisco, México.

ABSTRACT This article explores the process of construction of the conceptual, referential and operative schema among the wixáritari population regarding type 2 diabetes mellitus in a community of Jalisco, Mexico, from the appearance of the first symptom to a possible explanation of the disease. This is a qualitative study performed with the phenomenological method using in-depth interviews to collect information. There were seven participants. The data was processed with Bakhtin's discourse analysis, based on Pichon Rivière's theory of the link. It was found that the wixáritari population with diabetes develops their conceptual, referential and operative schema over a period of three to five years, based on three links: the symptoms in the body, the explanation the wixáritari give regarding their symptoms, and the explanations of the social space of the disease. The wixáritari develop a series of links and conceptual, referential and operative schema that allow them to validate an explanation of what they experience in their body, in a confrontational and painful process full of affirmations and denial until reaching a synthesis that allows them to achieve a full understanding of their situation and implement behaviors to care for their health.
KEY WORDS Diabetes Mellitus, Type 2; Health of Indigenous Peoples; Mexico.

RESUMEN Se recuperó el proceso de construcción del esquema conceptual, referencial y operativo (ECRO) de los wixáritari sobre la diabetes mellitus tipo 2 en una comunidad de Jalisco, México, desde la aparición del primer síntoma hasta una posible explicación de la enfermedad. Se realizó un estudio cualitativo con el método fenomenológico a partir de entrevistas en profundidad para la recolección de información. Se contó con siete participantes. Los datos se procesaron con el método de análisis del discurso de Bajtín, a partir de la teoría del vínculo de Pichon-Rivière. Se encontró que el wixárika con diabetes construye su esquema conceptual, referencial y operativo durante un periodo de tres a cinco años, a partir de tres vínculos: los síntomas en el cuerpo, la explicación del wixárika a sus síntomas, y las explicaciones del espacio social a su enfermedad. El wixárika construye una serie de vínculos y un esquema conceptual, referencial y operativo que le permite validar una explicación de lo que experimenta en el cuerpo, en medio de un proceso confrontativo y doloroso, lleno de afirmaciones y negaciones hasta llegar a una síntesis, que le permita comprender su situación e instrumentar una conducta para el cuidado de su salud.
PALABRAS CLAVES Diabetes Mellitus Tipo 2; Salud de Poblaciones Indígenas; México.

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INTRODUCTION

In May 2012, the World Health Organization warned about the increase in cases of diabetes.[1] In the year 2010, the United Nations Development Program stated that more than half of the indigenous people older than 35 years of age suffered from type 2 diabetes mellitus, which meant that this disease was placing the existence of indigenous communities at risk around the world. Moreover, the program mentioned that, when it came to diabetes, no discrepancies were found between the proportion of cases of this disease between indigenous and non-indigenous populations.[2] Therefore, indigenous communities throughout the world are not alien to the epidemiological dynamics of this disease.

The Wixáritari (in their mother tongue, they use the term "Wixárika" in the singular, and "Wixáritari" in the plural) from the north of Jalisco, Mexico, exhibited a frequency of 22 new cases in 2008, and by 2013 there were already 125 new cases. This shows a 568% increase in the frequency of diabetes.[3] This increase was registered by following the protocol for diabetes diagnosis that included the complete medical record, the evaluation of first-degree relatives that suffered from the disease, and laboratory tests such as random plasma glucose, fasting plasma glucose, two-hour plasma glucose, and the glycosylated hemoglobin test (HbA1c).[4] Of 483 Wixáritari localities, the community of Mesa del Tirador de Bolaños, Jalisco, stood out with a population of 767 inhabitants,[5] which showed the greatest prevalence of new cases of type 2 diabetes during the period 2008-2013 (from one to twenty-one cases) in the age group from 24 to 45 years old, followed by the age group older than 65.[3] This is most likely due to its closeness to *mestizo* communities, whose dietary regime is high in carbohydrates and sugars, thus affecting the modification of their traditional habits and predisposing them to develop type 2 diabetes mellitus,[6,7,8,9,10,11,12,13] for example the introduction into their regular diet of industrialized food such as canned corn, sardines, tuna, cookies, and beans, sausages, red tomato purée, ham, pasta, processed dairy products (yogurt, cheese, milk), cereals, sugar-sweetened beverages (Coca-Cola), sweet bread, beer, tequila, mayonnaise, instant soups, energetic drinks and juices, just to mention a few. This kind of food has modified the Wixáritari's traditional diet, which was based on corn, beans, pumpkin, and venison, calf, chicken, fish, or iguana stews.[14,15,16,17] Therefore, the localities that have greater difficulty accessing the *mestizo* settlements have no diabetes cases.

The Wixáritari community is located in Mexico's Sierra Madre Occidental[18] and, according to the National Commission for the Development of Indigenous Peoples,[19] there are 59,820 Wixáritari inhabitants in Mexico. With regard to the understanding of the health-disease processes, "there are two types of diseases for the Wixáritari: the ones that originated in the hill districts and those brought by the Spanish,"[20] [own translation] and, in accordance with the uses of traditional medicine, it is thought that "all natural elements constitute the pharmacy,"[20] [own translation] and that is why the knowledge and incorporation of the properties of nature into their everyday lives has been crucial in the Wixáritari's survival.[21]

Wixáritari people believe that disease is the result of a lack of responsibility towards their deities, a wrongdoing or something that the soul has lost (*kupuri*).[22] Similarly, diseases and death in the Wixáritari culture are attributed to causes such as: a punishment from the gods for breaking a religious duty, a signal that the gods did not approve of their actions, a lack of strength or bravery that makes the victim fall prey to black magic or become overwhelmed with bad thoughts.[21]

The healing of Wixáritari diseases is conducted by the singing *mara'kates*, who perform their healing and prophecy miracles by sleight-of-hand tricks and myth-singing, or just by using their healing techniques without singing.[23] Conjuring is a fight in which the power of the *mara'kates* is confronted with that of the being that has "possessed the sick person."[23] In addition, in the Wixáritari

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communities, there are health care facilities regulated by the Mexican State (National Health System), which develops programs, interventions, and therapies for diabetes prevention and control. Moreover, of the 59,820 inhabitants that compose the Wixáritari community, 37,046 are registered with the National Health System, while 22,205 are not registered, and there is no record of the situation of the remaining 569.[19]

The Secretariat of Health has twenty-one attention centers for Wixáritari's health: twelve medical centers and nine health care units, located in the 483 indigenous communities in the municipalities of Bolaños and Mezquitic, Jalisco, where four of the five traditional governments can be found (San Andrés Cohamiata, San Sebastián Teponohuaxtlán, San Miguel Huaixtita, and Tuxpan de Bolaños).[24]

However, diabetes prevalence keeps growing in the Wixáritari community, which evidences the need to design and implement complementary strategies that would help to significantly contribute to the control of this disease, as it would mean a change in the way of thinking, the modification of habits and customs, and the creation and transference of all the knowledge related to health-disease processes in order to understand those behaviors that lead to the adherence or non-adherence to the therapy.[25] Hence the importance of psychosocial studies like the ones present in this research, as they provide relevant information to justify these interventions. It becomes necessary to point out that several studies conducted on indigenous people,[26,27,28,29,30] from theoretical approaches of anthropology, phenomenology, economy, or health, show that one of the most important factors related to the public health system depends on how discriminated or accepted they feel by the health services. Moreover, in order to improve the compliance of the therapeutical indications, an awareness of popular practices and knowledges is also required.[31]

Other studies have reported that the type of experiences (positive or negative) that are generated and the different styles of physician-patient communication used in the biomedical model, determine whether the patient understands the disease and adheres to the treatment.[32,33,34,35,36,37] It is, therefore, necessary to promote among physicians the development of attitudes that would help them create trustful relationships with patients from the indigenous communities and the rural areas by trying to understand their cosmovision in order to adapt biomedical concepts and integrate them with the indigenous patients' subjectivity, thereby avoiding aggressive attitudes from the health service staff blaming the patients for their health conditions.[38,39] Therefore, we propose in this study an innovative theoretical approach, based on Pichón Rivière's social psychoanalysis, in order to create strategies that would facilitate the cultural physician-patient rapprochement since, as Whitty-Roger states, when the understanding of a body that suffers from diabetes gets hampered by the biomedical approach, patients develop anguish, uncertainty, fear, lack of energy, suffering, a feeling that they are losing control, decreased energy, and discomfort, among other feelings.[39] Thus, the importance of this study, which attempts to describe the modification of the subjectivity of the Wixáritari that suffer from type 2 diabetes mellitus, from the moment of the onset of the first symptom to the first explanation based on Pichón Rivière's model.

Theoretical development

With the aim of accomplishing its objective, this study has been theoretically based on social psychoanalysis, explained by the link theory.[40] Based on Byron Good's[41,42] proposal, it was pertinent to explore other proposals that would enable a deeper understanding of the experience undergone by the Wixáritari with type 2 diabetes mellitus, in order to suggest strategies that could facilitate doctor-patient communication. In this respect, Pichon-Rivière's theory enables this approach. This theory argues that the subject is constituted by intrasubjective and intersubjective dimensions that are dialectically

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related and articulated in totality by three dimensions: the mind (area 1), the body (area 2), and the outside (area 3).[40] Similarly, the subject is constituted both by the outside and the inside, amid the tensions and contradictions that are created by the interaction between the individual and the social, between the intersubjective and the intrasubjective. It is amid this dialectic that the understanding of the experienced phenomenon is constituted within a determined culture and history.[43]

In this respect, subjectivity is an open system that is constantly being structured and built in a dialectical way between the social and individual structure, the subject's historical, individual, and social elements being set up from the inside to the outside and vice versa, in the midst of tensions and contradictions.[40,43,44] Thus, subjectivity is formed by a set of internal and external links that the subject establishes with the objects, either projected or unconsciously introjected from the interaction fields where they can be found in a specific time and space.[40]

The link is a "dynamic and complex relationship structure that includes a subject and an object in dialectical interaction; its determination is reciprocal in a process of communication and learning that results in a behavior towards that object,"[40] specific to each subject and cultural and historic moment, enabling it to enter the symbolic field of the group to which it belongs.[43]

Pichon-Rivière[40] postulates the existence of a psychological field: inside or outside. It is in this psychological field where the objects can be located and establish two types of relationships: external and internal. Subject and object determine a dialectical relationship between the subject and the world, individual and collective, internal and external, inside and outside; there is a connection that makes the constant relationship possible and helps to create links.[40] Due to the existence of the psychological field, the subject can establish internal and external relationships with the object: while in an external field, it can be introjected to the internal field and transfer the relationship or external link to an internal link. Once the object is introjected, and while being in an internal field, it can be moved to the external field through projection and, thus, move a certain object from an internal relationship to an external one.[43]

In addition, social psychoanalysis[43] proposes the conceptual, referential, and operational schema (CROS, or ECRO from its Spanish acronym), which is constituted by a complex structure of links with specific objects; and for this reason, each schema corresponds to particular objects. CROS is formed by an articulated set of specific knowledge, references, and behaviors towards objects with which the subjects come into contact with reality. CROS is known for being an instrument that enables the apprehension of reality, which can be passed on from generation to generation.[40] It is also an individual and collective production that helps us recognize the living conditions, experiences, knowledge, and affections in which the subject is immersed and creates in the subject sensitivity models, ways of thinking, feeling and doing in the world, which marks its existence in a specific way.[40,44] Figure 1 schematically shows CROS, the constitutive links and areas of the subject, applied to the study of the Wixáritari people suffering from diabetes.

Following this line of thought, it can be argued that the Wixárika (subject) and diabetes (object) are in a dialectic relationship, where the Wixárika is constructed by diabetes and diabetes is constructed by the Wixárika. Through the different links that are created, a Wixárika establishes a subjective connection with their diabetes. This subjective connection (the link) with the disease is dynamic due to the fact that it constantly changes depending on the subject's experience of life and meanings in specific times and spaces, and also modifies the interactions with the indigenous community to which they belong.

The chronic disease known as diabetes, which is the object of knowledge of the indigenous Wixárika, can be located outside or inside. On the outside (area 3: the socio-cultural context to which the indigenous people belong), the subject collectively builds subjectivities around diseases. On the inside, it is

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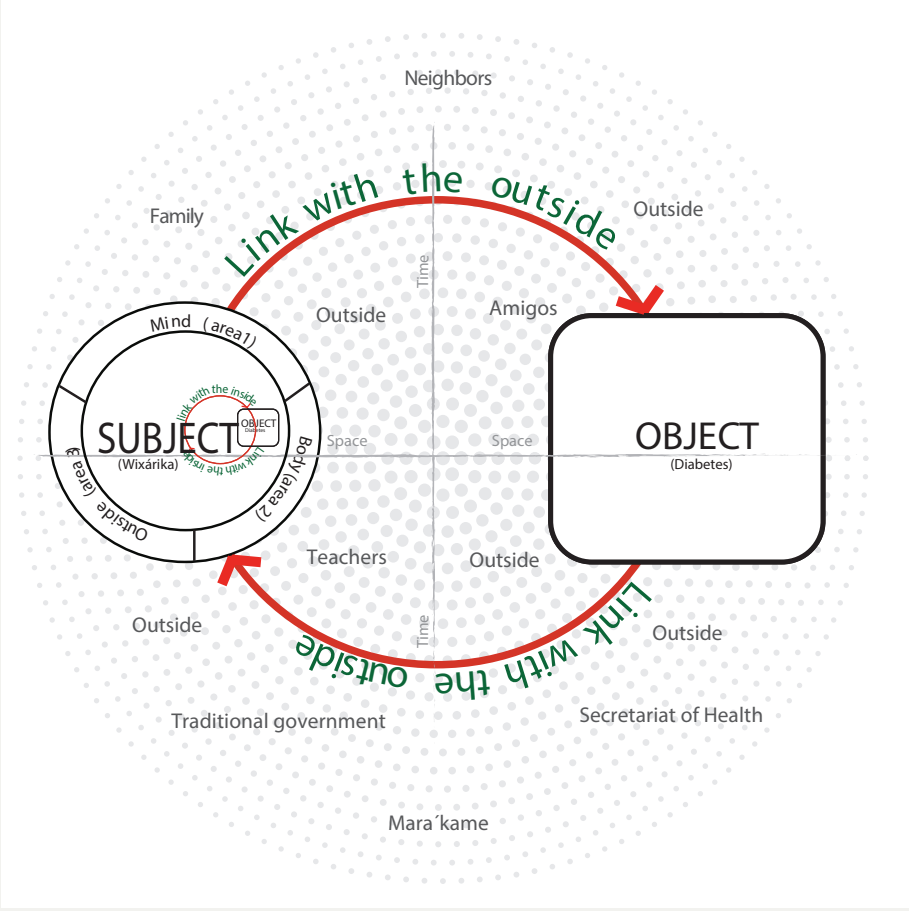

Figure 1. Link theory applied to the study of the Wixárika suffering from diabetes.

Source: Own elaboration.

the indigenous subject who physically suffers the disease (area 2: body) and constructs individual subjectivities that are associated with their beliefs related to what is being suffered (area 1: mind). From the interaction of the inside and the outside, the links with the object (diabetes) are constructed in a dialectic relationship with the Wixárika. Similarly, it is important to recover the CROS that the Wixárika constructs about diabetes, as it contributes to understanding the experiences and forms of knowledge that the Wixárika builds around their suffering.

METHOD

This study is part of a broader investigation called "Wixáritari subjectivity regarding their experience with diabetes mellitus." The study was based on the qualitative model[45], using Merleau-Ponty's critical phenomenological method[46,47,48,49] for data recovery. The investigation context was the Wixáritari indigenous community called Mesa del Tirador, located in the municipality of Bolaños, Jalisco, Mexico. The participants had to meet the following inclusion criteria: be a

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Wixárika belonging to the community, have a type 2 diabetes mellitus diagnosis confirmed by the Secretariat of Health, and be older than 25 years of age. The exclusion criteria were as follows: not willing to participate in the study, not accepting the requested time that the biographical method demands, and not agreeing to attend the proposed meeting venue. Additionally, those who voluntarily decided to abandon the study were not part of the final results.

The grounded theory method[50,51] was used, and the point of theoretical saturation was reached with seven Wixáritari (Table 1).

The technique used was in-depth interviewing.[52,53,54] Two interviews per person were conducted and they lasted between 60 and 90 minutes each, with a 2-day interval in between. The interviews were recorded with the participants' consent and were transcribed without altering the discourse. The first interview was in each participant's home, where the framework was established. The second interview was conducted on the Secretariat of Health's premises. Bakhtin's discourse analysis method was used for the analysis of the participants' life stories, using the ATLAS.ti (version 7) software.[57]

This investigation follows the principles of the Mexican Regulation of the General Health Law in Health Research[58] and the Ethics Code of the Mexican Psychological Society.[59] Therefore, the authorization to conduct the investigation in the Mesa del Tirador community was requested from the *tatuwani* (traditional governor) of Tuxpan de Bolaños, Jalisco, and the Secretariat of Health, in addition to getting the oral informed consent from the seven participants. Moreover, the investigation was approved by an ethics committee of the Universidad de Guadalajara, which abides by the principles of the Ethics Code of the Mexican Psychological Society and Mexican Regulation of the General Health Law in Health Research, mentioned above, as there is no relevant institutional code.

Table 1. Sample Characterization.

Participants	Age	Occupation	Length of time with type 2 diabetes (years)
Isela	27	Home	2
Rosa	70	Home	12
Juventino	78	Home	3
Claudia	85	Home	13
Leticia	57	Home	13
José	53	Grocery store	18
Fátima	61	Home	14

Source: Own elaboration.

Note: Age is considered in approximate years due to the fact that none of the participants have that information. The length of time they have suffered from type 2 diabetes mellitus is in approximate years, according to what the participant had reported. The names were changed in order to safeguard their integrity.

RESULTS

The Wixárika narrative is not woven into a temporal organization measured in years, months, weeks, or days because, for that purpose, they use life events. Therefore, the participants were first acquainted with diabetes when the onset of symptoms started to manifest in their bodies. That historical moment marks the beginning of an encounter that resulted in the development of a particular subjective feeling of the Wixárika towards diabetes.

Consequently, this moment of analysis begins with the manifestation of *what there is* and exists in the body (the diabetic symptom) and continues until they find a possible explanation for what they are experiencing. In order to understand the Wixárika's (subject) encounter with diabetes (object), three categories of analysis were proposed: a) body symptoms (subject's encounter with the object), which refers to the manifestation of the signs and symptoms of the disease; b) the Wixárika's explanation of the symptom (subject's interaction with the object), which refers to the moment when the person became aware of the disease and their first explanations of what the body was experiencing; c) explanations of the social space to their disease (subject and objects framed in a context), which

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refers to the analysis of existing interactions between the Wixárika with the symptom of the disease and the social context, in order to search for a logical explanation of what they are physically experiencing.

Body symptoms

As the participants were not able to define diabetes, they described the disease by its symptoms or causes: they reported the frequent need to urinate, excessive thirst, dry mouth, bitter taste in the mouth, headaches, numbness in a body limb, insomnia, blurry vision, swelling of the feet, and fatigue, as the following quotes show:

> …well, it was a headache, and my mouth was dry, with a strong need to drink water, and at night, well, I got up to go to the toilet many times, and after going to the toilet, I was thirsty again. (Isela)

> ...I feel good, just a little numb. I cannot grab things. I keep dropping everything. (Rosa)

The Wixárika establishes a first connection or relationship with diabetes based on what the person experiences in the body: the physical symptom. For Pichon-Rivière's social psychoanalysis,[40] this is considered to be the moment when the Wixárika experiences the first link with diabetes. The experiences lived and felt through the person's body have enabled the Wixárika to have a life story in relation to diabetes, which enables a reconfiguration of the subjectivity based on the disease. From the social psychoanalysis perspective, the object – diabetes – with which the Wixárika establishes the first link, can be found and acts in the body, thereby constituting the subject. It is a link that is created and becomes connected within the subject from the physical symptom that is experienced in their own body.

The object of diabetes is situated and acts within the body – in the internal field of interaction. That is why, up to this moment, several internal links have been established related to the specific area of the particular organ where the Wixárika experiences diabetes symptoms.

From the moment the Wixárika encounters diabetes through their body, a new organization of the subjectivity begins with the experienced situation that had caused the discomfort in specific organs. In addition, from that moment onwards, and along with other life elements that the Wixárika has, the construction of a subjective meaning that will help them know what is going on will be at stake. During that first encounter, a relationship is built between the Wixárika as the subject and diabetes as the object, whose final result is the creation of links between subject and object.[40] It is in this subjectivity that people, places, emotions, and thoughts are articulated in their own time and expressed through the settlement of links. All this is based on a knowledge and communication process between the Wixárika and diabetes.

The Wixárika's explanation of the symptoms

The participants told a life story situated in the context of hard and excessive work, as well as of a diet that was high in sugar and carbohydrates, but where there was no record of any disabling conditions or body-transgressions that might limit body functionality. Therefore, when they noticed the first symptoms of diabetes, they could not find a logical explanation of what their body was experiencing. Thus, they considered that the symptoms would go away naturally on their own, and when this did not occur, they assumed the idea of an imminent death, as shown in several of their discourses:

> ...I thought it would go away, but it didn't and it was getting worse and worse..., I felt that I was going to die, that's what I felt... (Rosa)

> ...so I felt that– that it was the end for me, there was no life... (Juventino)

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The initial experiences of the Wixáritari with diabetes, analyzed from Pichon-Rivière's logic,[44] show how the Wixáritari (subject) establishes a link with diabetes (object) based on the thought that the symptoms initially experienced in the body would go away on their own and, as later, this did not occur, they were going to die. This shows the difficulty that the Wixáritari have in identifying a chronic disease and the implications that it involves. In their minds, they only assume their illness when they become (consciously) aware of their symptoms. The first link occurs in the body (area 2) especially, and later moves to the mind (area 1) when they try to explain it to themselves. However, as there is constant interaction with their family and environment, the link is also manifested with the outside world (area 3). This sometimes makes it easier for them to deal with the discomforts associated with diabetes and, other times, does not. Right now, there is a dialectical relationship between diabetes as an object located in the body (area 2) and the mind (area 1) and the establishment of a certain link in each of the internal interaction fields, which makes it easier to understand how the Wixáritari experience their reality and their particular reaction to the disease.

The Wixáritari let three to five years go by from the time the object (diabetes) manifested in some of their body organs until implementing an operative action to take care of their health. During this time, there was only a dialectic process between what they were experiencing within their bodies and the first ideas that came to their minds. Thus, from that moment on, they constructed a CROS dynamic that, in a permanent way, started to integrate with new elements in this relationship that the Wixárika has with the disease. The CROS that the Wixárika built in every moment of the lived experience was constantly corrected and enriched to achieve a better understanding of the symptoms that their body was experiencing and how they acted on them.

The explanations of the social space to the disease

Due to the emotional impact that the idea that they are going to "die" produces, the symptoms progress until they reach disability. Unable to move, the Wixárika, who does not know what is happening to them, seeks an explanation of what is happening to their body (area 2), and this encourages them to seek support from area 3 (external world),[40] represented by the allopathic doctor from the medical center. Thus, the Wixárika begins to implement operational behaviors aimed at taking care of their health. Next is a dialogue that serves that purpose:

> Interviewer: And why did you decide to come to the clinic?
> Isela: Well, because I wanted to come now, I mean, I wanted to know, to know what the doctor was going to tell me, why I had those symptoms...

The interview about the physical discomfort and the clinical trials based on the blood test was the way in which the interviewees reported that a diabetes diagnosis had been made for them after three to five years of experiencing the symptoms. At that moment, they obtained an explanation from the health personnel, who told them that there was an excess of sugar in their blood. Thus, they start to build references around the diabetes object. This is how one of the interviewees describes her experience:

> ....the next year that doctor came, he was very good, and he kept asking and asking me about this and that...ah, well, tomorrow morning you will come on an empty stomach – he told me – and the next day I went, but my illness had progressed a lot, and so I went and he took blood from me and that's all... oh, no, your sugar blood levels are too high – he told me – how long have you been like this? No, well, almost three years [...]

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> how was I going to know what I had – I told him –, no, well, you have sugar in your blood, he says, and now you will have to come here frequently. (Fátima)

According to Pichon-Rivière,[40,43] the previous quote constitutes an external link with diabetes. This link has elements that outline the way in which the doctor from the Secretariat of Health tries to describe the physical pain of the Wixárika. Here we observe that the social space (area 3: external world) provides an explanation for the Wixárika's experience with diabetes and its cause. In this way, the social space characterized by the presence of medical staff from the Secretariat of Health has an impact on the social configuration of the disease. However, initially, the Wixárika finds an external CROS that is not associated with the person's personal experience; consequently, the Wixárika becomes distrustful, denying that they suffer from the disease and blaming the doctors by saying "that's what the doctors say"; although, in that encounter, they realize that what the doctors call "diabetes" really coincides with the ailments that they described. Gradually, when the Wixárika talks with other people from their own community, they find echoes of the medical discourses in their own experience, as shown in the following discourses:

> ...Before, a long time ago, when I started, they say – then I hear them talking – that starts from an anger, a fright, a lack of something, and I got it from anger... (Juventino).

> ...Well she says to me [she talks about her doctor], that this disease can come from, how can I tell you, a fright or anger that I had, or from things that they tell you not to do, that only you hear and do not tell that you feel, in my case I imagine that was what hurt me...(Isela)

Thus, when they hear from another member of their community a message similar to the doctor's message, the patient understands that fright or anger triggers diabetes, and this becomes a new link that is established with the disease, which facilitates the acceptance of the medical discourse. This explanation found in the external world (the Secretariat of Health) interacts with the internal world (body and mind of the Wixárika)[40,43] in the search for an understanding of the discomfort experienced in the body. In this way, the Wixáritari try to integrate the discourse prevailing in the external world (area 3) into their mind and body (areas 1 and 2) in order to understand what is happening to them.

The Wixárika validates this explanation of the cause of diabetes that is provided by the doctor of the Secretary of Health or a member of the community, based on their own personal experience. This validation is made through the search and the finding of an event in which the person experienced fright or anger. These events refer to homicides, suicides, lawsuits, rape allegations, physical abuse from partners, and land disputes, which coincided with the onset of the physical symptoms, showing to the interviewees that fright or anger causes diabetes, as it was explained by the allopathic doctors. The following is one of the descriptive reports:

> "You know, I want that, ah yes!" The president told him, "you know, I want your land and all because..." and Armando and the "famous" Raúl, well, they have their word, for some time already, they were told that they were going to give them the lands [...] That was what I heard, and that day there they went and he told the tenant: "And you know that Juventino and I want your land he said, and that of and that of so and so because here comes a man to get it" [...] There, at that time I got angry, both of them passed next to me laughing and saying all that, and well, but no way that I would have said that, say that, you know, that I occupy the land, "and I am going to give you a period of time and so you can take away your cattle, even if you don't pay me ehh", that was his way of saying things so that the other guys could have their part and there it hit me...I felt a lot

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> of anger, son of a bitch and well, they passed me by making fun of me...Hey, I wish...I had brought a fucking gun right now I killed them, and it was after that that I was fucking thirsty, mother fucker, and there was a lady selling smoothies [...] it was the month of February, it was when we went, which is already very hot in Bolaños, so I started to be thirsty and I, well you know, came and peed there in the shore, well, you know nobody was there and, so, I peed all the time, ...well, so what is wrong with me?, I thought to myself and they had already left there, earlier than now, they left, we went, they had given us a house to sleep there and I fucking peed and peed, every time I spent about twenty minutes there, and my uncle asked me, well, what happens to you that you go to the bathroom all the time? (Juventino)

This discourse evidences how this first dialectic encounter of links established from the body (area 2), the mind (area 1), and the external world (area 3) with diabetes (object), as is mentioned,[40,44] is neither linear nor harmonic. Quite the opposite, it is full of affirmations and negations, agreements and disagreements. This is a painful and confrontational dialectical process in which knowledge is acquired but also denied, in a dialectic logic, until there is a rupture. The Secretariat of Health assures that what the Wixárika experiences in the body is diabetes, and continues mentioning the typical symptoms of this disease. However, from these stories, it is known that the triggering cause of this symptomatology is fright or anger experienced in a moment of the life story of the Wixárika.

The Wixárika, with the information obtained from their social context, faces a conflict that enables the person to adjust and rectify the CROS that they have started to construct. However, at this moment, the Wixárika has not managed to integrate it into their subjectivity yet (understood as a totality that integrates the body, the mind, and the external world); this conceptual, referential, and operational schema is only found in the external world, which promotes the consolidation of the dialectical process as a creative process of the Wixárika's subjectivity against diabetes, which enables the person to generate an adaptative response to the lived experience of the disease. To this day, after three to five years suffering from the disease, the Wixárika (subject) has built a CROS on diabetes based on the dialectical relationships that the disease establishes and needs to adjust and consolidate to implement an operational behavior aimed at therapy compliance.

DISCUSSION

Diabetes does not exist in the cosmovision nor in the historical, social, or cultural development of the Wixáritari population. This is a disease that does not belong to them; they consider that "it was brought by the Spanish conquerors and it does not exist within the diseases produced in the hill districts," which refers to the historic colonization whose consequences are still valid from urban-western hegemonic concepts governing the daily practices of the indigenous peoples. However, nowadays, the Wixáritari population is suffering from this chronic degenerative disease as a result of the acritical adoption of the eating styles, ways of living, and modes of subsistance of the *mestizos,* which has become inevitable due to the close geographical proximity and, in this case, to the increasingly easy access between the indigenous and *mestizo* communities, but also because of the discrimination that they suffer for belonging to an indigenous community. Therefore, the Wixárika (subject), upon making contact with diabetes (object), does not have a CROS that is necessary to address the health-disease process of the disease, which enables the person to take care of their health.

The Wixárika, in the first encounter with the disease, fails to associate factors such as lifestyle, eating habits, and genetics with the development of chronic non-communicable diseases such as diabetes. This is why the

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Wixárika is forced to know the medical point of view for the understanding and intervention of the disease in order to take care of their health. While this does not occur, Wixárika will not be able to understand that certain lifestyles and eating habits contribute to the development of diseases, such as diabetes, which will have serious health implications.

From the moment the Wixárika becomes ill with diabetes, the person establishes links that constitute a weak CROS regarding diabetes, which only enables them to understand the disease, without yet creating a solid point of reference and behavior in regards to the care of their health. The CROS will be constantly adjusted through new experiences generated in a specific time and space during a dialectical interaction between the body, the mind, and the external world[40] and the coming and going memories. This way, a totalizing vision of diabetes is built based on the relationship between dualities: individual-society, individual-organism, inside-outside, which is useful for the approach of the health-disease process, in which the Wixárika generates new knowledge about diabetes, a disease that does not belong to their culture and is now already in their body and community.

The dialectical process through which a new CROS is built in the Wixárika begins with the *thesis* of the discomfort that the person experiences in their body and the explanation that they give to themselves in this regard. When going to the external world seeking responses, the *antithesis* comes up when the Wixárika denies the validity of the assertion received by the Secretariat of Health staff about the fact that it is diabetes that they are experiencing in the body. However, in the third dialectical moment (the *synthesis*), the Wixárika accepts the medical discourse when contrasting it with their personal experience and then consolidates the conceptual part of the CROS, although not without a process of internal rupture and personal conflict. And as mentioned in social psychoanalysis, there lies the dialectic between the internal and external links established with the mind, the body, and the outside, and this fabric of links enables the construction of the conceptual, referential, and operative schema of the Wixárika regarding diabetes.

The first experiences manifested by the Wixáritari with regard to diabetes, in terms of their body symptoms, coincide with the experiences reported by the Mi'kmaq women,[39] and the natives of Treaty 6, Treaty 7, and Treaty 8,[13] in Alberta; the Métis: Saulteaux or Ojib- (Anishinaabe), -Cree (Nêhinaw) and Oji-Cree,[38] in Canada; native inhabitants in Australia[26,37]; the Bedouins, in Israel[36]; the Native Americans in the USA,[32-33] and the Tzotzil and Tzetzal people in Mexico.[34] However, they differ in the first explanations that the Wixáritari gave regarding the symptoms of diabetes and the time that took them to find an explanation to understand their own diabetes: the idea that the symptoms would disappear on their own, the thought of death, and the period of three to five years that elapsed between these initial explanations and the time they decided to attend the health center to look for responses.

The explanation for the cause of diabetes that the Wixárika mentions coincides with the reports of the Tzotzil and Tzeltzal people from San Cristóbal de Las Casas and the municipal centers of Chamula and Tenejapa from the state of Chiapas, Mexico[34]; of the Diné, Hopi, Mayan, Oglala Lakota, Yoeme (Yaqui), and Choktaw people of the First Nations of North America[33]; of the Maya in Guatemala,[35] and the Apache, Akimel O'odham, Arikara, Assiniboine, Cherokee, Chippewa, Choctaw, Covelo, Dakota, Ho Chunk, Lakota, Menominee, Meskwaki, Micmac, Navajo, Odawa, Ojibwe, Omaha, Oneida, Ponca, Potawatomi, Pueblo, Sac and Fox, Seneca, Sioux, and Stockbridge of the First Nations of North America of Canada.[32] They admit that the trigger of diabetes is linked to a critical event that involved a considerable amount of suffering and that, simultaneously with that event, the symptoms of diabetes emerged. It is important to recognize that the participants interviewed in the previous studies are considered "urban" indigenous people, and this circumstance shows the initial degree of westernization of these natives, which impacts on their understanding and

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explanation of diabetes. While their understanding of the cause of the disease integrates both the events of fright or anger followed by suffering, as well as the relationship between human biology and eating habits and their consequence on the development of diabetes,[35] the Wixáritari do not relate biology, lifestyle, and eating habits to their impact on the health-disease processes.

The main strength of this investigation lies in its method and the theoretical foundation, because they enabled us to understand the subjectivity that is built by the Wixárika based on each person's experience with type 2 diabetes mellitus.

The links established by the Wixáritari with type 2 diabetes mellitus with their disease enables us to understand the tensions, the conflicts, and the resistance that are manifested in the life experiences with diabetes, in order to introduce behaviors aimed at health recovery within the specific context of the Wixáritari culture. The study shows that the interventions in the treatment and prevention of diabetes should also be considered in addition to the medical-biological, psychological, social, and cultural aspects in order to be effective in treatment adherence. Failure to do so will imply the failure of the interventions and therapies and will compromise the existence of the Wixáritari community. Moreover, in light of these results, other lines of investigation would be necessary to enable a better understanding of the appreciation of diabetes in the community, taking into consideration other actors such as the mara'kates, the relatives, the traditional authorities, and the western health personnel.

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