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Adaptation and Validation of the Semi-Structured Interview for Psychological Autopsy (SSIPA) in Spanish

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Introduction: objectives. The aim of this work was to adapt and validate into Spanish the Semi-Structured Interview for Psychological Autopsy (SSIPA).

Method. The SSIPA consists of 69 items distributed into four modules: precipitants and/or stressors, motivation, lethality, and intentionality. The original instrument was translated from Portuguese into Spanish and backtranslated by bilinguals persons. The resulting questionnaire was compared with the original and discussed by an expert panel. The adapted instrument was then applied to the relatives of 26 presumed suicide cases in Ourense (Spain) who voluntarily accepted to participate. Interviews were digitally recorded and evaluated using a decision-making algorithm by the interviewer and two independent judges blind to the results of the others.

Results. Interrater agreement was measured using Kappa statistics. Participation in the study (27.6%) was similar to that obtained in the original study in Brazil >(20%). The Kappa values obtained were statistically significant. Correlation index was considered good (k> 0.60) or very good (k> 0.80) in 15 steps including 3 out of 4 final steps of each module and the final result of the autopsy; moderate (k> 0.40) in 8 steps, 3 of them located in the motivation's module; and weak (k> 0.20) just in 2 steps.

Conclusions. The Spanish version of the SSIPA is a reliable instrument for psychological autopsy studies. Low correlation in two of the algorithm steps for decision making may be due to the lack of accuracy of the questionnaire and should be improved.

Key-words:
Psychological autopsy, suicide, Spanish, methodology

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Adaptación y Validación de la Semi-Structured Interview for Psychological Autopsy (SSIPA) en Español

Introducción: Objetivo. El objetivo de este trabajo es adaptar y validar en español la Semi-structured Interview for Psychological Autopsy (SSIPA) (Entrevista Semi- Estructurada para Autopsia Psicológica).

Métodos. El instrumento está constituido por 69 ítems divididos en 4 módulos: precipitantes y estresores, motivación, letalidad e intencionalidad. Se realizó traducción y retrotraducción del instrumento original, y discusión del cuestionario resultante por un grupo de expertos. El instrumento adaptado se ha empleado para entrevistar a los familiares que voluntariamente aceptaron participar de 26 personas fallecidas presumiblemente por suicidio en la provincia de Ourense. Las entrevistas fueron grabadas digitalmente y después valoradas por medio de un formulario de toma de decisiones de forma ciega por el entrevistador y por dos evaluadores independientes.

Resultados. El grado de concordancia entre evaluadores se midió por medio del estadístico kappa. La participación en el trabajo (27,6%) ha sido similar a la obtenida en Brasil (20%) en el estudio original. Los valores de kappa obtenidos son estadísticamente significativos. Se considera el grado de correlación como bueno (k> 0,60) o muy bueno (k> 0,80) en 15 pasos incluyendo 3 de los 4 pasos finales de cada módulo y el resultado final de la autopsia; moderado (k> 0,40) en 8 pasos, de los que 3 se localizan en el módulo de motivación y débil (k> 0,20) en tan sólo 2 pasos.

Conclusión. La versión española de la SSIPA es un instrumento fiable para la realización de autopsia psicológica. La baja concordancia en dos de los pasos del algoritmo de toma de decisiones puede deberse a falta de precisión del cuestionario y debe mejorarse.

Palabras-clave:
Autopsia psicológica, suicidio, Español, metodología

INTRODUCTION

In accordance with the definition of E. Shneidman,[1] psychological autopsy is the retrospective reconstruction of the life of a deceased person carried out to obtain a better understanding of their death. Currently, we can state that this is a procedure developed to obtain retrospective knowledge regarding the mental status of an individual in the moments prior to their death and thus evaluate the victim's role in their own death. The method includes interviews with relatives and other close persons to discover the physical, psychological and social circumstances of the deceased, a review of all the reports available and the integration of all the information from the different sources for a subsequent discussion of the case among the mental health professionals and experts in postmortem studies.[2]

Ebert[3] indicated four applications of the technique:

1. To established the method of death in doubtful cases (in the death certificates, there are 3 important features: cause [instrument or physical agent used to cause the death], mechanism [pathophysiological conditions that lead to death] add method [according to the "NASH" classification: natural, accidental, suicide and homicide]).
2. Discover why a death occurs at a certain point in time.
3. Obtain information that makes it possible to prevent suicides by means of identifying the at risk population.
4. Finally, the method per se has been shown to be therapeutic for the relatives and friends of the deceased.

One of the main problems of the psychological autopsy studies is the absence of standardized and consistent procedures. This is a retrospective evaluation in which the study subject is no longer present and both the interviewers and interviewed may introduce biases in the information available on the case.

Few instruments are found in the literature to conduct a psychological autopsy. Most of those found are very general guides,[1, 3- 4] so that the quality of the work depends more on the skills, experience and sensitivity of the interviewer than the methodological aspects of the instrument used.

Shneidman,[1] for example, recommends investigating the following questions: sociodemographic data, details of the death (method and other pertinent details); short summary of the background of the deceased (relationship with parents, siblings, married couple, children, medical diseases, medical treatments, psychotherapy, suicidal attempts), history of deaths of other family members (suicide, cancer, other diseases, etc.); description of the personality and style of life of the deceased, typical patterns of response of the victim to stress, emotional problems and periods of episodes, recent stress events (days-months), role of alcohol or drugs both in their style of life and in their death, nature of the interpersonal relationships of the victim, fantasies, dreams, premonitions or fears related with death, accident or suicide, change in habits before death (hobbies, significant other, work, etc.), evaluation of intention (rescue strategies, for example), evaluation of lethality (likelihood of causing death with the method used), and finally, reaction of informants.

This type of research proposes a series of methodological problems, summarized in the following.

In the first place and inherent to a retrospective study of these characteristics is the questionable reliability of the information provided by relatives and friends and the reliability of the altered memories due to the mourning situation, and their stability and time.[5] These aspects are at least partially resolved by using more than one informant for each case and adding information from other sources (suicide notes, report of the forensic physician, etc.).

Second, there is the question of reliability of the methodology used. Each interviewer has a different professional and intellectual background of experience that may lead him/her to consider different aspects of the information obtained. Based on the importance given to certain factors, the " construction" of the case may be altered, which interferes with the diagnoses. An interesting example of this is the work coordinated by Shneidman[6] on the Arthur case. In his work, 8 experts on suicide evaluated the same case, based on an extensive autobiographical text (a farewell letter) from the deceased and on the interviews conducted with the relatives, therapists, significant others and friends. As can be seen in this work, even professionals of known prestige find it difficult to obtain a common result on the diagnosis of the case and the reasons for the death, although they use the same information as a starting point.

To avoid this problem, a semi-structured interview for the development of psychological autopsy was recently designed. It is called *Semi-structured Interview for Psychological Autopsy* (SSIPA).[7] This instrument has the advantage of providing a flexible script for the interviews, without loosing relevant information in the "construction" of the case and it also has a decision-making algorithm that allows for establishing a series of conclusions on the death in a standardized way.

OBJECTIVES

The main purpose of our work has been to adapt and validate the SSIPA into Spanish.

For the adaptation, a process of translation and backtranslation was performed by bilingual persons with subsequent discussion of the resulting instrument by an experts group.

For the validation, the degree of concordance in the different steps of the decision-making algorithm of the original instrument was obtained using the Kappa statistics. These results were then compared with those obtained in the original work.

MATERIAL AND METHODS

Instrument

The original instrument that we aimed to validate is called *Semi-structured Interview for Psychological Autopsy*, *SSIPA* (Entrevista semi-estructurada para la autopsia psicológica). After its application, its elevated interrater reliability[7] and its utility not only in the study of individual cases but also in the study of the factors contributing to suicide were verified.

The instrument is made up of 69 items divided into 4 modules: precipitates and stressors, motivation, lethality and intentionality.

In the first module (evaluation of the precipitant causes and/or stressor) after the initial question (did anything happen before the death that could be related with what happened?), there are 2 other items formed by closed questions with dichotomic response alternatives (yes or no).

In the second module (evaluation of motivation) after the general question (why did the suicide happened?), there are 32 items with dichotomic alternatives (yes or no) organized into 4 sections: psychosocial problems, environmental or non-immediate life events:; symptoms of poor functioning; personality traits; fax associated to the family history.

In the third module (evaluation of the lethality) after the introduction question (how did the deaths occur?), there are 5 items, 3 of which are multiple response and 2 that attempt to specify the method of death.

Finally, in the fourth module (evaluation of intentionality), after the initiation question (what steps were taken to produce the death?), there are 2 closed questions, again with dichotomic alternatives (yes or no) that can be grouped into 2 subject blocks: desire to die and planning of the action.

To the already existing questions, others could be added during the interview as considered necessary to clarify any response.

Finally, the information obtained in the four modules was analyzed using a Decision-Making Form (DMF), following an algorithm that represented the clinical reasoning of each evaluator. The response to each one of these steps on the form is that which we compared in order to evaluate the degree of concordance among the raters.

Adaptation of the instrument

In a first phase of the original version of the instrument in Portuguese, this was translated into Spanish by a philologist specialized in Portuguese but who was a native Spanish speaker. This first version was backtranslated into Portuguese by a native speaking Portuguese philologist. The resulting translation was compared with the original one, correcting it when pertinent for discrepancies by a group of professionals experienced in suicide, or who had knowledge of the literature and spoke both languages. This methodology is the universally accepted one for the adaptation of tests in different languages.[8]

After, the author of the original instrument was asked to give a course to the participants in the work, during which the use of the interview was discussed item by item, thus clarifying (bilingual for Spanish and Portuguese) the doubts that could arise both on the instrument and on the technical aspects that should be considered by the forensics and by the psychiatrist and resident physicians who carried out the interviews.

The final instrument and decision-making algorithm were subsequently formatted and reviewed by the interviewers, remaining prepared for its use.

Participants

In the interviews that allowed us to validate the instrument, those relatives and friends of the victims of suicides that had occurred in our province between October 2005 in August 2008 who so desired participated voluntarily.

Participation in the work (27.6%) was similar to that obtained in Brazil (20%) in the original study.[7]

As occurs in the Brazilian sample in our population, the problem was not so much because the families of the deceased refused to participate but rather because they were not contacted. As we will see, this contact in our setting essentially depends on the first step (the contact of the

forensic physician with the family), which makes it necessary to collaborate with a very large team of persons.

Procedures

At the time of removal of the corpse, the forensic physician on duty should contact the relatives and/or known acquaintances about the possibility of voluntarily participating in the study and request their authorization to provide us with their address and telephone.

One week later, telephonic contact was made, during which the purpose of the interview was explained again and an appointment was made for the interview at the pertinent time and place (normally, the interviews were made in the home, although the possibility of doing so in the medical office was offered). A previous informed consent was obtained before the interview, following the script proposed by the Semi-structured Interview for Psychological Autopsy (SSIPA). The interviewers were, in every case, psychiatrists, or residents in psychiatry, all with experience in the management of mourning situations.

The interviews were recorded with a *Philips digital voicetracer 7670*, and were then transcribed into the *Windows Media Player* format. These recordings were then evaluated following the Decision-Making Form (DMF) proposed for the original instrument by three different raters (the one present in the interview and two others), and this was done independently with the raters being blind to the results of the other investigators. The independent raters were also psychiatrists or residents interested in the subject and trained in the management of the instrument through the course with the previously mentioned author.

Processing and analysis of the data

The interrater concordance grade was measured with the Kappa statistics in order to allow for comparison with the original study.[7] To do so, we used the EPIDAT 3.1. statistical program.[9] The aim was to observe the grade of agreement among the three raters - the interviewer and each one of the two raters - in regards to the 25 steps on the Decision-Making Form, which in turn, represents the information obtained through the semi-structured interview.

Description of the Work Plan

The sample collection began in October 2005. A meeting was held at the end of September with all the participants to go over the work methodology and to resolve any doubts that had arisen.

From this point on, the forensic physicians of the province who wanted to participate contacted the families

of the deceased suicide victims requesting their permission to provide us with the contact data. These data were transmitted by telephone or e-mail to the work coordinator who, based on the availability of each one, assigned the interviews to the different collaborators. Approximately one week later, telephone contact was established with the families. In this initial contact, the team members expressed their condolences, presented their excuses for causing any problems to the mourners at such a delicate time and explain the reason for the work and how it was being carried out, again requesting the family collaboration. In most of the cases, the family understood our motivations and were willing to collaborate. This first contact was followed by the sending of a letter in which written informed consent was requested and the reasons for the investigation were again explained.

Finally, the interview was scheduled. This was performed in every case with a delay of one to three months after the death in order to avoid, as the literature indicates, the initial moments of "shock" that caused considerable interferences in the information provided and also to avoid the passage of time that unfailingly reduces the clearness of the recall and contributes to the "reconstruction" of what had happened in order to make it more acceptable for the survivor.

As we have previously mentioned, the interviews were recorded for their subsequent processing, requesting permission from the families to make the recording. The interviews recorded were then evaluated, following the Decision-Making Form blindly by two independent raters as well as the interviewer. These data were then statistically processed to evaluate the inter-rater concordance.

Ethical aspects of the work

The methodological characteristics of our work (form in which the contact, consent, times, etc. is established) are, from the ethical point of view, similar to those proposed as optimums in the literature and reflected in the bibliographic review conducted by Werlang.[10]

The study was methodologically adjusted to the characteristics of beneficence and non-maleficence and respect for autonomy described by Beskow et al,[11] especially in that regarding the first contact and training of the interviewers.

The project was approved by the Ethics Committee of Galicia on 29 June 2005.

RESULTS

Interviews corresponding to 26 cases of suspected suicide death were carried out. The number of informants in each interview varied. We accepted cases in which there was

Table 1	Sociodemographic variables and method usedo		
		N	%
Gender			
Male		11	42.3
Female		15	57.7
Age (years)			
15 – 35		4	15.4
36 – 65		10	38.5
65 – 100		12	46.2
Civil status			
Single		9	34.6
Married		7	26.9
Divorced		7	26.9
Widow(er)		3	11.5
Method			
Poisoning		4	15.4
Immersion		2	7.7
Hanging		15	57.7
Firearm		1	3.8
Jumping		2	7.7
Electrocution		1	3.8
Occupational status			
Student		2	7.7
Active worker		4	15.4
On sick leave		1	3.8
Unemployed		5	19.2
Retired		11	42.3

only one informant, as long as there was a clinical history or information provided by the forensic physician. This occurred in 11 cases. The remaining interviews were conducted with 2 (N=12) or 3 informants (3 cases). Their duration ranged from 28 to 143 minutes. The sociodemographic characteristics of the sample are summarized in the following (Table 1).

The concordance index between the 3 raters for each one of the 24 steps of the 4 modules of the SSIPA can be observed in the following table (Table 2), where in addition to showing the Kappa statistical value, a 95% confidence interval and significance level (p) is represented.

The Kappa value could be established for the 25-steps of the Decision-Making Form. The results in all of them were statistically significant.

Considering the interpretation of the Kappa value proposed by Landis and Koch,[12] we can conclude that the

interrater concordance grade is:

- very good (k> 0.80) in 2 of them, steps 1 and 4 of the intentionality module;
- good (k> 0.60) in 13 others, including 3 of the 4 final steps of each module and the final results of the autopsy;
- moderate (k> 0.40) in 8 steps, 3 of which are located in the motivation module
- weak (k> 0.20) in only 2 steps, step 6 of the motivation module and step 5 of the intentionality module.

DISCUSSION

As we show in table 2, the level of agreement is good in 3 of the 4 final steps of each module and in the final results of the autopsy. These results are similar to those of the original study of Werlang,[10, 7] in which the level of agreement is classified as good or very good in most of the steps (Table 3).

The lower concordance in some of the steps in our work may be due to several factors. In the first place, in the original study, concordance was evaluated in several steps by means of percentages and in all of them using 2 x 2 comparisons. This hinders the evaluation of the level of agreement produce by chance. In this sense, the Kappa statistics is more reliable.

On the other hand, it is logical to think that the team that designed the instrument will give more homogenous responses when interpreting the meaning of the questionnaire. We believe that the results of our work support the use of the SSIPA by investigators outside of the original team, under conditions closer to those which may be for their use by psychiatrists or forensic physicians non-specialized in the subject.

There are 2 steps in which the interrater agreement level is weak:

- *Step 6 of the motivation module*; this corresponds with the question "would there be other reasons that would better explain the events?"
During this module, questions are being made about the psychosocial, environmental problems or events that could have led to the decision to commit suicide, as well as on the existence of the symptoms of poor biopsychosocial functioning or personality that could explain the action. These questions proposed in other steps would exclude in their extension practically any other known reason. Raising the question of whether there are others seems to be inviting the rater to guess if these reasons are sufficient or not and if there could be another alternative hypothesis (for example a first psychotic episode in a person without backgrounds that

Table 2	Interrater concordance			
Modules	Steps	Kappa	Confidence I. (95%)	P=
Precipitants and/or Stressors	Step 1	K = 0.7393	0.4800 0.9976	0.0000
	Step 2	K = 0.6162	0.4080 0.8235	0.0000
	Step 3	K = 0.4383	0.2175 0.6578	0.0000
	Step 4	**K = 0.6917**	**0.4302 0.9521**	**0.0000**
Motivation	Step 1	K = 0.4690	0.1997 0.7372	0.0000
	Step 2	K = 0.6032	0.3694 0.8357	0.0000
	Step 3	K = 0.7118	0.4803 0.9422	0.0000
	Step 4	K = 0.5377	0.3090 0.7653	0.0000
	Step 5	K = 0.4419	0.2009 0.6817	0.0000
	Step 6	K = 0.3947	0.1048 0.6829	0.0000
	Step 7	**K = 0.7913**	**0.5390 1.0000**	**0.0000**
Lethality	Step 1	K = 0.5726	-0.7319 1.0000	0.0000
	Step 2	K = 0.7365	-0.8759 1.0000	0.0000
	Step 3	K = 0.7365	-0.8759 1.0000	0.0000
	Step 4	K = 0.5726	-0.7319 1.0000	0.0000
	Step 5	**K = 0.7365**	**-0.8759 1.0000**	**0.0000**
Intentionality	Step 1	K = 0.8556	0.6393 1.0000	0.0000
	Step 2	K = 0.6594	0.4533 0.8646	0.0000
	Step 3	K = 0.6939	0.4596 0.9271	0.0000
	Step 4	K = 0.8659	0.7116 1.0198	0.0000
	Step 5	K = 0.3516	0.1096 0.5923	0.0000
	Step 6	K = 0.4484	0.1913 0.7043	0.0000
	Step 7	K = 0.6763	0.4214 0.9300	0.0000
	Step 8	**K = 0.5221**	**0.2723 0.7706**	**0.0000**
Final Result		**K = 0.6825**	**0.3101 1.0839**	**0.0000**

would better explain the case and who would not have shown previous symptoms of malfunctioning). We believe that one of the purposes of the instrument is to avoid, as far as possible, the "construction" of the case based on idiosyncratic experience of each professional and which would make it necessary to eliminate or redefine the item. Something similar occurred with step 3 of the precipitants module: "Were there other factors that could have also affected the decision?" which, in our work, obtains a moderate concordance, but in the original obtained low Kappa values in two of the crosses. We believe that this item should be modified for analogue reasons.

- *Step 5 of the intentionality module*; in this, the question is "Was the place, time, day and method chosen suggestive of consuming the autodestructive acts and the only option available?".

It is likely that the sense of the question is not clearly explained, which we understand to refer to whether the victim took steps to avoid rescue. That is, if the place and time chosen clearly indicate to us that the victim hide his/her intention to achieve this suicidal objective, avoiding the possibility of backing out or being rescued. The problem herein again is in the annotation "... as the only option," which we believe introduces an unnecessary evaluation on the mental condition of the victim.

Finally, we should point out that although a high grade of interrater agreement was obtained, we must take into account several limitations in our work. On the one hand, the good results obtained could be related with the voluntary participation, a possibility already indicated by Werlang,[7]

Table 3	Werland interrater concordance results[7]				
Modules	**Steps**	**I–E**	**I–J1***	**I–J2***	**J1–J2***	**I–J1–J2***
Precipitants and/or Stressors	Step 1	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
	Step 2	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
	Step 3	100.0 %	95.2 %	28.6 %	K=0.39; p=0.5170	K=0.2466; p=0.9792
	Step 4	**100.0 %**	**100.0 %**	**100.0 %**	**100.0 %**	**100.0 %**
Motivation	Step 1	K=0.87; p<0.001	K=0.87; p<0.001	K=0.28; p=0.061	K=0.21; p=0.175	K=0.41; p<0.0001
	Step 2	100.0 %	95.2 %	81.7 %	K=0.71; p=0.001	K=0.65; p<0.0001
	Step 3	K=1; p<0.001	K=1; p<0.001	K=0.35; p=0.028	K=0.35; p=0.0028	K=0.51; p<0.0001
	Step 4	K=1; p<0.001	95.2 %	K=0.4; p=0.02	66.6 %	K=0.40; p<0.0001
	Step 5	K=1; p<0.001	K=1; p<0.001	K=0.53; p<0.001	K=0.53; p<0.001	K=0.63; p<0.0001
	Step 6	K=1; p<0.001	K=1; p<0.001	K=0.62; p=0.002	K=0.62; p=0.002	K=0.71; p<0.0001
	Step 7	**K=1; p<0.001**	**K=1; p<0.001**	**K=0.62; p=0.002**	**K=0.62; p=0.002**	**K=0.71; p<0.0001**
Lethality	Step 1	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
	Step 2	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
	Step 3	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
	Step 4	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
	Step 5	**100.0 %**	**100.0 %**	**100.0 %**	**100.0 %**	**100.0 %**
Intentionality	Step 1	K=1; p<0.001	K=1; p<0.001	K=0.50; p=0.008	K=0.50; p=0.008	K=0.61; p<0.0001
	Step 2	K=1; p<0.001	K=1; p<0.001	K=0.32; p=0.018	K=0.32; p=0.018	K=0.57; p<0.0001
	Step 3	K=1; p<0.001	K=0.92; p<0.0001	K=0.51; p<0.0001	K=0.50; p<0.0001	K=0.63; p<0.0001
	Step 4	K=1; p<0.001	K=1; p<0.001	K=0.43; p=0.003	K=0.43; p=0.003	K=0.70; p<0.0001
	Step 5	100.0 %	100.0 %	81.0 %	81.0 %	K=0.55; p<0.0001
	Step 6	100.0 %	95.0 %	52.4 %	K=0.17; p=0.1440	K=0.27; p=0.0025
	Step 7	K=1; p<0.001	K=1; p<0.001	K=0.53; p<0.001	K=0.53; p<0.001	K=0.63; p<0.0001
	Step 8	**100.0 %**	**100.0 %**	**81.0 %**	**81.0 %**	**K=0.62; p<0.0001**
I=interviewer; A=research assistant; J1=first judge; J2=second judge						

which would favor the communication of information by those interviewed and thus a greater likelihood of obtaining precise responses to each one of the questions proposed in the 4 modules (precipitous and/or stressors, motivation, lethality and intentionality). However, modification of the conditions of participation if this were made obligatory, for example in the legal setting, would also introduce biases in the amount and quality of the information obtained and thus in the results of the interview.

On the other hand, there are limitations inherent to Kappa statistics per se, given that its value is affected not only by the prevalence of the trait studied but also by the number of categories that the raters may choose among the responses: the larger the number of categories, the more difficult it is to make a correct classification of the subjects observed and low Kappa values.

To finish, it should be indicated that although the fundamental purpose of the work was to validate the instrument, we have made a complementary qualitative analyses of the profiles obtained in the autopsies, which has given us surprises in regards to that established in the literature. We believe that the performance of the psychological autopsy studies is required for the design of effective prevention strategies, since the reality of the suicidal deaths analyzed has little to do with the characteristics of the suicidal attempts that we see in the emergency service and on those in which the prevention programs often try to have an effect.

CONCLUSIONS

1. The adaptation of the SSIPA to Spanish has been possible and no important differences between the original and backtranslation were found.
2. The participation in the work (27.6%) was similar to that obtained in Brazil (20%) in the original study.
3. The values obtained in the Kappa index are statistically significant. The grade of correlation is considered to be:
   - very good (k> 0.80) in 2 of them, steps 1 and 4 of the intentionality module;
   - good (k> 0.60) in 13 others, including 3 of the 4 final steps of each module and the final results of the autopsy;
   - moderate (k> 0.40) in 8 steps, 3 of which are located in the motivation module
   - weak (k> 0.20) in only 2 steps, step 6 of the motivation module and step 5 of the intentionality module.

4. The lower concordance in *Step 6 of the motivation module* and Step 5 of the intentionality module may be related with the lack of exactness of the questionnaire, it being possible to improve these items to obtain a higher agreement grade.

ACKNOWLEDGEMENTS

The team wants to thank the participants for their collaboration in the study in such difficult times.

This work has obtained the XXIV Award of the Cabaleiro Goas de la Fundación Galenus Auriensis.

Declaration on conflicts of interest: none

Distribution of investigator load: AGC coordinated the work, performed 9 interviews, evaluated along with FTD 26 cases and wrote the final version of the article. MJR performed 9 autopsies and evaluated through FTD the 26 cases, collaborating in the writing. RT performed 8 autopsies and evaluated 15 cases, performing a first statistical analysis and presentation of the results in form of the DEA. IGL had the idea for the work and performed the bibliographic review and discussion of the article. MC Alonso evaluated 11 cases through FTD. BW is the author of the SSIPA and trained the team in its use.

JJ is the coordinator of the forensic team and together with MCPA, AL and JB contacted the families and requested their participation in the study, providing us with their data to set up the interviews.

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