Physicians and Nurses: Knowledge of clinical management of sexual aggression in children based on the sexual aggression survivors manual in Puerto Rico

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Objective: **To evaluate the knowledge of health professionals about clinical the management of sexual aggression in children based on the sexual aggression survivors manual in Puerto Rico.**

Method: **The study population was composed of 150 health professionals (physicians and nurses). For the collected data, a self-administered questionnaire was used. The response rate was 88.7% (n=133). Descriptive statistics, crosstabs tables and Chi-Square were used for the data analysis.**

Results: **75.9% of the participants were unaware of physical indicators related to sexual aggression in children. Nevertheless, 66.2% of the participants recognized emotional indicators of sexual aggression. 82.7% of the participants think sexual aggression victims should be referred to the physician and nurse, followed by 20.4% that indicated the social worker. 94.7% of the participants were unaware of the correct steps to carry out in a crisis intervention with sexual aggression victims and 91.7% recognized that all information topics should be offered during the intervention.**

Conclusion: **The results of this study confirm the necessity of intervention strategies to increase the knowledge of the participants about the correct clinical management of sexual aggression survivors.**

Key words: Protocol, Victims, Health professionals, Indicators, Violence, Abuse.

The incidence of sexual aggression cases in Puerto Rico is high. 23,779 new children were referred during the year 2000 to the Children Protection Services of the Family Department of Puerto Rico (1). Estimates in Puerto Rico suggest a sexual aggression rate for children of 5 to 6 for 1000 habitants. Of these, approximately 62% are victims of direct assault that involves abusive sexual contact (1).

The Center of Help for Rape Victims [CAVV, Spanish acronyms) is a program ascribed to the Puerto Rico Department of Health. This center offers advocacy, counseling, orientation and community education services, among others. In 1976, CAVV developed a manual directed to work with sexual aggression survivors in the clinical setting (2). This manual included a protocol directed to physician, nurses and health professional that require knowledge about the adequate clinical procedures when attended a sexual aggression survivor. Specifically, health professionals, with emphasis in physicians, should possess the knowledge and skills to attend the sexual aggression victims in the clinical setting. Also, the health professionals should know about sexual violence dynamics, in children and adults, as well as, the legislation that applies in these situations. Lastly, the health professional should be knowledgeable about the community and government resources available to sexual aggression survivors (2).

The protocol includes three sections. The first section includes general aspects related to sexual aggression (physical and psychological effects of aggression, factors associated to the sexual aggression event, the most frequent reactions of the sexual aggression survivors, among others). The second section includes some psychosocial intervention descriptions to manage sexual aggression survivors. This includes a model to assist the children victims of sexual abuse and trauma. The third section includes information pertaining to the clinical and forensic evaluation. This section describes how to carry out the health and forensic record, what information

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should be included in the medical record, descriptions of the medical exam, laboratories, sexual aggression evidence sample techniques and follow up information. Lastly, the protocol emphasizes the legal aspects of the sexual aggression information requirements, survivors' rights and re-victimization prevention information. It is the health professional's responsibility, specifically physicians, to detect and to manage sexual aggression in children, as well as, to refer them correctly to other mental health providers to assess and treat psycho-social effects of the aggression (3). The study objective was to evaluate the knowledge of clinical management of sexual aggression in children based on the sexual aggression survivors manual in Puerto Rico.

Methods

The study population was composed of one hundred-fifty health professionals (physicians and nurses) that work in outpatient clinics, known as Metroclinics. The Metroclinics are localized in San Juan, Puerto Rico. San Juan is the health region in Puerto Rico that reports the most cases of sexual aggression in the children population (1). The physicians (27.8%, n=37) and nurses (72.1%, n=96) in the study offer services in the emergency room. This setting is usually where the victims receive the first intervention after the aggression. The response rate was 88.7% (one hundred thirty-three participants).

For the collected data, a self-administered questionnaire was utilized. The questionnaire included 19 questions. The first part included 12 questions about the management of sexual abuse in children based on the CAVV's manual. This included questions about: physical and emotional indicators, referral procedures, crisis intervention procedures, among others. The second part included 6 questions about socio-demographic and professional characteristics. Lastly, descriptive statistics and crosstabs tables were used for the data analysis.

Results

The majority (70.7%) was female and 29.3% were male. Specifically, 81.3% females are nurses and 56.8% males are physicians (Table 1). The median of age was 43 years (sd=8.9) with a range that fluctuated between 23-66 years. 45.9% physicians and 38.5% nurses were between 41-50 years (Table 1).

Among the participants, 72.0% had not assisted any cases of sexual aggression in the last month previous to the study [70.3%-physicians, 72.9%- nurses]. Nevertheless, 21.1% had assisted between 1-2 cases and only 6.8% had assisted three or more cases in the last month [10.8%-physicians, 5.2%-nurses] (table 1). Approximately, 74.0% of the participants did not suspect of any cases of sexual aggression and only 17.3% suspected between 1-2 cases. Specifically, 62.2% physicians and 78.1% nurses did not suspect any cases of sexual aggression, respectively. Only 8.1% physicians and 9.4% nurses suspected in three cases or more (Table 1).

Table 1. Socio-demographic and Professional Profile

Variable	Physicians		Nurses		Total	
	n	%	n	%	n	%
Gender						
Female	16	43.2	78	81.3	94	70.7
Male	21	56.8	18	18.8	39	29.3
Age (years)						
20-30	1	2.7	10	10.4	12	8.3
31-40	9	24.3	31	32.3	43	30.0
41-50	17	45.9	37	38.5	56	40.6
51-60	8	21.6	16	16.7	24	18.1
Non response	2	5.0	2	2.1	4	3.0
Numbers of sexual aggression cases (monthly)						
0	26	70.3	70	72.9	96	72.0
1-2	7	18.9	21	21.9	28	21.1
≥3	4	10.8	5	5.2	9	6.8
Numbers of sexual aggression suspected cases (monthly)						
0	23	62.2	75	78.1	98	73.7
1-2	11	29.7	12	12.5	23	17.3
≥3	3	8.1	9	9.4	12	9.0
Management of Sexual Aggression Training						
Yes	10	27.0	31	32.3	41	30.8
No	27	73.0	65	67.7	92	69.2
Numbers of training related to management sexual aggression						
One	4	44.4	14	51.9	19	50.0
Two	3	33.3	11	40.9	15	39.5
Three or more	2	22.2	2	7.4	4	10.5

69.2% of the participants had not participated in training related to the clinical management of sexual aggression in children. Only 30.8% have been trained in this specific area [27.0%-physicians, 32.3%-nurses] (Table 1). Of these, 50.0% had attended only one training about sexual abuse in children [44.4%-physicians, 51.9%-nurses] (Table 1).

75.9% of the participants ignored all physical indicators related with sexual aggression in children [81.1%-physicians, 74.0%-nurses; X^2=0.74, p=0.39] and only 24.1% recognized all physical indicators [18.9%-physicians, 26.0%-nurses; X^2=0.74, p=0.39]. Specifically, 91.9% of physicians identified the pain, rash and pruritus as physical indicators of sexual aggression. Other indicators identified were sexual transmitted diseases (89.2%), infection of mouth and rectum (86.5%), frequent urine infections (81.1%) and early sexual activity (81.1%). On the other hand, nurses identified the sexual transmitted diseases (86.3%) as physical indicator of the sexual aggression, followed pain, pruritus and recurrent genital inflammation (75.8%).

However, 66.2% of the participants recognize all emotional indicators of the sexual aggression. Specifically, 70.3% physicians and 65.0% nurses identified correctly all emotional indicators (X^2=0.39, p=0.53). For the physicians, the most frequent indicators identified was the consistent fear revealed by the children (91.9%), followed by aggressive behavior, dream disorders and inappropriate expressions of affection (89.2%, respectively). In the nurse staff, the most frequent indicators identified was inappropriate expression of affection (85.4%), followed by consistent fear observed in the children (84.4%).

82.7% of the participants think sexual aggression victims should be referred to the physician and nurse [94.6%-physicians, 78.1%-nurses; X^2=6.82, p=0.008], follow by 20.4% that indicated the social worker [5.4%-physicians, 21.9%-nurses]. We asked participants where they should refer sexual aggression victims (≤ 18 years); 60.2% indicated the Health Department and CAVV [54.1%-physicians, 62.5%-nurses], followed by 39.8% that indicated the Family Department [45.9%-physicians, 37.5%-nurses; X^2=0.79, p=0.37]. In addition, participants were asked where they should refer children they suspect may be victims of sexual aggression; 71.4% indicated Health Department and/or CAVV [75.1%-physicians, 69.8%-nurses], follow by 28.6% indicated Family Department [24.3%-physicians, 30.2%-nurses; X^2=0.45, p=0.50].

On the other hand, 94.7% of the participants unaware the correct steps to carry out in a crisis intervention with sexual aggression victims [97.1%-physicians, 96.8%-nurses; X^2=0.02, p=0.89]. Nevertheless, 98.5% of the participants [97.3%-physicians, 99.0%-nurses; X^2=0.47, p=0.48] acknowledged the rights, confidentiality, privacy and safety guarantee of the sexual aggression victims. Also, 78.4% of physicians and 74.0% of nurses recognized the importance of conducting the intervention in a private room (X^2=0.28, p=0.59).

91.7% of the participants recognized that all information topics should be offered during the intervention. Specifically, the participants identified the importance of explaining the specific procedures to the victims during the intervention and the available services in the community (94.5%). The physicians and nurses identified the corporal surface and genital organs as the most important areas that should be included in the sexual aggression physical exam. Specifically,100% physicians and 88.5% nurses identified correctly the corporal areas that should be included in the sexual aggression diagnosis (***X^2=4.62, p=0.03***). 95.8% of the participants recognized the minimal analytics required in the sexual aggression diagnosis [100%-physicians, 98.0%-nurses; X^2=1.17, p=0.56]. Also, 86.5% of the participants think that all health professionals should be certified by the government to be able to assist sexual aggression victims [91.9%-physicians, 84.4%-nurses; X^2=1.29, p=0.25] in the clinical setting.

Discussion

Most of the participants had not participated in a training course related to the clinical and psycho-social management of sexual aggression victims and they were not certified to carry out clinical interventions with this population. According to the protocol, it is indicated that all health professionals should be certified to possess the knowledge and the skills necessary to evaluate sexual aggression victims. In this study the participants did meet the criteria established in the Department of Health's protocol. This suggests little promotion of the protocol (established in 1976) among the health professionals, as well as, the necessity to establish the certification as mandatory on the island.

The protocol is available to health professionals, through the CAVV and constitutes a reference framework to work with the sexual aggression victims in the clinical setting. Also, it includes the correct way to refer the victim to psycho-social services in the community. In the literature, it has been demonstrated that structure protocol implantation increases the information gathered by the sexual aggression victims during intervention (4). This protocol includes information about general aspects of the sexual aggression in children. Also, it includes a psycho-social intervention description, as well as, a

medical and forensic evaluation. Additionally the document contains information related with the legal aspects of sexual aggression.

Inadequate knowledge of the management of sexual aggression victims by the participants has been observed, based on the CAVV's manual. Although there are many studies about the consequences of the sexual abuse (5-7); we did not find any literature that correlated the knowledge based on a sexual abuse handling protocol.

The sexual abuse in children was diagnosed based on patients' clinical interview, the physical evaluation and the analytical test. Sexual abuse can be suspected through the correct identification of the physical and emotional indicators. Although a normal physical exam is the most common in sexual abuse victims (8), according to the protocol, the physical indicators in sexual abuse cases are: frequent urine infections, mouth and rectum infections, frequent throat pain, sexual transmitted diseases, pain, pruritus and recurrent genital infections, stomach pain, extreme fatigue and early sexual activity. Also, according to the protocol, the emotional indicators are: drug and alcohol abuse, sexual behavior, variable emotional state, constant fear, indifference, regressive behavior, dream disorders, inappropriate expression of affection, among others. The health professional is responsible for identifying the existence of any physical and/or emotional indicators in the children.

The majority of the participants unaware the physical indicators related with sexual abuse. Nevertheless, the participants recognized more emotional indicators than physical indicators. It should be noted, physician has significantly more knowledge on corporal areas that should be including in the diagnosis than nurses. This important because the sexual abuse diagnosis in children is based on a physical evaluation (8). For this reason, the physical evaluation should be complete but if the health professional unaware the indicators, the evaluation would be considered inadequate. An inadequate evaluation may have a negative impact on the victims. The inadequate management and referral of the victim puts their health and well-being at risk. Inclusive there is the possibility of re-victimization.

Also, the lack of knowledge about the physical indicators produces inadequate clinical management considering the possibility that the health professional does not provide an adequate setting for the intervention. According to the literature, providing a setting where an appropriate contact between the health professional and the victim is promoted, would result in a familiar and safe setting for the intervention (9). This would allow a victim the necessary support to verbalize the event, minimize the insecurity and fears, among others. On the contrary, if the privacy does not exist, the physical, emotional and psychological health of the victim would be negatively impacted. The victim would feel confused, threatened and fearful, interfering hence with the effective communication among professional and patient.

The participants also identified incorrectly the referral process of the sexual abuse victims. The proportion of physicians that miss identified referrals was significantly higher than nurses. Sexual aggression is a social problem that comes accompanied by many problems. In this case many agencies related with the sexual abuse problem do not conceptualize the human being as comprehensive entity. The health professionals have the responsibility to evaluate the immediate needs of the victims, as well as, the coordination of the support services. The responsibilities include three specific areas: (a) emergency medical services coordination and follow up, (b) orientation and counseling to the sexual aggression survivors and introduce the victim to social support networks and (c) coordination and advocacy with related agencies.

The participants, in general, indicated the Department of Health and/or CAVV as the principal agencies to refer a sexual aggression survivor. According to the protocol, the principal agency is the Family Department (2). This agency has the indispensable resources to handle the confidentiality of each sexual abuse case. Also, this agency has the legal responsibility to provide protection to the victim. The lack of knowledge in the referral process in the study population would delay the adequate intervention of the victim and delay the rehabilitation process. The same results were observed in the case of suspected sexual abuse. This patient should be referred to the Family Department which has the expertise in crisis intervention. Also, it has the legal authority to avoid the re-victimization assuming abused children's legal custody, as well as, any children in danger of being sexual abuse.

The majority of the participants did not recognize the correct steps to carry out in crisis intervention. According to the protocol the correct steps are: (a) guarantee safety and support to the victim, (b) to explore the feeling in the victim, (c) explore the sexual aggression event, (d) clarify the sexual aggression concept to the victim, (e) explain the medical and legal procedures and (f) offer support to the victim and availability for the following up. Altering these steps could interfere with the adequate management of the victim. Possibly the victim would express disorientation, shame, and guilt feelings, among others. This impedes the victim to take their control in their life, delaying their reincorporation to the general community. It is important, as part of the crisis intervention, that the health professional must introduce himself and explains

his or her functional role of health professionals that participate in the intervention. A child that has been sexually abused has lost his trust in the adults that are in fact the people that should protect them.

In conclusion, when the health professional does not posses the adequate knowledge, like in this study, it could lead to a deficient management of this type of patient and consequently to bring negative consequences to the victim (10-11). The results of this study confirm the necessity of intervention strategies to increase the knowledge of the participants about the correct clinical management of the sexual aggression survivors.

Resumen

Objetivo: Evaluar el conocimiento sobre el manejo clínico de agresión sexual en niños/as basado en el manual de sobrevivientes de agresión sexual en Puerto Rico. *Método:* La población de estudio fue compuesta por 150 profesionales de la salud (médicos y enfermeras/os). Para la recopilación de datos, un cuestionario auto-administrable fue utilizado. La tasa de respuesta fue de 88.7% (n=133). Estadísticas descriptivas y análisis de tablas cruzadas (Ji-cuadrada) fueron utilizados para el análisis de los datos. *Resultados:* 75.9% de los participantes desconocen todos los indicadores físicos relacionados con la agresión sexual en niños/as. Sin embargo, 66.2% de los participantes reconocen todos los indicadores emocionales de una agresión sexual. 82.7% de los participantes piensan que las víctimas de agresión sexual deben ser referidas al médico y enfermera/o, seguido por 20.4% que indicó al trabajador/a social. 94.7% de los participantes desconocen los pasos correctos para llevar a cabo una intervención en crisis con víctimas de agresión sexual y 91.7% reconocen toda la información que debe ser ofrecida durante una intervención. *Conclusión:* Los resultados de este estudio confirma la necesidad de estrategias de intervención para aumentar el conocimiento de los participantes acerca de manejo clínico correcto de sobrevivientes de agresiones sexuales.

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