The Demographic Profile of the Female Assailant: A Ten-Year Background Review of Female Perpetrators Committing Abuse Seen at the Philippine General Hospital Child Protection Unit from January 2008 to December 2018

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ABSTRACT

Objectives. There is limited information on the demographics of female perpetrators of child abuse hence its profile was described utilizing the records collected at the University of the Philippines – Philippine General Hospital Child Protection Unit from January 2008-December 2018.

Methods. A retrospective review of the electronic records using the Child Protection Management Information System (CPMIS) database was done using descriptive and inferential analyses. Total enumeration was done for the descriptive analysis and categorical data was analyzed using frequencies and percentages. Inferential analysis using chi-squared analysis or Fisher's exact probability test was used using a minimum sample size computed using power analysis

Results. A total of 983 female perpetrators were reported, mostly belonging to the age group of 25-34 years old (23%). They were more frequently a close relative to the victim (47.3%). Half (50%) of the perpetrators had history of substance abuse, and 65.5% witnessed family violence. Criminal history (99.8%) and occupation (46.7%) were mostly unknown. The types of abuse committed were mostly physical (36%) followed by sexual abuse (34.9%). Inferential analysis of the data suggested that the demographic variables associated with physical abuse were age group, relationship, and history of substance abuse. Meanwhile, age group, relationship, and occupation were associated with sexual abuse.

Conclusion. Although we see a greater number of male perpetrators, it cannot be denied that female perpetrators can also cause harm to the vulnerable population. It is alarming to note that majority of them are close relatives to the victim. Data from the study can help raise awareness and increase vigilance on possible at-risk population.

Keywords: female perpetrator, child abuse, demographic profile

INTRODUCTION

Children are vulnerable to various forms of violence including physical, sexual, psychological, emotional and neglect that happen mostly in their own homes.¹ In 2015, global estimates state that one in two children, or around one billion children in the age group of 2 to 17 years has suffered violence.² Furthermore, data from the World Health Organization state that 25% of all adults have experienced being physically abused as a child while one in five women and one in thirteen men stated that they have been sexually abused as a child.³ Violence in any form can bring about effects in the child's physical and mental health and well-being.³

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In the Philippines, an increasing trend of reported violence against children was noted; hence, the creation of the Child Protection Unit (CPU) of the University of the Philippines - Philippine General Hospital (UP-PGH) in 1997 and the establishment of the Child Protection Network (CPN) in 2002. CPU-PGH offers a venue for interviewing, examining and providing medical and psychosocial management for abused children consulting in PGH. Moreover, the CPN is a non-government organization created to increase accessibility of services to all children in the Philippines and Asia.⁴ The CPN devised key strategies with the purpose of ending violence against children. These include initiation of parenting programs, integration of life skills and personal safety lessons in the school curriculum, creation of multi-sectoral response plan on violence against children, conduct of relevant research, passage of laws and policies and strengthening of local councils for the protection of children.5

CPU-PGH receives around 1400 cases annually.⁶ In 2019, majority of consults were of sexual abuse at 74.39% while 4.65% was from physical abuse.⁶ Data from 2008-2018 showed that 81% of perpetrators were male, 10% were female and 9% were unknown.

The general objective of the study was to describe the demographic profile of female perpetrators from the records collected at the UP-PGH Child Protection Unit from January 2008-December 2018. More specifically, it aimed to determine the prevalence, demographics, and type of abuse committed by the female perpetrators. The demographic variables described are the following: age group, relationship to the victim, history of substance abuse, history of violence, criminal history, and occupation. This study also determined the demographic variables of the female perpetrators that are associated with physical abuse and sexual abuse. Lastly, the demographic profile of female and male perpetrators within the same time period were compared.

METHODS

A retrospective review of the electronic records of the Child Protection Unit through their database, Child Protection Management Information System (CPMIS), was done. The principal investigator collected the data from the CPMIS database. All data were compiled in an electronic file where data analysis was done.

This study underwent review by the University of the Philippines Manila Research Ethics Board (UPMREB) and complied with the 2017 National Ethical Guidelines for Health and Health-Related Research (NEGHHR) and the Data Privacy Act of 2012 guidelines.

The study was divided into two parts. First, a descriptive study of all childhood abuse cases committed by female perpetrators were identified. The data was analyzed via total enumeration of samples and no subject was excluded from this study. The age group of the perpetrator, their relationship to the victim and occupation was determined. The perpetrator's history of substance abuse, violence and criminal history was reviewed. The type of abuse, such as physical, sexual, neglect or any combination were noted. The study evaluated the following demographic variables: age group, relationship to the victim, history of substance abuse, history of violence, criminal history, and occupation (Appendix 1). The second part was an inferential study between the demographic variables versus physical and sexual abuse, the two most common type of violence against children. A complete case analysis was done where it was assumed that incomplete data were missing completely at random and were excluded in the analysis. The database was reviewed to identify the demographic profile of male perpetrators for comparison to female perpetrators.

Before statistical analysis, completeness and accuracy of data was ensured by reviewing for duplicates and missing data. Data encoders were also trained to ensure reliability, and pre-tested data collection forms were utilized. Data on female perpetrators was first analyzed using descriptive statistics. Categorical data was described using frequencies and percentages. Inferential analysis was used to determine association between the demographic data and type of abuse and analyze the differences between male and female perpetrators. For each categorical variable chi-squared analysis or Fisher's exact probability test was used to compare sexual versus non-sexual, physical versus non-physical abuse and males versus females. Non-sexual and non-physical abuse was defined as any type of abuse that was seen in the rest of the population that was not sexual nor physical. A p-value of less than 0.05 was considered significant for all tests. Data was analyzed using GraphPad Prism 8.0 (GraphPad software, La Jolla California, USA) statistical software.

RESULTS

A total of 983 female perpetrators were recorded and majority were from the age group of 25-34 years at 23% followed by 60 years and above at 22%, 18 to 24 years at 18%, 35-44 years at 15% and below 18 years at 10% (Figure 1).

Majority of the female perpetrators were close relatives of the victims at 47.3% (n=465), followed neighbor at 6.8% (n=67) and acquaintance at 5.7% (n=56) (Figure 2). Among the close relatives, 72.9% is the victim's mother, followed by the maternal aunt (7.5%) and paternal aunt (6.2%) (Figure 3).

Among the female perpetrators, 50% has reported history of substance abuse, 18.8% of which are alcohol, followed by drugs at 14.6%. The remaining 50% of the population had unknown history of substance abuse. Majority of the perpetrators also witnessed family violence at 65.5%. However, for criminal history, it was most unknown (99.8%) to the victims who reported the abuse (Figures 4 to 6).

The occupation of the female perpetrators was mostly unknown to the victims (46.7%), while 17.8% were unemployed. Around 16% had elementary occupations which

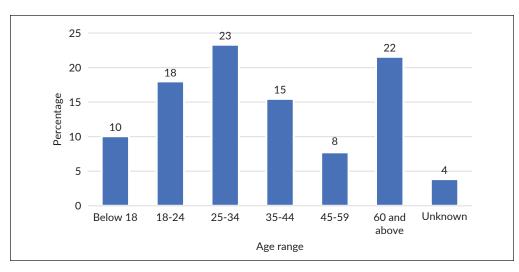


Figure 1. Age of distribution of female perpetrators seen from January 2008 to December 2019.

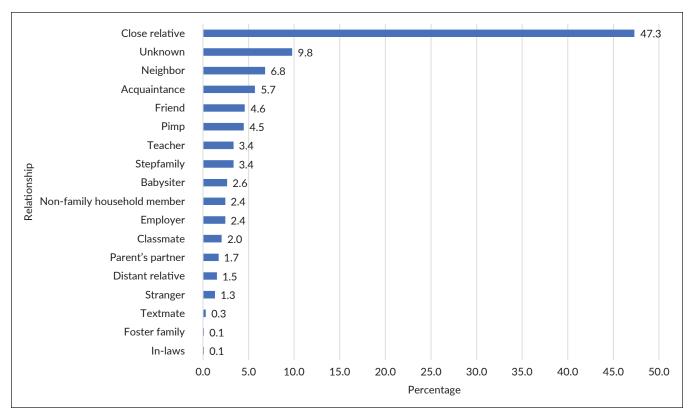


Figure 2. Distribution of relationship of victims to perpetrator.

include vendor, pimp, laundrywoman, household help, street sweeper, sales lady, and factory worker (Figure 7). Students comprised 5.3% of the female perpetrators, followed by service and sales workers at 4.8 which included babysitter, caregiver, masseuse, security guard, manicurist, and beautician. On the other hand, professionals accounted for 3.7% of female perpetrators which included teacher, nurse, dancer, and talent actress. Businessmen were bar, store or bakery owners at 1.4%. Tied at 1.4% are craft and related trades workers who were food vendors, cook, waitress and electricians. Bar managers and fast-food managers were at 1.2%. Plant and machine operators and assemblers were tricycle drivers at 1%. Less than 1% were clerical support workers or call center agents (0.7%) and technicians and associate professionals who were 2D echo and IT technicians (0.3%).

Looking at the type of abuse committed by the female perpetrators, 36% were physical abuse followed by sexual

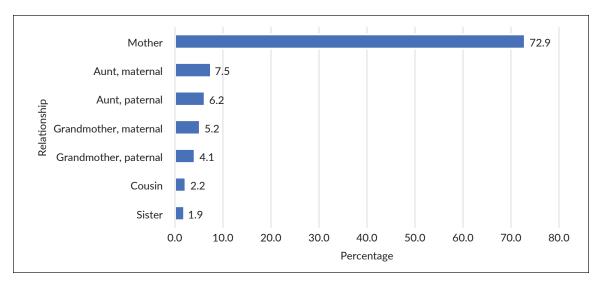


Figure 3. Distribution of female perpetrators who are close relatives to the victim.

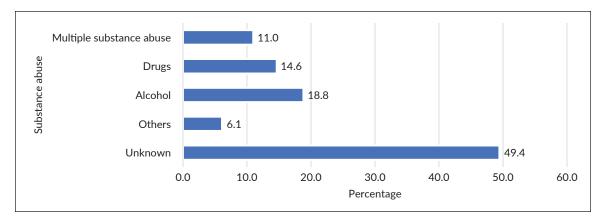


Figure 4. Distribution of female perpetrators by history of substance abuse.

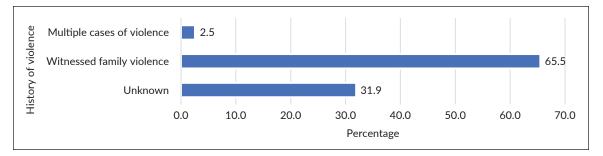


Figure 5. Distribution of female perpetrators by history of violence.

abuse at 34.9%. Ranked third at 13.3% were other types of abuse, this included pending cases, sibling of abused child and unable to validate abuse (Figure 8).

Inferential analysis using the demographic variables was done versus physical and sexual abuse. Excluded in the analysis are the data that were labelled as unknown (Figures 1, 2, 4 to 7). The demographic variables of female perpetrators associated with physical abuse were: age group (P<0.0001), relationship (P<0.0001) and history of substance

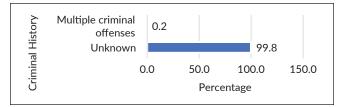


Figure 6. Distribution of female perpetrators by criminal history.

abuse (P<0.0447) (Table 1). Based on the data, the female perpetrators who committed physical abuse mostly belonged to the age groups of 35–44 and 45–49 years. On the other hand, female perpetrators below 18 years of age were more frequently involved in non-physical abuse cases. Under the relationship variable, female perpetrators who were members

of the stepfamily and teachers more frequently committed physical abuse; while distant relative, acquaintance, classmate, friend, pimp and stranger most frequently committed nonphysical abuse cases. Lastly, those who have history of substance abuse such as alcohol, drugs or multiple substance more frequently committed non-physical abuse cases.

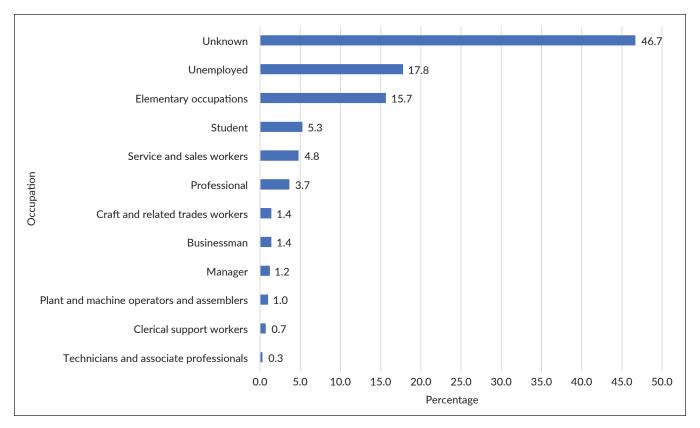


Figure 7. Percentage distribution of occupation of female perpetrators.

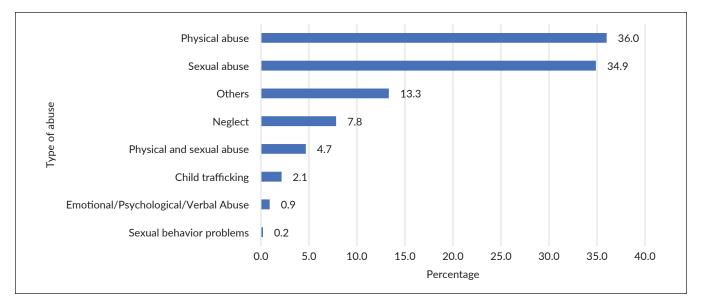


Figure 8. Percent distribution of type of abuse committed by female perpetrators.

The demographic variables of female perpetrators associated with sexual abuse are age group (P<0.0001), relationship (P<0.0001) and occupation (P<0.0001) (Table 2). Female perpetrators from the age group of 25-34, 35-44, 45-49 and above 60 years more frequently committed non-sexual abuse cases. Meanwhile for the relationship variable, distant relative, acquaintance, friend, and pimp

more frequently committed sexual abuse cases. In addition, most of the female perpetrators who are involved in sexual abuse cases were employed.

Comparing the demographic variables of male and female perpetrators, age group (P<0.0001), relationship (P<0.0001), history of substance abuse (P<0.0001), and occupation (P 0.0009) were associated with gender (Table

 Table 1. Demographic
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Table 2. Demographic	variables	of	female	perpetrators
associated with	n sexual abu	lse		

associated with physical abuse					
Variable	Physical abuse		Non-pl abu		P-value
	No.	%	No.	%	
Age group (yrs.)					<0.0001
Below 18	11	8	126	92	
18-24	50	28	127	72	
25-34	101	44	128	56	
35-44	78	51	74	49	
45-59	39	51	37	49	
60 and above	70	33	142	67	
Relationship					<0.0001
Close relative	214	46	251	54	
Distant relative	3	20	12	80	
In-laws	0	0	1	100	
Stepfamily	25	76	8	24	
Foster family	1	100	0	0	
Parent's partner	8	47	9	53	
Acquaintance	1	2	55	98	
Babysitter	15	58	11	42	
Classmate	0	0	20	100	
Employer	8	33	16	67	
Friend	0	0	45	100	
Neighbor	14	21	53	79	
Non-family household member	6	25	18	75	
Pimp	0	0	44	100	
Stranger	0	0	13	100	
Teacher	31	94	2	6	
Text mate/ Chatmate	0	0	3	100	
Substance abuse					0.0447
Alcohol	57	31	128	69	
Drugs	34	24	110	76	
Multiple substance abuse	35	32	73	68	
Other	26	43	34	57	
History of violence					0.1498
Witnessed family violence	282	44	362	56	
Multiple cases of violence	15	60	10	40	
Criminal history					NA
Multiple criminal	1	50	1	50	
history					
Occupation					0.1243
Employed	119	40	178	60	
Unemployed	83	47	92	53	

associated with sexual abuse					
Variable	Sexual abuse		Non-s abu		P-value
	No.	%	No.	%	-
Age group (yrs.)					<0.0001
Below 18	71	52	66	48	
18-24	64	36	113	64	
25-34	67	29	162	71	
35-44	42	28	110	72	
45-59	20	26	56	74	
60 and above	59	28	153	72	
Relationship					< 0.0001
Close relative	63	14	402	86	
Distant relative	11	73	4	27	
In-laws	1	100	0	0	
Stepfamily	5	15	28	85	
Foster family	0	0	1	100	
Parent's partner	7	41	10	59	
Acquaintance	39	70	17	30	
Babysitter	4	15	22	85	
Classmate	20	100	0	0	
Employer	9	38	15	63	
Friend	38	84	7	16	
Neighbor	43	64	24	36	
Non-family household member	15	63	9	38	
Pimp	38	86	6	14	
Stranger	7	54	6	46	
Teacher	0	0	33	100	
Text mate/ Chatmate	3	100	0	0	
Substance abuse					0.0951
Alcohol	89	48	96	52	
Drugs	67	47	77	53	
Multiple substance abuse	47	44	61	56	
Other	18	30	42	70	
History of violence					0.1492
Witnessed family violence	287	45	357	55	
Multiple cases of violence	7	28	18	72	
Criminal history					NA
Multiple criminal	1	50	1	50	
history					
Occupation					<0.0001
Employed	117	39	180	61	
Unemployed	37	21	138	79	

3). The data shows that there are around 8.6 times more male perpetrators than female perpetrators in the same time period and thus data was skewed to favor the male gender. It is notable that similar to the data on the female assailants, most of the male perpetrators were also close relatives of the victims, alcohol as the main substance abuse, had witnessed family violence and was more frequently employed.

 Table 3. Comparison of the demographic profile of the female perpetrator with male perpetrators within the same time period

Female Male					
Variable					- P-value
	No.	%	No.	%	
Age group (yrs.)		_			<0.0001
Below 18	99	5	1770	95	
18-24	177	10	1619	90	
25-34	229	14	1400	86	
35-44	152	11	1212	89	
45-59	76	8	892	92	
60 and above	212	15	1204	85	
Relationship					<0.0001
Close relative	465	19	2040	81	
Distant relative	15	8	167	92	
In-laws	1	2	61	98	
Stepfamily	33	8	360	92	
Foster family	1	7	13	93	
Parent's partner	17	8	208	92	
Acquaintance	56	6	875	94	
Babysitter	26	84	5	16	
Classmate	20	14	126	86	
Employer	24	26	67	74	
Friend	45	11	353	89	
Neighbor	67	4	1595	96	
Non-family household	24	10	212	90	
member					
Partner	0	0	851	100	
Pimp	44	54	38	46	
Stranger	13	3	458	97	
Teacher	33	45	40	55	
Text mate/ Chatmate	3	3	85	97	
Substance abuse					< 0.0001
Alcohol	185	5	3787	95	
Drugs	144	8	1720	92	
Multiple substance	108	6	1700	94	
abuse					
Other	60	6	915	94	
History of violence					0.2513
Witnessed family	644	9	6718	91	
violence					
Multiple cases of	25	7	339	93	
violence					
Criminal history					NA
Multiple criminal	2	2	123	98	
history					
Occupation					0.0009
Employed	297	9	3026	91	
Unemployed	175	12	1269	88	
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DISCUSSION

The ten-year demographic profile of the female perpetrator from 2008-2018 described a total of 983 assailants, mostly belonging to the age group of 25-34 years old, followed by the age 60 years and above. They are also more frequently a close relative to the victim, more specifically the victim's mother. Half of the perpetrators has history of substance abuse, more commonly alcohol, followed by drugs, while the remaining half was unknown. Furthermore, majority witnessed family violence in the past; while criminal history was mostly unknown to the reporter. For occupations, majority were also unknown to the victims, and those who have known status were mostly unemployed. However, for those employed assailants, they mostly have elementary occupations including vendor, pimp, laundry woman, household help, street sweeper, sales lady, and factory worker. The type of abuse committed by the female perpetrators are mostly physical followed by sexual abuse.

Inferential analysis of the data suggested that the demographic variables associated with physical abuse are age group, relationship, and history of substance abuse. Meanwhile, age group, relationship and occupation are associated with sexual abuse. Lastly, comparing the male and female perpetrators for the past 10 years, it is notable that there are around 8.6 times more male perpetrators than female, the demographic profile is also similar, such as relationship to the victim history of substance abuse and occupation.

A perpetrator is defined as a person who caused or allowed maltreatment of a child.⁷ A review on the perpetrators of child abuse done by Santhosh in 2016 noted that any human being is capable of abuse, but risk factors include age: on the average at late 20s to early 30s, circumstances during abuse such as the victim being alone with the perpetrator, personality type including lack of self-confidence and reduced impulse control, and history of childhood abuse.⁸

Studies on female perpetrators are very limited, since they are usually labeled as the victim. A study in Canada in 2017 on female assailants in child sexual abuse cases reported that majority of victims were of female gender with age approximately 10 years old and were mostly a member of the family. Also, there was proportionally more male complainants and a notably faster criminal proceedings in female accused cases.⁹ Long-term effects of abuse by female perpetrators include substance abuse, self-injury, suicide, depression, rage, strained relationships with women, selfconcept and identity issues, and discomfort with sex.¹⁰

A study done in the US in 2016 compared the female and male perpetrators of child sexual abuse.¹¹ A mixedmethods analysis was done which compared experiences between female and male perpetrators currently incarcerated for sexual abuse via a validated self-administered survey form. The study included a sample of 51 female and male assailants with victims below 13 years of age. Findings show that the average age at the time of abuse was 30.6 years old, and two out of three participants had the highest educational attainment of high school. In addition, the female assailants were more likely than men to be the parent or guardian of the victim, although data also suggest that the women were also more likely than men to have no relationship to the victim. The women were also equally likely to have both female and male victims while men more likely have female victims. Substance abuse disorders were more likely seen in male perpetrators based on quantitative data, but no noted difference was seen between male and female perpetrators based on qualitative data on their representations of substance abuse. In terms of criteria met for severe mental illness and child sexual abuse, it was seen that there was a higher proportion in women than in men. It was also found that abuse by an intimate partner is a critical contributor to women's perpetration. Moreover, 70.6% of the female perpetrators while 64% of male perpetrators experienced child sexual abuse. However, there was no significant differences between women and men in terms of adverse experiences in childhood.¹¹

The National Baseline Study on Violence against Children done in the Philippines in 2016 interviewed 3,866 children and youth 13-24 years old from all over the country.¹² Results of their prevalence survey show that three in five children suffered from physical and psychological abuse while one in five children reported sexual abuse.¹² Corporal punishment at home was seen to be the most common form of violence through spanking, hair pulling and pinching of ears (54.44%) followed by more severe forms of punishment including slapping, kicking, smothering, tying, drowning, and burning at 30.3%.¹² However, no information was gathered regarding the perpetrators of abuse. In addition, there is no locally published information on the demographics of the female perpetrators of child abuse. Conduct of this research is thus timely and may aid in increasing awareness, support, and intervention to the children at risk.

Limitations of the study

The study was limited to female perpetrators seen at the UP-PGH CPU from 2008 to 2018. The information retrieved from the electronic record were those reported by the victims and relatives and thus may not have the desired information hence may affect the completeness of the records and inadequate data analysis. Ideally, data should come directly from the perpetrators however, they are not always available due to medico-legal reasons. In addition, the data came from only one institution.

CONCLUSIONS

Although we see a greater number of male perpetrators, it cannot be denied that female perpetrators can also cause harm to the vulnerable population. It is alarming to note that majority of them are close relatives to the victim. Data from the study can help raise awareness and increase vigilance on possible at-risk population.

Recommendations

It is thus recommended that analysis of each case be thoroughly reviewed separately, to ensure completeness of the data. Multi-center studies can also be done to increase population size and consequently improve statistical power. The demographic profile should also be updated every five to ten years to monitor and establish prevalence. Child abuse remains an alarming social problem that requires an integrated strategy of information dissemination, surveillance, and active participation of government and healthcare personnel. Physicians and other health care personnel should always be attentive whenever patients are seen in the clinics.

The lack of accurate data and inferential analysis on female perpetrators of child abuse warrants the conduct of similar well-controlled empirical research to gain better insights on the characteristics and dynamics linked to these female offenders. While further research is necessary to establish predictive risk factors associated with female assailants, the findings of this study can help raise awareness and increase vigilance on possible at-risk population.

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Statement of Authorship

All authors participated in the collection of data and analysis and approved the final version submitted.

Author Disclosure

All the authors declared no conflicts of interest.

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REFERENCES

- World Health Organization: Factsheet on Violence Against Children. [Internet] 2018 [cited 2019 April]. Available from: https://www. who.int/mediacentre/factsheets/violence-against-children/en/
- Hillis S, Mercy J, Amobi A, Kress H. Global Prevalence of Past-year Violence Against Children: A Systematic Review and Minimum Estimates.Pediatrics.2016 March [cited 2019 April];137(3):e20154079. Available from: https://pediatrics.aappublications.org/content/137/ 3/e20154079
- 3. World Health Organization [Internet], Factsheet on Child Maltreatment. 2016 [cited 2019 April]. Available from: https://www. who.int/en/news-room/fact-sheets/detail/child-maltreatment
- 4. Child Protection Network [Internet] 2019 [cited 2019 April]. Available from: https://www.childprotectionnetwork.org/
- Child Protection Network Foundation. Annual Report: Protecting the Child from the Many Faces of Abuse. [Internet] 2017 [cited 2019 April]. Available from: https://www.childprotectionnetwork.org/wpcontent/uploads/2019/03/CPN-Annual-Report-2017.pdf
- Child Protection Network Foundation. Annual Report: Protecting the Child from the Many Faces of Abuse. [Internet] 2019 [cited 2021 September]. Available from: https://www.childprotectionnetwork. org/wp-content/uploads/2021/04/CPN-Annual-Report-2019.pdf

- Child Welfare Information Gateway of the U.S. Department of Health and Human Services [Internet], Perpetrators of Child Abuse and Neglect. 2019 [cited 2019 April]. Available from: https://www. childwelfare.gov/topics/can/
- Santhosh, KR. A Review on the Perpetrators of Child Abuse. Review of Social Sciences [Internet]. 2016 [cited 2019 April]; 01(03), 45-52. Available from: https://www.nlm.nih.gov/bsd/uniform_requirements. html
- Weinsheimer CC, Woiwod DM, Coburn PI, Connolly DA. The unusual suspects: Female versus male accused in child sexual abuse cases. Child Abuse and Neglect [Internet]. 2017 [cited 2019 April]; 72: 446-55. Available from: https://www.sciencedirect.com/science/ article/abs/pii/S0145213417303320
- Denov, MS. The Long-Term Effects of Child Sexual Abuse by Female Perpetrators: A Qualitative Study of Male and Female Victims. Journal of Interpersonal Violence [Internet]. 2004 [cited 2019 April]; 19 (10) 1137-56. Available from https://journals.sagepub.com/ doi/abs/10.1177/0886260504269093
- Burgess-Proctor, A, Comartin, EB, Kubiak SP. Comparing Femaleand Male-Perpetrated Child Sexual Abuse: A Mixed Methods Analysis. Journal of Child Sexual Abuse [Internet]. 2017 [cited 2019 April]; 26 (6) 657-76. Available from: https://www.researchgate. net/publication/319280504_Comparing_Female-_and_Male-Perpetrated_Child_Sexual_Abuse_A_Mixed-Methods_Analysis
- Unicef. National Baseline Study on Violence against Children: Philippines. [Internet] 2016 [cited 2021 September]. Available from https://www.unicef.org/philippines/media/491/file/National%20 Baseline%20Study%20on%20Violence%20Against%20Children%20 in%20the%20Philippines:%20Results%20(executive%20summary). pdf
- International Labour Organization [Internet] International Standard Classification of Occupations. 2012 [cited 2019 April]. Available from: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_172572.pdf

APPENDIX

Appendix Table 1. Demographic variables of the female perpetrators

Variable	Description
Relationship to victim	Close relatives: maternal and paternal aunt, cousin, maternal and paternal grandmother, mother and sister Distant relatives In-laws Stepfamily: stepmother, and stepsister Foster family Parent's partner Babysitter Coworker Employer Friend Neighbor Non-family household member Pimp Stranger Teacher Text mate/chatmate Acquaintance
Occupation (International Standard Classification of Occupations as published by the United Nations in 2008 ¹³)	Managers Professionals: science and engineering, health, teachers, business and administration, information and communications technology and legal, social and cultural professionals Technicians and associate professionals Clerical support workers: general and keyboard and customer services Service and sales workers: personal service, sales, personal care and protective services workers Skilled agricultural, forestry, and fishery workers: market oriented agricultural, forestry, fishery and hunting workers Craft and related trades workers: building, metal, machinery, handicraft, electrical, food processing, wood working, garment, and other related trades workers Plant and machine operators, and assemblers: stationary plant and machine operators, assemblers, drivers and mobile plant operators Elementary occupations: cleaners and helpers, agricultural, forestry, fishery, mining, construction, manufacturing and transport laborers, food preparation assistants, street and related sales and service workers Student Unemployed Businessmen