Implementation of motivational interview and dropout to treatment

Implementación de entrevista motivacional y deserción al tratamiento

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SUMMARY

Introduction: *Dropout is a recurring problem in psychological treatments, generally, it has been attributed to patient variables, however, these effects are probably due to the therapist skills, therefore, since the Motivational Interview is a strategy that seeks to increase treatment adherence, it is necessary to evaluate the skills of the therapists.*
Objective: *Evaluate the MI skills of therapists in training during a simulated first session situation, as well as the dropout rates related to each participant.*
Method*: 11 therapists in postgraduate training participated. An idiographic, multidimensional, and follow-up observational design was used; the attrition rates of the users attended by the therapists were obtained.*

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Results*: Therapists used MI skills on average 40 % of the recorded intervals, while the dropout rates were above 60 %.* **Conclusion***: The study findings point out the importance of training in MI skills, for a first session, in such a way that this increases the treatment adherence rates.*

Keywords: *Motivational interviewing, therapist skills, therapist training, dropout, observational methodology.*

RESUMEN

Introducción: *La deserción es un problema recurrente en los tratamientos psicológicos y generalmente se atribuye a variables de los pacientes, sin embargo, probablemente estos efectos se deban a las habilidades del terapeuta, por lo que, al ser la Entrevista Motivacional una estrategia que busca incrementar la adherencia al tratamiento es necesario evaluar las habilidades de los terapeutas.*
Objetivo*. Evaluar las habilidades de EM de terapeutas en formación, durante una situación simulada de primera sesión; así como las tasas de deserción, asociadas a cada terapeuta.*
Método: *Participaron 11 terapeutas en formación de posgrado. Se empleó un diseño observacional idiográfico, multidimensional y de seguimiento; se obtuvieron las tasas de deserción de los usuarios atendidos por los terapeutas.*
Resultados: *Los terapeutas emplearon habilidades de la EM en promedio el 40 % de los intervalos registrados, mientras que las tasas de deserción encontradas son superiores al 60 %.*
Conclusión: *Los hallazgos del estudio señalan la importancia de entrenar en habilidades de la EM,*

principalmente en una sesión inicial, para incrementar las tasas de adherencia en los tratamientos en adicciones.

Palabras clave*: Entrevista motivacional, habilidades del terapeuta, formación del terapeuta, abandono, metodología observacional.*

INTRODUCTION

Attrition to treatment is defined as the early dropout of psychological treatment, which generally occurs in early sessions, corresponding to the evaluation phase (1).

Studies have analyzed a set of specific variables of the patient and his substance consumption, such as the level of severity, the age, or the substance type (2), however, little is known about the variables related to the treatment characteristics and the implementation skills of the therapist.

One of the strategies that are frequently incorporated into treatments for substance use is the Motivational Interview [(MI), 3)], which considers as its key components: empathy, reflective listening, feedback, and fostering self-efficacy, which increases the willingness of the substance users to get involved in treatment.

In a study carried out by Salazar et al. (2009), where the impact of an induction session to treatment based on MI was evaluated, on variables such as acceptance and maintenance in treatment, perception of the role of the adolescent, and the therapist role, using a pretest-posttest design, no significant differences were found in reported motivation, since from the beginning it was high. In addition to this, 100 % of the participants agreed to enter the program, but only 62 % concluded it. This study shows a higher adherence percentage than expected in Mexico, which is around 50 %, however, it is likely that, in this case, the implementation skills of the motivational interview played an important role.

On the other hand, in a study carried out by Şimşek, Dinç and Ögel (5), in which variables associated with attrition rates were analyzed, it was reported, among others, that 49 % of participants in interventions for substance use, dropped out treatment in the second session, which highlights the need to analyze the skills

available to therapists to make a first contact, which is essential for treatment adherence.

However, the foregoing demands the constant supervision of therapists and having adequate tools to measure these skills. Therefore, various instruments have been designed to measure MI skills in the intervention, such as questionnaires, checklists, and observation code systems (e.g. 6, 7, 8).

Observation code systems have proven to be a reliable tool to measure MS skills and allow behavior to be recorded as it occurs in real environments.

One of the first works in which the impact of MI was analyzed, was carried out by Chamberlain and Ray (6), who developed an observation system to record the interactions between therapists and family members of substance users, to identify those behaviors resistant to change, finding that, those therapists who emitted a low percentage of behaviors related to MI were more likely to generate resistant behaviors in patients.

Thus, it is worth highlighting the process of social interaction implicit in the client-therapist relationship, for which the observational data have also been reported through sequential analysis of this interaction, to understand how the behavior of both members of the dyad is affecting each other during sessions.

In a study carried out by Moyers and Martin (9), based on a sequential analysis of the behaviors emitted in a patient-therapist interaction, a conditional probability of 0.173 was found between the MI skills presented by the therapist and the emission of behaviors that indicated motivation to change in patients. Similar probabilities were found in a study carried out by Jiménez and Santoyo (8), in which the interactions patient- therapists were analyzed, taking into account the emission of desirable behaviors for the intervention, among which were those related to MI and the participation or resistant behavior of the users, finding significant patterns associated only with the behaviors generating resistance by the therapist, this preceded the resistant behaviors of the users with conditioned probabilities of 0.24, at the same time that this was inhibitory of participation, with a probability of 0.26.

Studies have also pointed out the relationship

between the use of MI skills and the patient verbalizing their intention to change or staying in the proper flow of the conversation (10), highlighting that sustained speech of the patient, is related to poor treatment results (11,12).

Given the above, studies on MI have focused on modifying the verbal behavior of patients during the sessions or to impact their consumption. However, few studies analyze its importance in the first session with the user (13) and its implications for attrition.

Therefore, the objective of this study is to evaluate the MS skills of therapists in training, through a behavioral observation system, during a simulated first session situation; as well as the attrition rates of the users served by each participant.

METHODS

Participants

Eleven students recently admitted to a master's program in psychology participated, who agreed to participate in the study and signing informed consent. Of these, there were eight women and three men, with an average age of 25 years, had approximately 2 years of graduating from various degree programs in psychology in Mexico and had the experience of at least one year in the treatment of addictions.

Design

An idiographic, multidimensional, and follow-up observational design was used (14), which implies that it had only one focal subject per observation occasion, the therapists' abilities were recorded from the following dimensions: MI, behavioral therapy skills, resistance-generating behaviors, attentional behavior and other responses, where those behaviors incompatible with the intervention were considered; the participants were observed upon entering the master's program and two years later at the end of their training.

Measurement

Behavioral Observation System for Intervention Skills (SOC-HI in Spanish) (8). The system consists of 22 behavioral categories that consider the behaviors of the patient and the therapist. Among the therapist's behaviors include courtesy (CORT), open question (PAT), give reasons (Dr), agreement (ACU), empathy (Em), reflective listening (ER), promote self-efficacy (FA), provide feedback (Rc), give treatment information (DITx), Support (Ap), Suggest (Sug), Paraphrase (Para), closed question (PCT), incongruous answer (Ri), attention (ATNT), teach (Ens), Give instructions (Ins) and Other answers (OR). The validity of the instrument was given by judges and its reliability is determined through the percentage of agreement between independent observers, therefore, before data collection, observers were trained, who obtained a percentage of agreement greater than 80 %, percentage considered desirable according to the canons of Observational Methodology (15).

Procedure

Before data collection, two independent observers were trained in the use of the SOC-HI by its Spanish acronym, to guarantee the quality of the observation data, once a percentage of agreement greater than 80 % was obtained in at least three trials, data was collected; it is worth mentioning that the test trials should not be carried out on the same day, so as not to generate an adverse effect on training.

Two confederates were trained to act as patients, and they had to emit resistant behaviors at intervals of approximately one minute, to be able to observe the type of skill used by the participants and guarantee that all were exposed to identical evaluation conditions. To ensure the adequate training of the confederate, records were made only of their conduct, to verify that the response rate of both was equal. Each participant was exposed to the simulated situation for 20 minutes.

The recordings were made in cubicles of an addiction's attention center in Mexico. Each cubicle had a table and two chairs, in a space of approximately 2x3m, it was used as a Handycam to record the interaction, guaranteeing the confidentiality of the information.

The evaluation of the therapists, through the

SOC-HI, was carried out during the first week of their master's degree education, while the second evaluation was identical to the first and was carried out in the last weeks of the second year of master's degree before they graduated from the program. Once the videos of the sessions were available, the observers made partial interval records of five seconds, which demands that the behavior be recorded in each of those intervals, resulting in a record of 240 recording intervals for each participant, in each of the measurements.

To determine the attrition rate associated with each of the participants, the center managers were asked about information on the number of users attended by each one throughout two years, indicating completed cases and dropouts.

RESULTS

A total of 4 800-time intervals were recorded, of which 43.7 % of the therapist showed MI skills during the initial evaluation, a percentage that increased to 44.4 % during the post-evaluation, as can be seen in Figure 1; which also shows that behavioral therapy skills were presented around 10 % of the intervals, both in the pre-test and in the post-test; also, the attentional behavior by the therapist, that is, that only observes and listens to the patient, occurs in 29 % and 33.5 % for the pretest and posttest respectively.

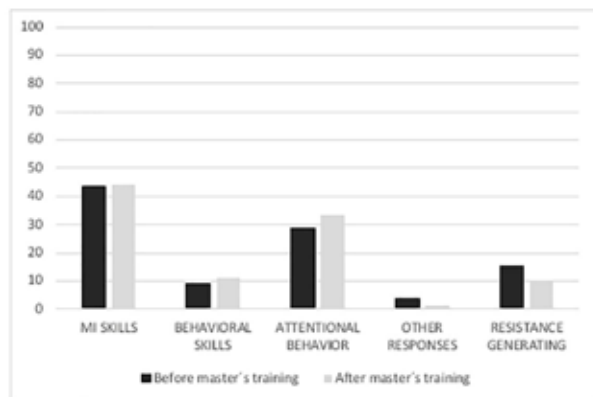Subsequently, all the behaviors included in

Figure 1. Percentage of intervals, in which MI and other skills for clinical implementation occur. Source: Prepared by the authors.

the Motivational category were disaggregated to identify the presence of specific MI skills, finding that these occur in a lower percentage, compared to attentional behavior. According to the data shown in Table 1, it is observed that upon entering the master's program, therapists used closed questions in 15 % of the intervals, while open questions were used by 11.6 %. Regarding the type of questions, it is observed that, in the post-evaluation, the use of closed questions decreases to 5.8 % of the intervals. The same table also shows that behaviors such as empathy, reflective listening, or promoting self-efficacy, which are considered central in MI, occur around 1 % of the time observed.

At the end of their training, the number of

Table 1

Specific skills of the therapist

		Before master's training	After master's training
MI skills	Courtesy	1.8	1.1
	Open question	**11.6**	**10.8**
	Give reasons	8.0	8.7
	Agreement	1.0	0.5
	Emphaty	**0.2**	**0.1**
	Reflective listening	**1.4**	**0.7**
	Promote self-efficacy	**0.7**	**1.0**
	Feedback	0.2	0.4
	Give treatment information	4.9	4.7
	Support	1.3	1.1
	Suggest	4.9	6.2
	Paraphrase	5.7	8.7
Resistance Generating	**Close question**	**15.0**	**5.8**
	Incongrous answer	0.9	1.1
	Judge	3.7	3.1
	Attention	**29.7**	**33.7**
	Other responses	4.4	1.4
Behavioral skills	Teaching	2.6	10.3
	To give instructions	1.9	0.7

Source: Prepared by the authors.

patients attended by the students over the two years was retaken, identifying the number of them that dropped out after the first session, As shown in Table 2, the dropout percentage exceeds 60 % for most of the cases; as well as an equitable distribution between the percentage of time spent in MI skills and the presence of attentional behavior of the therapist.

Table 2

Dropout and therapist skills percentage

Therapist	Number of dropouts	Total of patients attended	% Dropout	% of MI Skills	% of Attentional behavior
1	15	24	63	50.9	42.3
2	15	20	75	63.1	33.8
3	28	34	82	63.4	35.1
4	18	24	75	51.7	42.9
5	22	30	73	63.7	30.4
6	17	22	77	62.2	32.9
7	20	28	71	53.2	43.8
8	29	31	94	58.9	22.4
9	20	25	80	68.3	29.2
10	19	25	76	40.7	55.9
11	28	32	88	53.2	43.5

Source: Prepared by the authors

CONCLUSION

This study had the objective of evaluating the MI skills used by therapists in training in simulated situations of a first session, as well as the dropout rate.

The data show that the therapist uses the MI skills, around 40 % of the recorded intervals, however, it is evident that almost the rest of the time the therapists dedicate them to only listening to the patients, which may help to understand the high attrition rates, similar to that reported in previous studies (11,12), where the patient's sustained speech was related to poor results in the change in substance use behavior or relation to the user's verbal behavior during the session. This is important if we consider that skills fundamental of the MI, such as empathy, reflective listening, or feedback, occur in about 1 % of the intervals, contrasted with the high percentage of attentional behavior.

On the other hand, the use of direct observation tools, such as SOC-HI (8), allowed to carry out a molar and molecular analysis of the behavior of the therapists, which allows to analyze the implementation skills at different levels and facilitate feedback during the supervision of therapists, since observation systems, such as the one used in the present study, allow the precise identification of the type of skills that require training, such as the empathy, feedback, reflective listening and promoting self-efficacy, which Miller and Rollnick (3), point out as the key ingredients of the MI and therefore have a greater impact on the behavior of substance users. In this sense, we observe the low occurrence of the key ingredient, found in this study, it is possible to assume that, since the therapist uses them little, it has a low impact on the willingness of users to change their behavior and to treatment adherence.

Attrition is a common phenomenon in the application of psychological intervention and although, attrition rates similar to those reported in this study have been reported, most studies on attrition give priority to the variables of the patient, so it is necessary to increase the evidence, regarding the implementation elements, or variables of the therapists, that allow improving the training of therapists in the use of this strategy, which although it has been widely used, there are few works in which an operational definition of its components has been made (e.g 6, 8, 9), which would impact on the knowledge of the active ingredients that make a psychological intervention effective.

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