Modelo factorial mediador de gobernanza sanitaria en la era de la COVID-19

Mediating factorial model of health governance in the COVID-19 era

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Resumen
La gobernanza de la salud pública es un sistema de gestión en el que la cultura organizacional, las normas familiares, la formación y las relaciones sindicales serían determinantes de la adherencia al tratamiento como indicador de la calidad del servicio de salud. Se realizó un estudio no experimental, transversal y exploratorio con una selección probabilística de 104 estudiantes asociados con la infección por el VIH. Los resultados muestran que las relaciones en torno al cuidado de los infectados por el VIH determinan la adherencia al tratamiento (β = 0,702, R = 0,645, R2 = 0,080, R2 ajustado = 0,070; p <0,001). En la literatura revisada respecto a la importancia de la cultura organizacional de las instituciones públicas de salud, la calidad de sus servicios y las innovaciones antirretrovirales como determinantes directos e indirectos de la adherencia, así como la construcción de un sistema advierte la participación ciudadana conforme a los valores y estrategias institucionales.
Palabras clave: Gobernanza, VIH, cultura organizacional, relaciones, adherencia al tratamiento.

Abstract
The governance of public health is a management system in which the organizational culture, family norms, training and trade union relationships would determinants of adherence to treatment as an indicator of the quality of the health service. A non experimental, transversal and exploratory study with a probabilistic selection of 104 students associated with HIV infected was conducted. The results show that the relationships around the care of HIV infected determines treatment adherence (β = 0.702, R = 0.645, R2 = 0.080, R2 adjusted = 0.070; p <0.001). In the literature reviewed regarding the importance of the organizational culture of the public health institutions, the quality of its services and antiretroviral innovations as direct and indirect adherence determinants as well as the construction of a system warns the civil participation conforms to the values and institutional strategies.

Keywords: Governance, HIV, organizational culture, relationships, adherence to treatment.

Introduction

The purpose of this study is to establish the psychometric properties of an instrument that measures attitudes toward technological innovations on the treatment of Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS). As the number of HIV carriers in Latin America and the Caribbean in relation to the rest of the world, it is just less than the cases recorded in North Africa and the developed countries. Regarding the cases by gender, men doubled the numbers of women at the global and regional level. That is the problem of HIV, according to data from the World Health Organization (WHO) in its report for 2015 report it focuses on risk behaviors that assume the male gender identity with regard to the responsibility that transfer women to their partners at the time to prevent Sexually Transmitted Infections (STIs). Thus, the problem of HIV is an external factor regarding the public health organizations who have been studied from two dimensions related to the work environment that produces stress, or from the working environment that facilitates ease among professionals of the health. Thus, empathy, trust and commitment are related to life satisfaction, commitment, altruism, solidarity and optimism while exhaustion, frustration and depersonalization have been identified as work-related stress factors (Cobos et al., 2013).

In the case of social work professionals, like other health professionals such as doctors, nurses or psychologists, they are engaged in organizational climates from which oriented stress or happiness processes are developed. Some studies have tested the hypothesis around which the processes of job stress include a fourth factor on the subjective norm defined as a set of assessments that guide the work behavior in everyday situations in which uncertainty or risk are attributed to carriers of chronic degenerative or terminal (Petro, 2013). If one considers that studies relating to HIV / AIDS have been developed in public institutions, health centers and educational spaces, then it is possible to infer a systematic concern of health professionals about the quality of service and care management specialized.

Because the state of knowledge reveals that most research on the subjective norm and HIV has been descriptive as frequencies and percentages are presented as evidence of a low or high level of perceptions, knowledge, beliefs and attitudes in reference to the service provided, the work environment seems to influence the function of respondents. As their ages, wages and skills increase, the quality of service seems to increase (Abbasi et al., 2013). In addition to the effect of institutional climate in which a working pressure around the promotion of antiviral products, the studies reviewed suggests that family and work groups inhibit the socialization of carrying HIV and therefore are considered vulnerable, marginalized or excluded from health services.

The relationship between health professionals, particularly social work professionals and HIV carriers parce intensify as labor groups or family to which they belong or want to belong determine their perceptions, beliefs, attitudes, knowledge, standards and actions. Studies on the labor climate in terms of social and institutional rules warn two dimensions coexist with other organizational factors such as productivity, quality, innovation and competitiveness.

In the case of the relationship between health professionals and carriers of the Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome they have been approached from the adherence to treatment.

However, research conducted by Garcia (2013) notes that between sex of the professional health and attitude towards HIV carriers there is a negative relationship mediated by the standard. That is, men appear to be negatively influenced by the institutional rules when carrying out their professional practice. Thus, organizational values and adherence to treatment appear to correlate around predicting rehabilitation or predict relapse HIV carrier.

Garcia & Rodriguez (2014) found significant differences between men to mode of infection [UMW = 380,000; Z = 3,975; SA = 0.000] and family support [UMW = 304,000; -4.762; SA = 0.000] about the condition of HIV AIDS. The union and institutional rule represented a determinant of adherence to treatment has less effect with respect to family norms. The asymmetric effects on professional practice standards were also observed by those who found a negative relationship between the attitudes towards HIV carriers, since as the intensified exchange of information, discrimination decreased. If work or family standard involves communicative processes that affect professional practice, then it is necessary to deepen the climate of labor relations and tasks within a health facility develop and that its influence on professional practice explains discrimination to HIV carriers.

From the relations established by the state of knowledge it is possible to delineate the relationship between indicators, factors and dimensions of first and second order which would be linked with the social norms of the social work professionals about the quality of care HIV

carriers. It is a dimension of second order in a relationship of dependency with two prime factors each composed of four indicators is inferred. Although adherence to treatment is crucial explanatory variable and rehabilitation, in the case of HIV testing new CDA show greater recovery (Wynberg et al., 2014). Therefore, treatments that involved a longer period increased the rejection or resilience, but by shortening the period of treatment, the adhesion becomes irrelevant, although side effects of treatments will involve learning adhesion.

Thus, assistance to women living with HIV AIDS generates differences from the beginning of prenatal care [OR = 8.16; CI = 2.61; p = 0.000], birth control modes [OR = 4.61; CI = 2.28; p = 0.000], initiation of antiretroviral therapy [OR = 5.70; CI = 2.37; p = 0.000] and route of delivery [OR = 1.26; CI = 0.32; p = 0.000].

As the treatment period extends, health professionals, social workers and nurses, develop prejudices towards the lifestyles of HIV carriers they will determine the quality of care (Carreon et al., 2015). This is because the climate of relations overcomes the climate of tasks. In this sense, the culture of care and treatment is a reflection of the values and norms of the guilds and families to which health professionals belong or want to belong.

Garcia et al. (2014b) also showed a direct relationship between vocational training, habitus or standards of control and power, which would be focusing on the quality of care for HIV-infected groups. Thus adherence to treatment would be determined by professional organizational variables, family, professional and.

However, the relationships also influence on adherence to treatment and the decision-making and support are a consequence of the perception of the relationship. A greater commitment generates greater care of the couple (Garcia et al., 2014A).

In short public health around HIV means 1) an organizational culture from which public health institutions determine their quality of care for HIV-infected groups; 2) family norms not only create prejudices or commitments, but also affect decisions on the quality of health services; 3) a trade and institutional training from which intervention strategies for infected and their families are projected; 4) analysis of the relationships and gender identities as determinants care of the infected and living with his family or social support. Each of the four dimensions is directly and significantly related to the advancement of science and technology in the treatment of HIV, the process of care and adherence.

What are the dependency relationships between variables reported in the state of knowledge as determinants of adherence to treatment in HIV infected?

The relationship of theoretical dependence between the variables determining adherence fit the observed data. The relationship of theoretical dependence between the variables determining adherence to treatment are different with respect to the observed data.

Method

A non experimental, transversal and exploratory study was carried out.

A non probabilistic selection of 104 students of a public university given its experience in supporting HIV treatment was performed.

Sex. The 37% were men and 63% women.

Age. 46% said it was under 18 years (M = 17.20 and SD = 0.13 years old), 38% said their ages ranged between 18 and 22 years (M = 20.13 and SD = 0.19) and 16% said it was more than 22 years (M = 24.23 and SD = 0.29).

Join. 27% stated that their monthly family income was less than 3,500 pesos (M = 3'245 pesos and SD = 123.29 pesos), 51% said that their family income per month ranged between 3'500 and 7 ' 000 pesos (M = 6'281 and SD = 192.03 pesos) and 22% said their revenues were higher than 7'000 pesos (M = 8'252 and SD = 192.30).

Adherence Scale was used to treatment Carreon et al., (2015) that includes 20 items with four response options ranging from "strongly disagree" to "strongly agree".

It He applied the survey at the premises of the public university. The information was processed in the Statistical Package for Social Sciences (SPSS) and Structural Analysis of Moments (AMOS) version 20. estimates of reliability, validity exploratory factor-analysis of principal components with rotation varimax-, correlations and regressions were performed with Cronbach's alpha statistics, KMO, Bartlett and Levene test, Pearson, beta, R and $R^2_{adjusted}$ R^2.

Results and Discussion

The psychometric properties such as reliability and validity (adequacy, sphericity and factoriality) indicate that the scale has five dimensions mediated by five subscales (see Table 1).

Tabla 1
Descriptive instrument.

Code	Item	M	SD	α	F1	F2	F3	F4	F5
	Organizational Culture subscale (alpha 0.783 and 25% of the explained variance)								
CO1	The quality of service lies in adherence	1.25	0.19	0.724	0.392				
CO2	The quality of care lies in their health professionals	1.01	0.28	0.790	0.305				
CO3	The quality of health professional training is	1.93	0.38	0.703	0.365				
CO4	The quality of its professionals is at its humanism	1.25	0.41	0.792	0,315				
	Standard Family subscale (alpha = 0.794 and 22% of the explained variance)								
NF1	The human quality is family life	3.46	0.49	0.791		0.402			
NF2	The quality of service is to support values	3.04	0.56	0.742		0.406			
NF3	The quality of support is in the professional commitment	3.49	0.92	0.754		0.491			
NF4	Quality commitment is empathy with people	3.15	0.57	0.792		0.405			
	Guild Training subscale (alpha = 0.738 and 23% of the explained variance)								
FG1	The quality of training is in dedication	1.20	0.35	0.741			0.403		
FG2	The quality of care is knowledge	1.25	0.31	0.756			0,500		
FG3	The quality of knowledge is experience	1.31	0.25	0.736			0.603		

		M	SD				
FG4	The quality of health research is	1.05	0.25	0.773	0.583		
	Relationships subscale (alpha = 0.708 and 18% of the explained variance)						
RP1	The quality of care is in fidelity	3.84	0.90	0.706		0.389	
RP2	The quality of communication is adhesion	3.72	0.82	0.736		0.694	
RP3	The communication quality is loyalty	3.46	0.97	0.794		0,514	
RP4	The quality of treatment is in the care of the couple	3.11	0.61	0.782		0.646	
	Treatment Adherence subscale (alpha = 0.747 and 12% of the explained variance)						
AT1	The institution facilitates adherence to HIV treatment	1.02	0.93	0.731			0.331
AT2	The family is the support for adherence to treatment	1.25	0.49	0.743			0.332
AT3	Adherence to treatment depends on technological innovations	1.27	0.57	0.794			0,495
AT4	Emotional support of the couple determines treatment adherence	1.39	0.21	0.724			0,315

Source: Prepared with data from the study. Bootstrap = 0.000; KMO = 0.683; Bartlett = [χ2 = 14.24; (14 gl) p = 0.004]; Levene = 0.024; F1 = Support; F2 = Solidarity; F3 = Resilience; F4 = Traning; F5 = Adherence.

It is a structure of correlations which measure student opinion regarding organizational variables, family, training, inter-related and behavioral care of HIV carriers. However, the reliability and validity of the scale correlations between the five factors are spurious, only in the case of adherence to the other factors, you may notice that relationships are the determinants (r = 0.690; p <0.001).

Tabla 2
Correlations between variables.

	Adherence	Traning	Resilience	Support	Solidarity
Adherence	1,000				
Traning	ns	1,000			
Support	0.031 *	0,030 *	1,000		
Resilience	0.046 *	0.057 **	0.049 *	1,000	
Solidarity	0.380 **	0.460 **	0.560 ***	0.690 ***	1,000

Source made with the survey data. *** P = 0.0001; ** P = 0.001; * P = 0.01; ns = p <= 0.05
In the case of dependent relationships, adherence to treatment is predicted by the relationships (β = 0.702, R = 0.645, R 2= 0.080, adjusted R 2 = 0.070; p <0.001). Ie care of the couple not only correspond with decisions to follow in antiretroviral treatment, but also the support of the couple determined by 7% variance of adherence to treatment.

Tabla 3
Regression between the variables determining adherence

Determinant	B	R	R^2	$R^2_{Adjusted}$	p
Resilience	0.391	0.251	0.053	0,040	0.01
Training	0.473	0.362	0.062	0.052	0.001
Support	0.570	0.493	0.071	0,061	0.0001
Solidarity	0.702	0.645	0.080	0,070	0.0001

Source: Prepared with data from the study
Therefore, other variables not included in the regression model explain a higher percentage of the variance in adherence to treatment, although being a variable type of behavior, it would be further explained by another variable of the same order.

Tabla 4
Direct effects

	Estimate	Std. Error	z-value	p	95% Confidence Interval	
					Lower	Upper
Resilience → Adherence	-0.033	0.046	-0.719	0.472	-0.123	0.057
Solidarity → Adherence	0.089	0.075	1.189	0.234	-0.057	0.235
Support → Adherence	-0.045	0.063	-0.727	0.468	-0.168	0.077

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

The values of the direct and indirect effects are not significant. That is, the relationship between the determinants of treatment adherence suggests a volatile structure centered on the relationship between training and adherence (see Table 4, 5 & 6).

Tabla 5
Indirect effects

	Estimate	Std. Error	z-value	p	95% Confidence Interval	
					Lower	Upper
Resilience → Training → Adherence	0.003	0.006	0.606	0.545	-0.008	0.014
Solidarity → Training → Adherence	-0.011	0.014	-0.796	0.426	-0.038	0.016
Support → Training → Adherence	0.001	0.006	0.188	0.851	-0.010	0.013

*Note.* Delta method standard errors, normal theory confidence intervals, ML estimator.

Tabla 6
Total effects

	Estimate	Std. Error	z-value	p	95% Confidence Interval	
					Lower	Upper
Resilience → Adherence	-0.030	0.046	-0.645	0.519	-0.120	0.061
Solidarity → Adherence	0.078	0.074	1.051	0.293	-0.067	0.222
Support → Adherence	-0.044	0.063	-0.706	0.480	-0.167	0.079

Note. Delta method standard errors, normal theory confidence intervals, ML estimator

The values in Figure 1 explain the dependency relationships between the five relative and determinant factors of adherence such as training, support, solidarity and resilience. In this sense, the relationship between training and adherence suggests that self-care skills are determinants of positive disposition to treatment.

Figura 1
Mediating factorial model
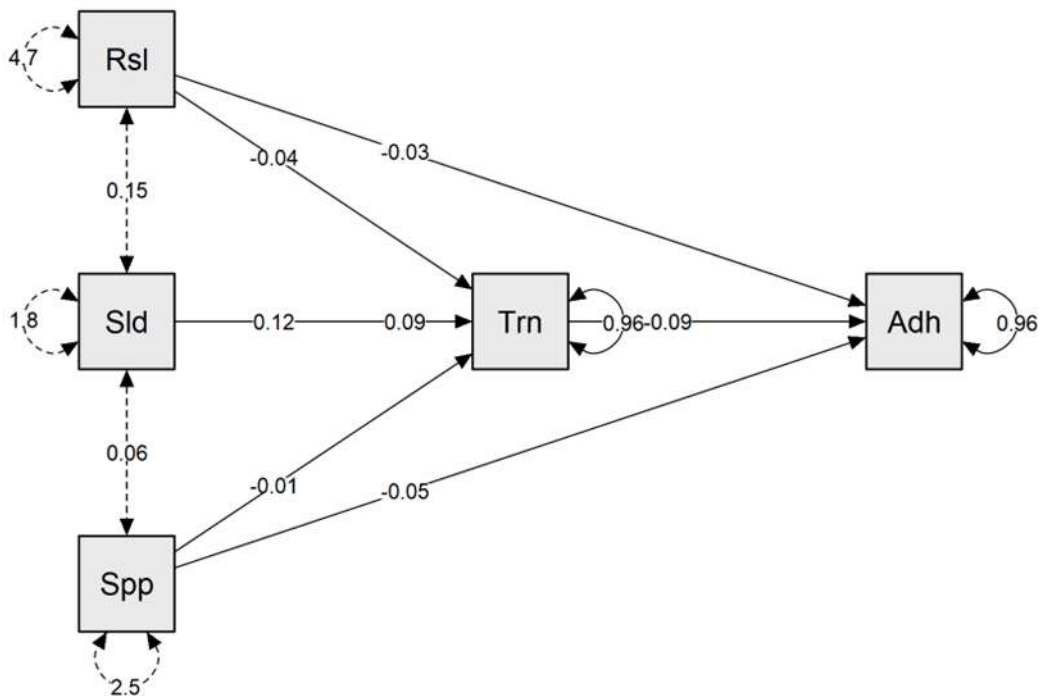
Source: *Elaborated with data study.*

The relationships regarding the adherence not only determine, in the opinion of the students surveyed, public health institutions, organizational culture, family policy and its trade union training they would be included in a model of dependency relationships; 1) would impact directly adherence to treatment and 2) influence indirectly through other personal variables such as stress, self-esteem or depression, predicting adherence.

However, the cultural values of the organization, to say Carreon et al., (2015) not only anticipate adherence to treatment when HIV carrier assumes that health care is quality, but also trigger other processes such the rules of family, union formation and partner relationships to support the rehabilitation time.

Therefore, investigation of relations climate and weather duties and commitment, innovation and satisfaction could explain a higher percentage of the variance in adherence. This is because the public health institutions generate a set of beliefs, attitudes and perceptions, if not comply with quality service, exacerbate family rules and care of the couple.

It is possible that the sample surveyed have an unfavorable view of public health institutions and this mistrust is translated into an idealization of the partner as caretaker of diseases, while indicative of concern, respect and affection toward VH infected partner.

Moreover, vocational training has not been all clear as determinant of adherence to treatment, however if health professionals implement the humanistic area of expertise, then generate greater confidence that rules and adjusted family relations couple, cultural traits of solidarity to a family member, partner or friend infected with HIV, the system of public attention.

However, changes in the period of antiretroviral therapy could revolutionize care system and reduce adherence to a minimum, since the immediate effectiveness of antiretroviral innovations could minimize engagement infected with HIV, their families, doctors, psychologists, nurses and social workers.

Conclusions

The governance of public health, unlike other social sectors and areas not only involves the participation of civil society, also it involves integration between family rules and relationships with organizational culture and training of that union they work in institutions. The governance of public health does not mean the emergence of family rules and relationships of support to encourage adherence to treatment for people infected with HIV, further comprising adjusting the social support to the values and strategies of organizations, as technological innovations around the antiretroviral treatment.

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