Gaining traction by action

- activating accountability in protecting the rights of children:

Evaluation of preparedness in government services against child sexual abuse and exploitation in Botswana

June 2015

Sexual violence against children occurs everywhere irrespective of location, race, religion, culture, and social class.

Stepping Stones International (SSI) is a non-governmental, non-profit organization that unlocks the potential of orphaned and vulnerable adolescents (aged 12–18+) to a world of opportunities. SSI is the first program of its kind in Botswana focused exclusively on adolescent development. SSI uses a holistic approach by nurturing the mental, physical, and social well-being of our youth to create realizable opportunities for them to become self-sufficient. Through the leadership program, our youth gain life skills, leadership, entrepreneurship and community mobilization competencies to assist them in the attainment of post-secondary education or full-time employment. Our team possesses knowledge and expertise in the fields of adolescent care and support services. Visit www.steppingstonesintl.org

Gaining Traction by Action is a Child Protection Project under Stepping Stones International (SSI) funded by the European Union (EU); grant contract # 2013/335-583.The project aims at activating Botswana to be accountable in protecting the rights of children from sexual abuse and exploitation.

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ACRONYMS

ACWRC	African Charter on the Rights and Welfare of the Child
AIDS	Acquired Immuno-Deficiency Syndrome
ANOVA	Analysis of Variance
ARV	Antiretroviral Therapy
AU	African Union
CSA	Child Sexual Abuse
CSAE	Child Sexual Abuse and Exploitation
CPS	Child Sexual Abuse and Exploitation Preparedness Scorecard
CQI	Culture of Quality Improvement
UNCRC	United Nations Convention on the Rights of a Child
EPA	Exploratory Factor Analysis
EU	European Union
HIV	Human Immuno-Deficiency Virus
GOB	Government of Botswana
KMO	Kaiser-Meyer-Olkin
MoDJS	Ministry of Defense, Justice, and Security
MoESD	Ministry of Education and Skills Development
MoH	Ministry of Health
MoLG&RD	Ministry of Local Government and Rural Development
SSI	Stepping Stones International
UNICEF	United Nations Children's Fund
UN	United Nations
UNDP	United Nations Development Program
USAID	United States Agency for International Development
WHO	World Health Organization

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EXECUTIVE SUMMARY

INTRODUCTION

Child sexual abuse and exploitation (CSAE) remains a pervasive legal, health, social, and developmental problem in the world. Sexual violence against children occurs everywhere irrespective of location, race, religion, culture, and social class. It occurs in settings in which children live and play: their homes, schools, streets, and communities. Despite the magnitude and impact of sexual violence on children and youth; government, civil societies, and non-government organizations rarely evaluate their services. In addition, most institutions serving children and youth lack reliable data because their system structures and processes are weak and fragmented.

This study examined preparedness of key government ministries that provide services to survivors of sexual abuse and exploitation in selected areas of Botswana. The primary research question was: "Are government ministries mandated to serve survivors of sexual abuse and exploitation fully prepared to carry our mandated services?"

METHODS

The study was a cross-sectional survey of CSAE service providers, which collected a snapshot of information related to preparedness of CSAE services. The study randomly selected service providers from ministries of Defense, Justice, and Security; Education and Skills Development; Health; and Local Government and Rural Development. The study was conducted in Artesia (Kgatleng District), Bobonong, Goodhope, and Francistown.

The sample included magistrates, court clerks, secondary school teachers, guidance counselors, healthcare workers (doctors, registered nurses, midwives, and pharmaceutical and laboratory staff), social welfare officers, and community development officers. Respondents were interviewed using a face-to-face standardized questionnaire. The Health Research Development Committee (HRDC) Institutional Review Board conducted an ethical review and cleared the research.

SUMMARY OF STUDY FINDINGS

A total of 322 eligible CSAE service providers consented and took part in the study. Females made up 55.9% of the sample; and 81.1% were between 22–44 years old. The mean length of service in their professions was 11.9 years, ± 8.3, 95% CI: 11.9, 12.8. The mean length of service in selected duty stations was 4.4 years, ±4.1 years, 95% 3.9, 4.8.

The study evaluated child sexual abuse and exploitation (CSAE) preparedness in the selected government ministries. The study asked service providers to rank their CSAE services based on a three-point Likert scale. The CSAE Preparedness Scale ranged 0 to 0.5 which stood for the government departments are not prepared to offer CSAE services, 0.6 – 2.5 meant the department were sub-optimally prepared, and 2.6 – 3.0 stood for fully prepared. The study validated respondents' ratings of optimal services.

Most of the respondents believe CSAE services in selected areas were sub-optimal based on the CSAE Preparedness Scorecard. The mean CSAE preparedness index score (CPS) was M_{CPS}= *1.2(±0.59, 95% CI: 1.10, 1.23)*. One-way analysis of variance (ANOVA) comparing mean index scores of the four primary ministries varied significantly, $p<0.001$. The Ministry of Defense, Justice, and Security ([MoDJS] - the Judiciary and Police Departments) performed relatively better in providing CSAE services than other ministries *(M = 1.76, ±0.55, 95% CI: 1.64, 1.88, p<0.001)*. The Ministry of Local Government and Rural Development ranked second *(M = 1.43, ±0.35, 95% CI: 1.26, 1.60, p<0.01)*. The Ministries of Education and Skills Development *(M = .95, ±.45, 95% CI: .86, 1.04)* and Health *(M = .98, ±.43, 95% CI: .81, .97)* performed ranked third and fourth, respectively. The mean scores between MoESD and MoH were not significantly different.

CSAE Basic Services and Awareness of the Impact of CSAE among Adolescents

The study found that 65% of the respondents reported providing basic CSAE services in their departments or ministries. The study also found that 60% of the respondents reported being aware of the timeline for taking post-exposure prophylaxis to prevent HIV transmission among victims of sexual abuse.

Access to, Knowledge and Application of CSAE Statutes

Summarized results show most of the respondents did not have access to the main CSAE statutes. Over 80% could not state what the 2009 Children's Act says about sexual violence. In addition, 86% could not explain what the Domestic Violence Act states about the processes of reporting sexual violence. Further, 64% of the respondents were not knowledgeable about sexual offenses stated in the Penal Code.

Access to Youth-Friendly Strategies, Protocols, SOPs and Best Practices

Results show that over 80% of the service providers in selected ministries and study areas lacked access to CSAE strategies, protocols, standard operating procedures (SOPs), and best practices. About

Availability of CSAE Service Personnel

Data also show that only 38% of respondents had a focal person designated to children and youth services. Only 19% of the respondents reported having a focal person available 24 hours a day to support survivors.

CSAE Competencies and Skills

About 90% of the respondents had never received specialized training in counseling of sexually abused children, crisis counseling, and trauma management. In addition, 91% of the respondents had never received specialized training in counseling adolescent victims of sexual abuse and exploitation in the study areas, and 95% of the respondents had never received specialized training in forensic social work.

Data Management and Referral Practices for Cases of Sexual Abuse and Exploitation

Results suggest that while participating ministries collect and segregate data by sex for CSAE, there is no electronic CSAE information system to allow service providers share information and coordinate provision of service. Over 90% of the respondents reported referring CSAE survivors across participating departments or outside services.

However, only six in every ten of the respondents did not make follow-ups on cases they referred, and 41% received feedback. Results suggest only two in every ten of the respondents received feedback in timely manner.

Infrastructure for CSAE Services

The study found that less than half (47%) of the respondents reported having proper infrastructure to offer CSAE services to survivors. Participants from MOESD were 59% more likely to report having acceptable space and setting to provide CSAE services to survivors than other ministries.

Most rural police stations lacked functioning refrigerators to keep evidence while most primary health care settings reported lack of rape kits, making collecting of evidence almost impossible. None of the respondents reported having a CSAE screening questionnaire to decide proper service provision.

Community Outreach Programs

Overall results show the participating government ministries do not have community outreach programs to raise CSAE awareness. Only 36% of the respondents across all the ministries reported having CSAE community outreach programs. The police department was 60% more likely to report having community outreach programs.

PREDICTING OPTIMAL CSAE SERVICES IN THE FUTURE

Prediction modeling suggests that structure, process, and demographic characteristics of the respondents were significant predictors worth investing on to achieve optimal CSAE Preparedness in government ministries.

Structure Predictors of CSAE Preparedness

Regression modeling found that improving data management system increased the odds of achieving optimal CSAE Preparedness for CSAE survivors 14 times compared with providing poor or sub-optimal CSAE services to survivors, OR adjusted = 14.15, 95% CI:3.32, 60.34, Wald = 13.39, p<0.0.001.

The study also found that improving the referral system (OR adjusted = 9.11, 95% CI: 3.32, 27.11, Wald = 15.00, p<0.001), improving access to and knowledge about laws among service providers (OR adjusted = 5.10, 95% CI: 1.35, 18.17, Wald = 5.87, p=0.015) increased the odds of achieving optimal CSAE Preparedness for survivors compared with providing poor or sub-optimal CSAE services.

Process Predictors of CSAE Preparedness

Regression of modeling found that improving service providers' knowledge about, application, and implementation of CSAE statutes, strategic plans, and policy guidelines increased the odds of achieving optimal CSAE Preparedness for survivors twenty-four times compared with providing poor or sub-optimal CSAE services to survivors, *OR adjusted = 23.57, 95% CI: 1.35, 28.17*, Wald χ^2 = 5.87, p=0.015.

Further, increasing service providers' competencies and skills through specialized counseling training *(OR adjusted =11.47, 95% CI: 1.35, 99.48, p =0.03)*, provision of counseling services *(OR adjusted = 8.33, 95% CI: 2.23, 33.12, p = 0.002)*, and developing youth-friendly strategic plans, protocols, and standard norms *(OR adjusted = 6.23, 95% CI: 1.49, 27.11, p = 0.01)* were significant predictors of increasing the odds of achieving CSAE Preparedness in the surveyed ministries in selected areas.

Demographic Predictors of CSAE Preparedness

Modeling found that being a magistrate increases the odds of achieving CSAE Preparedness over a thousand times compared with other professions, OR adjusted = 1152.9, 95% CI: 3.09, 408399.0, Wald = 5.44, p=0.02.

CONCLUSION

This is one of the few gap analysis studies assessing service provision and preparedness of government ministries providing child sexual abuse and exploitation services. The study identified strengths and weaknesses of the current CSAE services based on service providers' perspectives.

The study provides important planning information in which policy makers, program managers, and service providers can invest to significantly improve CSAE preparedness. Results also offer non-governmental organizations (NGOs) and the donor community critical information for supporting the government of Botswana in CSAE services.

INTRODUCTION

BACKGROUND

Child sexual abuse and exploitation (CSAE) is a global problem common in every corner of the globe. There are no reliable statistics about children who suffer sexual abuse worldwide. However, research suggests that about 20% of women and 10% of men have suffered sexual abuse and exploitation as children (UN Secretary General's Study, 2006). Reports suggest that 150 million girls and 73 million boys below the age of 18 have experienced sexual abuse (Pavey, 2014). In most countries, boys are the victims of physical and psychological abuse more often than girls; while girls are at higher risk of infanticide, sexual abuse, neglect, and exploitation (Jewkes, Sen, and Garcia-Moreno, 2002). Women are more often accused of physical child abuse than men, probably because they spend most of the time with children. However, in instances of serious or fatal injuries; men are more often the perpetrators (Jewkes et al., 2002; UN Secretary General's Study, 2006).

The international community recognizes the need to uphold children's rights and protect them from abuse and exploitation. The United Nations Convention on the Rights of a Child (CRC) and the African Charter on the Rights and Welfare of the Child (ACWRC) are some of the international community's response to addressing abuse and exploitation among children (African News Service, 2000). Botswana has legislative instruments aligned with most international gold standards such as CRC and ACWRC (Pavey, 2014). At prima-facie, the Government of Botswana (GoB) has structures and processes aimed at improving service delivery to the survivors of sexual violence.
In 1990, the African Union (AU) adopted the ACRWC. The Charter focuses on a wide range of basic rights of children including the right to survival and development, food, healthcare, education, spiritual life, as well as family, societal and legal protection. ACRWC protects African children against human rights abuses to which they are vulnerable. These abuses include chattel slavery, child prostitution and pornography, sexual assault (rape), child labor, and other forms of abuse (Kagaruki, 2012).

Botswana signed and ratified the landmark ACRWC, which covers all the fundamental aspects about the child's welfare (Jamu, 2013). However, promoting the rights and welfare of children needs strong interdisciplinary collaboration among security agencies, the judicial system, health, and social and development agencies and civil societies (Jamu, 2013). In Botswana, the Ministry of Defense, Justice, and Security (MoDJS); Ministry of Education and Skills Development (MoESD); Ministry of Health (MoH); and Ministry of Local Government and Rural Development (MoLG&RD) are mandated by law to provide comprehensive care and support services to survivors of sexual abuse (Pavey, 2014). Given the interdependent nature and involvement of various ministries in Botswana, managing child sexual abuse and exploitation requires assessing government departments' CSAE preparedness.

The study defined CSAE preparedness as a range of deliberate, critical tasks, and activities necessary to build, sustain, and improve the operational capacity to prevent, protect against, and respond to incidences of child sexual abuse and exploitation. Preparedness is a continuous process, which requires inter-governmental collaboration and coordination to identify threats, determine vulnerabilities, and identify effective interventions. It is focused on establishing guidelines, protocols, and standards for planning, training and exercise, and ensuring availability of qualified staff to provide effective support (US Department of Homeland Security, 2007). Child abuse and exploitation preparedness was evaluated from this perspective. SSI used CSAE preparedness as a risk reduction strategy.

VIOLENCE AGAINST CHILDREN

Violence against children is a prevalent but often concealed legal, health, and social developmental problem across many cultures around the world. Estimates suggest that over 4,400 people die every day because of violence (Krug, Mercy, Dahlberg, and Zwi, 2002). Thousands more children suffer from being victims or witnesses of acts of violence. In addition, many lives are destroyed, families shattered, and huge costs are incurred in treating victims, supporting families, and prosecuting perpetrators, resulting in a loss in productivity and investment (Krug et al., 2002). Estimates suggest 40 million children are subject to abuse and neglect each year. Adolescents and young adults are the primary victims at the same time perpetrators of interpersonal violence. Rape and domestic violence account for 5% to 16% of healthy years of life lost for girls and women of reproductive age (Krug et al., 2002).

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Child Sexual Abuse and Exploitation (CSAE): Definition

Literature identifies several definitions CSAE; however, all concern violence and abusive behaviors directed towards children. CSAE are violent and abusive behavioral patterns intended to show and uphold control and dominance by the abuser over his or her victim (MLG&RD, 2010). CSAE describes criminal acts committed against children where a perpetrator engages in sex with a minor and exploits him or her for sexual satisfaction. The most common criminal acts regulated within the Penal Code include rape, defilement, indecent assault, incest, and procuration (MLG&RD & UNICEF, 2010).

Factors Influencing Child Abuse and Exploitation in Botswana

Culture and socio-economic status influence the contexts in which violence occurs. Studies suggest that poverty, unemployment, and power dynamics are associated with increased incidence of sexual abuse and exploitation among children in Botswana. Seloilwe & Thupayagale-Tshweneagae (2009) found that people with material power take advantage of those who do not have such powers. Often, powerful people force young girls and boys into sexual relations for material gain (Fidzani et al., 1999; Fidzani, 2000; Molebatsi & Mogobe, 1999; Ntseane & Ncube, 2000; Seloilwe & Ntseane, 2000).

Vulnerable children are enticed with material gifts in exchange for sex with older men and women (Seloilwe & Ntseane, 2000, p. 24). Older men and women exchange sex with young people by giving them rides in their expensive cars, buying them cell phones or clothes, or giving them cash; a social construct called the "C" syndrome. Intergenerational and transactional sexual relations, often complicated with multiple concurrent partnerships, funnel HIV transmission in Botswana (Ntseane & Ncube, 2000; Seloilwe & Ntseane, 2000).

Studies also suggest poverty and unemployment influence CSAE. Poverty forces young girls and boys into occupations that carry high risks of sexual abuse. Poverty also creates enormous pressure for young people to find and to keep jobs. Some resort to transactional sex, which not only puts them at risk for sexual coercion and physical violence, but also at risk of HIV infection (Seloilwe & Thupayagale-Tshweneagae, 2009). Although reports suggest that children and adolescents are safe in the protection of relatives, available data paints a different picture. Data suggest relatives and trusted friends are main perpetrators of CSAE (Seloilwe & Thupayagale-Tshweneagae, 2009).

THE IMPACT OF VIOLENCE AGAIST CHILDREN

The complex model of traumatization (Kendall-Tackett, Williams, & Finkelhor, 1993) states the impact of sexual abuse has multifaceted effects. The model states victims develop multiple health, psychological, and social problems in areas where they are most vulnerable (Kendall-Tackett et al., 1993). The vulnerabilities manifest themselves in maladjustment and maladaptation problems such as depression and anxiety. Child sexual abuse results in internalization and externalization disorders, such as conduct disorders, aggressiveness, and inappropriate or early sexual behaviors (Bagley, 1991; Higgins & McCabe, 1994; Mayall & Gold, 1995).

Sperry and Widom (2013) compared the psychological and social well-being of adults who reported sexual abused in childhood with those without history of sexual abuse. The researchers found that adults who had childhood histories of physical, emotional, and sexual abuse and neglect had significantly low social support, sense of belonging, and self-esteem. Cohen, Gottlieb, and Underwood (2000) noted that support from others, sense of belonging, and positive self-appraisal (high self-esteem) influence a person's ability to cope with life stresses. Cohen et al. (2000) noted that social support and high self-esteem improved a person's psychological, social, and healthy well-being. The loss of social support, sense of belonging, and low self-esteem negatively influences stressful life events (Cohen et al., 2000; Kaniasty & Norris, 1993).

Maniglio (2014) found an association between CSAE and conduct disorder in over 19,000 research subjects. Child sexual abuse was significantly and directly related to conduct disorder (violence, stealing, and other social problems). In a meta-analysis study of abused individuals, Paolucci, Genuis & Violato (2001) found that childhood sexual abuse was significantly associated with posttraumatic stress disorder (PTSD). The study also found association between childhood abuse and depression, suicidal tendencies, sexual promiscuity, victim-perpetrator cycle, and poor academic performance. These findings were consistent with earlier studies that suggested an association between PTSD and disruptive behaviors, which affected individual's social development (McLeer, Callaghan, Henry, & Wallen, 1994). These problems often resisted traditional treatments leaving individuals at great risk for prolonged psychological and social dysfunction (McLeer et al., 1994).

STATEMENT OF THE PROBLEM

There is a lack of CSAE preparedness research to inform decision makers about the readiness of service departments mandated to provide basic CSAE services to survivors. Only one study evaluated the readiness of government departments mandated to serve the abused and exploited population in Botswana (Pavey, 2014). However, this study sampled service departments from one district. This study aims to confirm the previous research results.

The extent of child sexual abuse and exploitation in Botswana is underreported (Seloilwe & Thupayagale-Tshweneagae, 2009). According to Seloilwe & Thupayagale-Tshweneagae (2009), the problem is far larger than currently reflected in police and other government statistics. In addition, police data are incomplete and limited. Many cases go unreported for fear of stigmatization. Further, most families hide abuse cases to preserve the family's social status and integrity (Botswana Police, 2001). Besides, children victims cover-up incidents of abuse due to shame, fear of being blamed, fear of not being believed, and fear of being maltreated. Culture and norms also force adults to hide child abuse and exploitation incidents in Botswana (Seloilwe & Thupayagale-Tshweneagae, 2009).

RESEARCH PURPOSE AND OBJECTIVES

The gap analysis study answered two questions. First, "Are government ministries fully prepared to support survivors of child sexual abuse and exploitation?" Second, "To what extent is cross-sector collaboration in the response to addressing sexual violence to improve reporting, service provision, and successful prosecution of sexual offenses in Botswana? The overall purpose was to evaluate the readiness of the government ministries mandated to protect children and young people from sexual abuse and exploitation. The objectives of the study were twofold:

1. To identify gaps that hinder promoting children's basic human rights, in particular related to sexual abuse

2. To use the research findings to:
   - Advocate for policy and intervention reforms that promote effective provision of child protection and promoting children's rights enshrined in local and international laws and obligations,
   - Improve service delivery guided by the norms in International Human Rights Laws (IHRL), and
   - Develop departmental as well as cross-sector interventions that promote children's rights.

METHODS AND PROCEDURES

The study interrogated CSAE preparedness from the systems thinking lens. Systems thinking applied to child abuse and exploitation response is a management strategy that recognizes that disparate parts must be viewed as interrelated parts of a single system (IoM, 2014).

RESEARCH DESIGN

The study was an observational cross-sectional survey. It collected a snapshot of information about services related to child sexual abuse and exploitation (CSAE) in the main government ministries mandated to support survivors. The design produced planning information for CSAE service providers, decision-makers, donors, and nongovernmental organizations.

STUDY SETTING

The study was conducted in Francistown, Goodhope, Artesia, and Bobonong. SSI and the EU determined the study areas during program development. The study settings included the Ministry of Defense, Justice, and Security (MoDJS); the Ministry of Education and Skills Development (MoESD); the Ministry of Local Government and Rural Development (MLG&RD); and the Ministry of Health (MoH).

STUDY POPULATION

The study targeted police officers, magistrates, and court clerks from MoDJS; and secondary school teachers and guidance counselors from MoESD. The study population included social welfare officers and community development officers from MoLG&RD; and professional healthcare workers (doctors, registered nurses, midwives, and pharmaceutical as well as laboratory staff) from MoH. The study population provides judicial, legal, protective, social, health and psychosocial services to survivors of abuse and exploitation in Botswana.

SAMPLE SIZE

The study used simple random sampling to estimate sample size. In a simple random sample, researchers independently select one unit at a time until achieving the suitable sample size. Each study unit in the finite population has an equal chance of being selected in the sample (Pagano & Gauvreau, 2000). The likelihood of selecting a particular unit is n/N, where n is the size of sample and N is the size of the underlying population (Pagano et al., 2000).

$$\textbf{Equation 1: } n = \frac{z^2\, pi(1 - pi)}{d^2}$$

n = unadjusted simple random sample
z^2 = associated with 95% confidence interval
pi = estimated number of service providers in selected areas is 3.4% of the national estimate
d^2 = precision (standard error)

The sample calculation assumed the percent of service providers in selected areas will differ in value from the national estimates of service providers with no more than 2.5% where d is the relative precision. In the equation, z2 is associated with the 95% confidence interval. The study adjusted the sample to account for between-cluster sampling variation using a 1.5 design factor, 30% non-response rate, and 25% missing data. The desirable sample size for the study was 405.

SAMPLING METHOD: STRATIFIED DISPROPORTIONATE

Stratified simple random sampling proportionate to size was the best sampling method given the study population distribution. However, stratified sampling would have introduced sampling error and bias because the number of social welfare officers, magistrates, court clerks, social workers, and development officers was small. The study used the stratified disproportionate sampling to address the problem.

Disproportionate sampling is suitable in cases where subgroups of the study population are small. A proportionate sample might underrepresent such subgroups. Disproportionate sampling increases the accuracy more than other sampling methods when one or two of the subgroups are small or if a particular subject of the study is more relevant to one subgroup than another (Kalton& Anderson, 1986).

The data collection team asked magistrates, court clerks, social workers, and community development officers in the study settings to take part in the study. The study randomly selected police officers, health workers, guidance counselors, and teachers proportionate to sample population.

Table 1:

Stratified disproportionate distribution of the study sample across ministries

Ministry	Department	Target sub-groups	Sample
Defense, Justice and Security	Judiciary	Magistrates/Court Clerks	21
		Kgosi/Kgosana*	6
	Security	Police Officers	79
Health	Emergency, laboratory and social services	Health Workers	144
Education and skills Development	Guidance counseling	School Guidance Counselors & Teachers	104
Local Govemment & Rural Development	Social services Development	Social Welfare Officers	35
		Community Development Officers	16
		Total Study Sample	**405**

*The research excluded Dikgosi due to language barrier. The sample for service provision was 399

SELECTION OF RESPONDENT POPULATION

In each selected study area, the research team asked institution managers the number of staff. The research team created random numbers of target sample (1 to k) in each area (where random sampling was required). During data collection, the research team ordered the list of staff alphabetically. The research matched random numbers with the list of respondents. The research team asked respondents matched to random numbers to participate in the study. Sometimes, the number of staff received before data collection was different from the number found on the day of data collection. In these instances, the research team re-ran random samples. The research team asked all magistrates, court clerks, social workers, and community development officers in the selected areas to take part in the study.

DATA COLLECTION AND INSTRUMENTATION

The study used a face-to-face standardized questionnaire to collect data. SSI recruited and trained eight research assistants (RAs) to administer the questionnaire. RAs received a two-day training which covered topics including the interview techniques, ethics, and ethical duties of research assistants. The training provided RAs with techniques aimed at limiting interviewee biases and ensuring ethical conduct in data collection. The research team piloted the questionnaire in Kgatleng before using it for data collection.

ETHICAL AND LEGAL CONSIDERATION

The Health Research Development Committee (HRDC) and Institutional Review Board (IRB) reviewed and approved the research.

DATA MANAGEMENT AND PROCESSING

Data are fundamental to research conduct and their integrity is paramount. The study carried out quality improvement measures before, during, and after data capturing. Quality measures ensured quality and accuracy of the study results (Szklo and Moyes, 2007). Quality measures included training of RAs aimed at reducing sampling errors and interview biases. RA training established consistency during data collection to reduce information errors. During data collection, field supervisors carried out on-spot checks to ensure questionnaire completeness.

Data were entered in International Business Machine Statistical Package for Social Sciences (IBM SPSS) version 22 for Windows (Armonk, New York). The study conducted pre-data analysis screening to identify and correct data entry errors, identify missing data, and screen for outliers. Data preparation will also comprise of identifying missing information in the dataset (Vittinghoff, Glidden, Shiboski, and McCulloch 2005).

VALIDITY AND RELIABILITY ANALYSIS

Cross-sectional surveys (like other designs of research undertakings) are an important form of scientific inquiry that merits rigorous design. The aim is to gather reliable and unbiased data from a representative sample of respondents. Valid and reliable measures represent the essence of scientific inquiry for discovering the truth). Validation analysis gives researchers a degree of confidence about the scientific truth (Nunnally, 1978). Garson (2013) identified four major validation processes needed in research studies. The validation processes include a) instrument validation, b) hypothesis validation, c) inferential validation, and d) generalizability validation. The purpose and design of this research was not to ascertain or disprove any hypotheses. The study focused on instrument validation. Instrument validation is a priority and primary process in social science research to ensure unbiased research conclusions (Garson, 2013).

Validity

Validity entails that data are not only reliable, but also accurate. Thus, validity is the extent to which a measurement does what it is intended to do. There are four types of validity; however, this study focuses on content (face) and construct validities (Fisher, Foreit, Laing, Stoeckel, and Townsend, 2000).

Content and Face Validity

Researchers have to ensure the questionnaire designed to collect data covers the acceptable subject under study. Straub (1989) urged researchers to develop questions that capture and represent the subject under study. In this study, the subject under study was services preparedness.

The most recommended techniques for ensuring content validity include literature review, use of expert panel, and use of research to develop a credible questionnaire (Burns, 2008). The study reproduced the CSAE Preparedness Questionnaire (Pavey (2014). Pavey (2014) developed the questionnaire from a compendium of the CSAE best practices and services essential to provide optimal services to CSAE survivors. Pavey (2014) used the following documents:

1) The step-by-step guide for strengthening sexual violence services in health facilities: Lessons and tools from sexual violence in South Africa
2) The Pathfinder International's certification tool for youth friendly services
3) The Botswana Ministry of Health's protocols and services standards for prevention and management of gender based violence for healthcare providers (Annex 1): Minimum care for survivors of sexual assault checklist of supplies.

SSI adapted the questionnaire through a series of consultations with Pavey and SSI staff. The questionnaire measured service preparedness on a three-point Likert Scale from "0 to 3". The questionnaire included questions to assess culture of quality improvement (CQI. The study adapted CQI from a Kunkel, Rosenqvist, and Westerling (2007) questionnaire developed to assess quality of care in health delivery systems. The tool was adapted to assess CSAE CQI in this study. CQI measured items on a seven-point Likert scale from "1 to 7". The study deemed CSAE Preparedness Questionnaire satisfactory for content validity.

Construct Validity

Construct validity is one of the most critical procedures in social research. Without knowing what construct is being measured, it is impossible to have faith in the overall empirical analysis.

The study carried out exploratory factor analysis (EFA) based on principal component analysis (PCA) with orthogonal rotation (Varimax with Kaiser Normalization). The study examined the test statistic of Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's tests of Sphericity to check suitability for factor analysis (Aletras, Kostarelis, Tsitouridou, Niakas, & Nicolaou, 2010). Values ≥ 0.50 on single measurement item and measures of KMO were a precondition for measure of sampling adequacy (Field, 2009). In addition, measure of sampling adequacy needed a significant Bartlett's test for Sphericity at $p \leq 0.05$.

The study used factors with Eigenvalues ≥ 1(Kaiser's criteria rule) and factors that accounted for $\geq 50\%$ cumulative variance (Filed, 2009). In addition, the study also used the Scree plot to assess agreement of extracted factors with the Kaiser's criteria (Williams, Brown, and Osman, 2010). The study interpreted high factor loadings with values greater than 0.4 (equivalent to 16% of variance).

Reliability

Reliability describes how consistent, stable, and dependable a questionnaire is to collect accurate data. Reliability reflects the extent to which the measurement instrument is consistent and an accurate representation of the total population under study (Fisher et al., 2000).

Internal Consistency

Internal consistency evaluates the degree to which different items produce similar results. It is most commonly used to estimate questionnaire reliability in social science research. The Cronbach's alpha analysis models internal consistency based on the average correlation among subscale items. The Cronbach alpha (α) coefficient of zero reflects lack of reliability in a construct while α coefficient of 1 stands for high reliability. The Cronbach's α coefficient is the percent of variance the observed scale would explain in the hypothesized true scale of all possible items (Garson, 2013). Garson (2013) recommends a cut-off point of $\alpha = .60$ as an indicator of reliability when the questionnaire is new and up to $\alpha \geq .70$ when confirming internal consistency in an old questionnaire. The CSAE Preparedness Questionnaire is new. The cut-off point for validation to determine reliability was set at $\alpha = .60$.

CONSTRUCTING PERFORMANCE SCORECARD

Social science relies on building scales or composite matrix scores. Measurement scales and matrices are often used as benchmarks for assessing how well institutions are doing to achieve agreed target performance goals (Khan, Strong, and Wang, 2002). Measurement scales add up responses from several questions into a single value (mean, median or percent).

Scorecards are a set of constructs, formed additively to achieve a mathematical role, in which items are inter-correlated. In this study, the CSAE Preparedness Scorecard (CPS) is a sum of constructs that are stacked together using factor analysis. Each construct had a Cronbach's α coefficient of .60 or greater.

The study measured CPS scorecard on a three-point Likert scale (3 = Yes, 1 = Somewhat but not all, and 0 = None at all). The scores of ≥ 2.6 to 3.0 stood for fully prepared government ministries while scores of ≥ 0.6 to 2.5 meant sub-optimal CSAE services. The scores of ≥ 0.0 to 0.5 meant unprepared government ministries to provide CSAE services.

The study developed the CQI matrix by adding items that loaded together and had a Cronbach's alpha coefficient ≥ 0.60. The CQI matrix coded data on a seven-point Likert scale (1 = strongly disagree, 4 = threshold (cut-off point), 7 = strongly agree).

DATA ANALYSIS STRATEGY

The study analyzed data based on two broad approaches: descriptive and inferential analysis. Descriptive analysis describes and summarizes data, as well as evaluates associations between variables of interest (Vittinghoff et al., 2005). In inferential analysis, researchers apply statistical manipulations to draw conclusions beyond the immediate data. It uses sample data to infer to the total population under study. It tests hypotheses and estimates parameters of the sample to make inferences about the general population (Vittinghoff, 2005).

Descriptive Analysis

Descriptive analysis summarizes the general properties of each variable using measure of central tendency and dispersion. The study presents categorical data in frequency distribution tables to show trends of each variable. It presents ordinal data in median and interquartile range (IQR) and interval data using means, standard deviations, and 95% confidence intervals. Descriptive data include graphs to show trends across measures of interest.

The study computed chi-square test (X2) to assess association between marginal totals (row and column totals) of whether observed pattern of distributions differed from the expected distribution by pure chance. The p-value of ≤ 0.05 was the deterministic threshold for deciding the difference between variables was not by chance alone (Kirkwood & Sterne, 2003). The study also computed Lambda, a proportional reduction error (PRE) coefficient to measure strength of the association between nominal and ordinal variables.

The lambda measure varies from 0.0 to 1.0. The interpretive guide for association is as follows: 0.0 -.10 = no relationship, ±0.10 to ± 0.19 = very weak, ±0.20 to ±0.30 = weak, 0.30 to 0.40 = moderate, 0.40 + = strong, and 1.0 = perfect association (Field, 2009).

The study estimated one-way analysis of variance (ANOVA) to test whether mean differences between two or more groups were statistically significant at $p \leqslant 0.05$. Because ANOVA does not show which particular means are different among comparison groups, the study calculated Tukey's honestly significant difference (HSD) to identify group differences (Field, 2009).

Inferential Analysis

Inferential analysis served two purposes in this study. First, it allowed testing the hypothesis of whether government ministries mandated to serve child sexual abuse and exploited survivors are fully prepared to provide mandated services. Second, inferential analysis estimated parameters of the sample data to predict service areas that need improvement to achieve optimal preparedness.

Hypothesis Testing
Research Question: Are the primary government ministries (MoDJS, MoESD MoH, and MoLG&RD) mandated to serve child sexual abuse and exploitation survivors fully prepared to provide mandated services?

Null hypothesis: $H_0 = \mu_0 <$: Primary government ministries mandated to serve child sexual abuse and exploitation survivors are prepared to provide optimal services to survivors

Alternative hypothesis $H_a = \mu_a \geq$: Primary government ministries mandated to serve child sexual abuse and exploitation survivors are prepared to provide optimal services to survivors.

Parameter Estimation using Regression Modeling

The study performed a multivariate ordinal regression model (PLUM) to predict association between dependent (CSAE Scorecard Matrix) and independent variables (Scott, Goldberg, and Mayo, 1997). The generic model is illustrated in equation 2:

$$In\left(\theta_j\right) = \alpha_j - \beta_x$$

Where j goes from 1 to number of categories minus 1
= prob (Score of 1) = prob (Score >1)
= prob (Score of 1 or 2) = prob (Score >2)
= prob (Score of 1, 2, or 3) = 1

In the equation, each logit has its own but the same coefficient ß, which means the effects of each independent variable is the same for different logit functions. This is the reason the model is proportional odds model (Scott et al., 1997).

Ordinal Regression Model

The ordinal model contains two major sections, the threshold and location. The threshold represents the response variable. Location represents parameter estimates of ordered log-odds regression coefficients. The standard interpretation of the ordered logit coefficient is that for a one-unit increase in the predictor the response variable changes by its respective regression coefficient in the ordered log-odds scale while the other variables in the model remain constant (Scott et al., 1997).

Post-hoc Diagnostic Tests

Before making inferences from the ordinal regression findings, the study carried out post-hoc diagnostic tests which included model fit evaluation, overall Goodness-of-Fit, and proportional odds assumption.

Model Fit

Model fit provides the overall parameters of the model and provides the intercept, which describes a model that does not control for any predictors, and the final which describes a model that includes predictors. The small p-value (≤ 0.05) in the model shows the model fit the data well (Scott et al., 1997).

Pearson and Deviance Goodness-of-fit

The Pearson and Deviance Goodness-of-Fit test measures strength of the association between the dependent variable and the predictors. If the model fits the data well, the observed and expected cell counts are similar; and the observed significance level is large ($p>0.05$). Small p-values suggest poor data fit (Field, 1996). In addition, the ordinal model produces pseudo R-squared values. Pseudo R-squared are not robust and are equivalent to the R-squared in OLS regression. However, Field (2009) suggests reporting the statistic. The study reported the Cox and Snell and the Negelkerke R-squared coefficients.

Proportional Odds Assumption

The proportional odds assumption in ordinal regression tests the hypothesis that the slope coefficients in the model are the same across response categories. A large p-value ($p>0.05$) implies that proportional odds assumption holds and data are valid for ordinal regression (Field, 2009).

FINDINGS

This section presents results from a random sample of service providers for survivors of CSAE. The target sample was 405; however, the study excluded six chiefs because of potential language barrier. Instead, the research team planned a separate research for chiefs.

The adjusted sample for the survey was 399. Eligible respondent population included social welfare officers, community development officers, professional healthcare workers, police officers, secondary teachers, school guidance counselors, magistrates, and court clerks. Doctors, nurses, pharmacy technicians, and laboratory technicians made up a sample of professional healthcare workers.

Survey interviews took place from December 10th, 2014 to January 31st, 2015. 322 (80.7%) respondents consented and took part in the study. Twenty-two respondents declined. Those who declined were secondary teachers. Fifty respondents were not available in their respective duty stations on the day of the survey. These included thirty police officers, three social welfare officers, and seventeen community development officers.

STUDY SETTING

The study setting was Artesia in Kgatleng, Goodhope, Bobonong in Bobirwa (Central District), and Francistown (Table 2). The study targeted a random sample of service providers from government ministries mandated to serve sexually abused and exploited children in Botswana. The ministries included MoDJS, MoESD, MOH, and MoLG&RD.

Most of the service providers (60%) were sampled from Francistown proportionate to the number of service providers in the city relative to other study settings. MoESD and MoH contributed 68% of the sample while MoLG&RD contributed the 19% of the respondents (Table 2).

Table 2

Frequency distribution of respondents by government ministries and study areas (N = 322)

	Study areas				
Operating authority	Artesia	Goodhope	Bobonong	Francistown	**Sample**
MoDJS	1(9.1)	17 (34.7)	16(23.2)	49(25.4)	**83 (25.8)**
MoESD	7(7.1)	15(15.2)	22(22.2)	56(56.6)	**100 (31.1)**
MoH	3 (27.3)	17 (34.7)	24 (34.8)	76 (39.4)	**120(37.3)**
MoLG&RD	-	-	7 (36.8)	12(6.2)	**19 (5.9)**
Total sample	**11 (3.4)**	**49 (15.2)**	**69 (21.4)**	**193 (59.9)**	**322 (100)**

In MoLG&RD, the research team sampled respondents from the social and community development department (S&CD). In MoH, the research team selected respondents from the accident and emergency or outpatient department (A&E/OPD), maternal and child health (midwives), pharmacy, and laboratory departments.

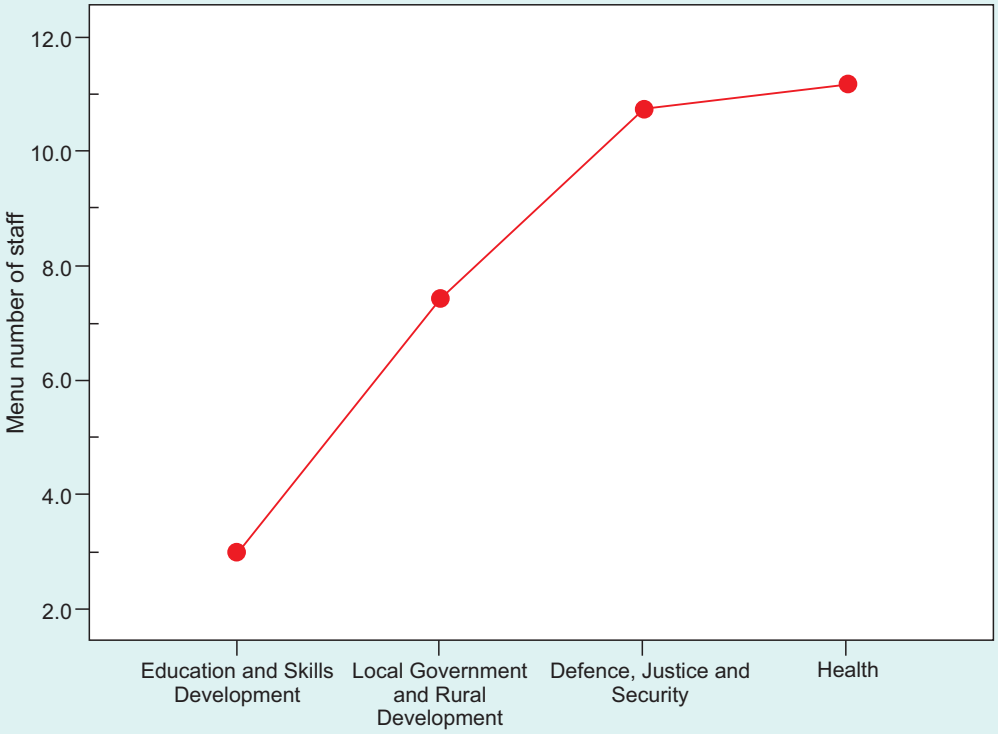
In MoESD, the research team selected respondents from administration and management, guidance counseling, and teaching services. In MoDJS, the research team sampled respondents from the Department of Justice (the courts) and department of security (policing service, criminal investigation, and management and administration department). Table 3 summarizes the service departments included in the survey.

Table 3

Frequency distribution of respondents in the survey ministry departments (N =322)

Service departments	Number	(%)
Ministry of Health (n=120)		
Pharmaceutical Services	3	(2.5)
Social Services	3	(2.5)
Laboratory Services	4	(4.1)
Maternal & Child Health	9	(7.4)
Outpatient and Accident & Emergency Dept.	101	(83.5)
Ministry Education & Skills Development (n=100)		
Management and Administration	8	(7.1)
Guidance and Counseling Services	17	(84.8)
Teaching Services	75	(8.1)
Ministry Defense, Justice and Security (n=83)		
Department of Justice		
Policing	1	(10.8)
Court Clerks	9	(12.1)
Magistrates	9	(54.2)
Department of Security [Police]		
Management & Administration	9	(10.8)
Criminal Investigation	10	(12.1)
General Police Services	45	
Local Government & Rural Development (n=19)		
Social welfare and community development	19	(5.9)
	322	**(100.0)**

Figure 2: Mean plot of number of designated personnel to handle sexually abused and exploited children in study areas



The study asked respondents to report the number of dedicated staff designated to handle child sexual abuse and exploitation cases. Across all participating ministries, the mean number of dedicated staff to handle sexually abused and exploited children was M = 8.6, ±11.8, 95% CI: 7.1, 10.2. The distribution of mean number of staff varied from M = 3.4, ±2.5, 95% CI: 2.4, 3.6 in MOESD to M= 11.2, ± 9.5, 95% CI: 9.3, 13.0 in MoH (Figure 1).

The study computed one-way analysis of variance (ANOVA) to examine if the distribution of mean number of personnel designated to handle sexually abused and exploited children differed significantly by ministries. There were significant mean differences between ministries at $p \leq 0.05$, $F(3, 226) = 7.17$, $p < 0.001$. The post-hoc analysis of the mean number of personnel handling sexual abuse and exploitation cases differed significantly between MoH and MoESD, and MoDJS and MoESD.

DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

Females made up 55.9% of the respondent population. Eight in every ten of the respondents were either in the 20-34 or in the 35-44 age groups. Data indicated that 35.7% of the respondents had attained a three-year university education (diploma) while 32.9% had undergraduate degrees. In addition, about 20% of the respondents had secondary or post-secondary education. The remainder 11.8% had attained graduate education. Nurses, secondary school teachers and police officers constituted70.2% of the sample (Table 4).

Table 4

Demographic profile of the respondent population by sex, age, education, and occupation

Demographic variables	Number	(%)
Sex		
Male	142	(43.8)
Female	180	(55.9)
Age (in years)		
20-34	139	(43.2)
35-44	122	(37.9)
45-54	55	(17.1)
55-64	6	(1.8)
Education		
Secondary Education	36	(11.2)
Post-Secondary Education (Certificate)	27	(8.4)
University Diploma	115	(35.7)
Bachelor's Degree	106	(32.9)
Graduate Education	38	(11.8)
Professional Occupation		
Health		
Pharmacy Technicians	3	(0.9)
Social Welfare Officers	3	(0.9)
Laboratory Technicians	4	(1.2)
Medical Doctors	24	(7.5)
Registered Nurses	86	(26.7)
Defense, Justice, and Security		
Court Clerks	9	(2.8)
Magistrates	9	(2.8)
Police Officers	65	(20.2)
Education & Skills Development		
School heads or Deputies	8	(2.5)
Guidance Counselors	17	(5.3)
Secondary School Teachers	75	(23.3)
Local Government and Rural Development		
Community Development Officers	2	(0.6)
Social Welfare Officers	17	(5.3)

Results indicate police officers were 93.9% and 92.0% more likely to have secondary and post-secondary education in this sample population. Nurses were 63% more likely to reporting having a diploma followed by 22.9% of secondary school teachers. Data also show that 49.1% of secondary school teachers had earned Bachelor's degrees. Medical doctors (36.8%), secondary school teachers (28.9%), and guidance counselors (15.8%) made up most of respondents with postgraduate education in this sample population.

Measures of association between respondents' education and occupation were significant at $p \leq 0.05$, The measure of effect between education and occupation using Lambda was moderate and significant, $\lambda = 0.466$, $p < 0.001$

The study found the overall mean length of service across all professions to be $M_{LoS} = 11.9, \pm 8.3$, 95% CI: 11.9, 12.8. The mean length of service ranged from M= 6.6, ±7.2, 95% CI 3.6, 9.6 to 14.3, ±9.1, 95%CI 12.3, 16.2. The ANOVA comparison of means was significant, $F(9, 312) = 2.5$, $p < 0.01$. The Tukey HSD found that the means differed significantly between nurses and doctors and between police officers and doctors.

Data also show that the mean number of years in the current office was M = 4.4 ±4.1, 95% CI 3.9, 4.8. The ANOVA comparison of mean number of years in the current office was not significant at $p \leq 0.05$.

Respondents were asked to describe whether they had directly dealt with cases of sexually abused and exploited children in the course of their career. Overall, 58% of the respondents reported to have dealt with cases of abused and exploited children. Results indicate that nine in every ten respondents in MoLG&RD and six in every ten respondents in MoH and MoDJS had dealt with sexually abused and exploited children. Only four in ten of respondents from MoESD had dealt with abused and exploited children (Table 5).

Table 5

Frequency table of respondents with experience dealing directly with sexually abused and exploited, grouped by participating ministries

Exploratory variable	Yes (%)	No (%)	Referred (%)
Ever been involved with cases of abused and exploited? *			
Defense, Justice, and Security+	48 (58.5)	27 (32.9)	7 (8.5)
Education	39 (39.4)	54 (54.5)	6 (6.1)
Health	78 (65.5)	32 (26.9)	9 (7.6)
Local Government and Rural Development+	17 (89.5)	2 (10.5)	-
Total	**182 (57.6)**	**112 (35.4)**	**22 (6.9)**

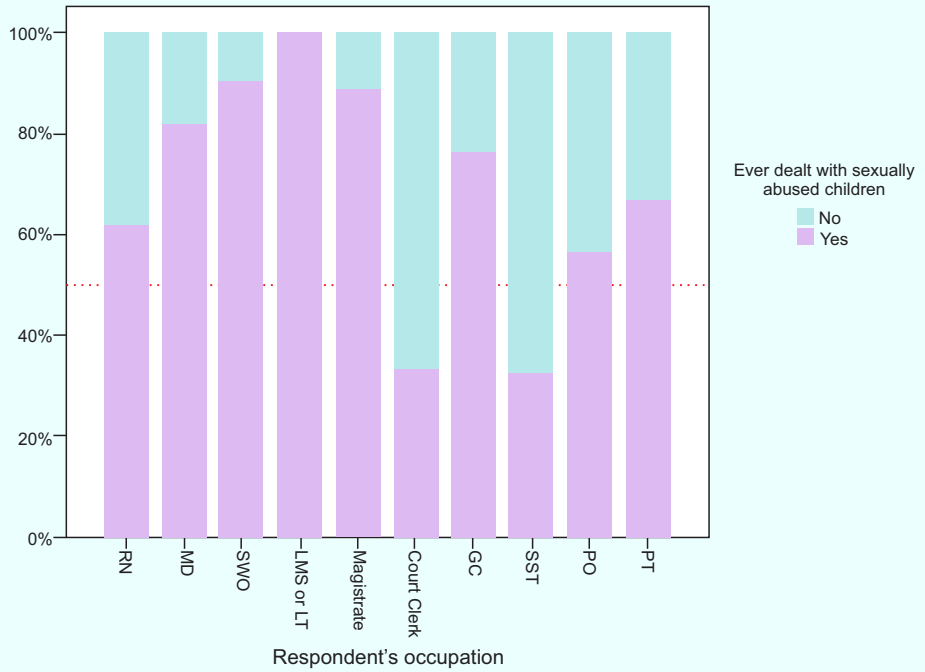
+Missing values

*p=0.05, **p<0.01, ***p, <0.001

Cross-tabulation between 'ever dealt with cases of abused and exploited children' and occupation revealed that over 80% of medical doctors, social welfare officers, and laboratory staff had dealt with sexually abused and exploited children during their career. Results indicate that about 45% of nurses and police officers are likely to report to have never dealt with sexually abused and exploited children in this study. The study also found that over 65% of teachers and court clerks had never dealt with sexually abused and exploited children in the course of their career.

Chi-Square analysis between 'ever dealt with abuse and exploited cases' by respondent's ministry was significant; $\chi^2(6) = 167.0, p < 0$ and measure of strength between the two variable using lambda was very weak, $\lambda = 0.097$, $p<0.01$. Figure 3 summarizes self-reported percent of respondents who have dealt with cases of abused and exploited children in the study.

Figure 3: Percent of respondents who reported to have ever dealt with sexually abused and exploited children during their carer



RN = Registered nurse, MD = Medical Doctor, SWO = Social Welfare Officer, CDO = Community Devlopement Officer, LMS = Lab Medica Scientists, LT = Laboratory Technician, GC = Guidance Counsellor, SST = Secondary School Teacher, PO = Police Officer, and PT = Pharmacy Technician.
Each occupation category adds up to 100%

PROVISION OF SEXUAL ABUSE AND EXPLOITATION SERVICES TO SURVIVORS

Respondents were asked whether their respective departments provided services to abused and exploited population and to children and youth. About 64% of the respondents reported offering services to sexually abused and exploited population in the study areas.

More than 80% of respondents from MoDJS and MoLG&RD reported offering services to survivors of abuse and exploitation in the general population children and youth survivors. Among the ministries, respondents from MoESD were less likely to report offering services to all survivors of sexual abuse and exploitation.

Chi-square measure of association between operating ministry and services offered to all survivors of abuse and exploitation was significant at p≤0.05, $X^2(6):64.14,p<0.0$. However, there was no effect between the two variables using Lambda. The study also found significant association between ministries and services offered to children and youth survivors $X^2(6):26.02,p<0.0$. The study did not find any effects between the two variables using lambda.

The study also asked respondents whether they used standardized screening protocol to identify abused and exploited children, and inquired whether service providers offered process, crisis, and therapeutic counseling to survivors of sexual abuse and exploitation. Table 6 summarizes survey participants' responses aggregated by participating ministries.

Table 6

Frequency distribution of child sexual abuse and exploitation services offered to survivors aggregated by participating ministries

	Three-point Likert Scale		
Exploratory variables	Definitely Yes	Some but not all	None at all (%)
Does this organization offer services to children and youth of sexual abuse survivors			
Standardized screening protocol? ***			
Defense, Justice, and Security	37 (44.6)	7 (8.4)	39 (47.0)
Education and Skills Development	17 (17.2)	10 (10.1)	72 (72.7)
Health	29 (24.0)	13 (10.7)	79 (65.3)
Local Government & Rural Development	3 (15.8)	4 (21.1)	12 (63.1)
	86 (26.7)	**34 (10.6)**	**202 (62.7)**
Process counseling? *			
Defense, Justice, and Security+	53 (82.8)	6 (9.4)	5 (7.8)
Education and Skills Development+	72 (76.3)	14 (15.1)	8 (8.6)
Health+	81 (68.3)	14 (11.7)	24 (20.0)
Local Government & Rural Development	17 (89.5)	2 (10.5)	-
	223 (75.3)	**36 (12.2)**	**37 (12.5)**
Crisis counseling intervention? ***			
Defense, Justice, and Security	30 (47.6)	18 (28.6)	15 (23.8)
Education and Skills Development	43 (46.7)	21 (22.8)	28 (30.4)
Health	44 (38.3)	20 (17.4)	51 (44.3)
Local Government & Rural Development	15 (78.9)	3 (15.8)	1 (5.3)
	132 (45.7)	**62 (21.4)**	**95 (32.9)**
Therapeutic counseling? ***			
Defense, Justice, and Security	17 (28.8)	5 (8.5)	37 (62.7)
Education and Skills Development	28 (31.8)	23 (26.1)	37 (42.0)
Health	`43 (37.4)	9 (7.8)	63 (54.8)
Local Government & Rural Development	14 (73.7)	5 (26.3)	-
	102 (36.3)	**42 (14.9)**	**137 (48.8)**

*p=0.05, **p<0.01, ***p, <0.001

About 73% of the respondents did not have a standardized screening questionnaire to identify cases of sexual abuse and exploitation in the study areas. None of the 27% (n = 86) who reported having a standardized screening questionnaire produced a copy to validate the availability of a screening questionnaire.

When asked whether they provided process counseling, 75% of the respondents reported offering the services to survivors of sexual abuse and exploitation. Overall, 54% and 63% of respondents reported not offering crisis and therapeutic counseling services to survivors of abuse and exploitation in the selected survey areas (Table 5). Disaggregated data, however, indicated that of all service providers in the survey only social welfare officers in the MoLG&RD offered crisis as well as therapeutic counseling services.

The study also asked respondents whether their respective ministries offered in-house HIV counseling and testing and forensic services to survivors of abuse and exploitation. About 90% of the respondents from MoH reported providing in-house HIV testing and counseling services compared to 10% from MoDJS. Within MoH, in-house HIV testing and counseling services were primarily offered in hospitals and few of the clinics and health posts.

Within MoDJS, HIV counseling and testing services were reported in Francistown. Measure of association using Chi-square test between in-house HIV testing and counseling services and participating ministries was significant, (6) = 271.04, $p>0.001$; and measure of effect between the two variables was very strong and significant, $\lambda = 0.84$, $p<0.001$.

The study found that 63% of the respondents from MoDJS reported providing forensic services as well as 48.7% of respondents from MoH. The relationship between providing 'forensic services' and participating ministries was statistically significant, (6) = 119.3, $p>0.001$; however, the measure of effect between the two variables using lambda was weak but significant, $\lambda = 0.237$, $p<0.01$.

CSA STATUTES, POLICIES, STRATEGIC PLANS, PROTOCOLS, AND STANDARD OPERATING PROCEDURES

Policies

The study inquired from respondents whether they had access to main statutes that govern CSAE in their duty stations. The study also asked respondents whether they had access to organizational strategies/plans, protocols, and standard operating procedures (SOPs) to guide services provision to CSAE survivors.

Table 7 provides a summary of responses regarding respondents' access to the main statutes governing services for survivors of abuse and exploitation in Botswana.

Table 7

Frequency distribution of respondents reporting availability of statutes (policies) related to child sexual abuse and exploitation, grouped by participating ministries

	Three-point Likert Scale		
Exploratory variables	Definitely Yes (%)	Some but not all (%)	None at all (%)
Does your organization have a copy of: Penal Code? ***			
Defense, Justice, and Security	59 (73.8)	14 (17.5)	7 (8.7)
Education and Skills Development	26 (30.9)	15 (17.9)	43 (51.2)
Health	8 (6.9)	10 (8.6)	98 (84.5)
Local Government & Rural Development	4 (21.1)	5 (26.3)	10 (52.6)
	97 (32.4)	**44 (14.7)**	**158 (52.8)**
The 2009 Children's Act? ***			
Defense, Justice, and Security+	36 (47.4)	16 (21.0)	24 (31.6)
Education and Skills Development+	20 (26.7)	12 (16.0)	43 (57.3)
Health+	4 (3.5)	15 (13.2)	95 (83.3)
Local Government & Rural Development	15 (83.3)	3 (16.7)	0 (0.0)
	75 (26.5)	**46 (16.3)**	**162 (57.2)**
The Domestic Violence Act? ***			
Defense, Justice, Security	27 (37.5)	17 (23.6)	28 (30.9)
Education and Skills Development	8 (10.7)	8 (10.7)	59 (78.7)
Health	5 (4.5)	6 (5.5)	99 (90.0)
Local Government & Rural Development	10 (58.8)	5 (29.4)	2 (11.8)
	50 (18.2)	**36 (13.1)**	**188 (68.6)**

**p=0.05, **p<0.01, ***p,<0.001*

Summarized results show that the majority of the respondents did not have access to the main statutes governing CSAE services. Overall, 68% of the respondents had no access to the Penal Code and 74% had no access to the 2009 Children Act. Data show 82% of the respondents did not have access to the Domestic Violence Act (Table 7). Disaggregated data revealed that magistrates were more likely to report access to the penal code, while social welfare officers were more likely to report access to the 2009 Children's Act compared with other service providers.

There was significant association between 'having access to the Penal Code X2 (6) = 125.3, p>0.001), the 2009 Children's Act X2 (6) = 93.68, p>0.001), and the Domestic Violence Act ((6) = 83.9, p>0.001) and participating ministries. Lambda measure of effect between having access to the Penal Code and participating ministries was weak but significant, $\lambda = 0.37$, $p<0.001$. In addition, the lambda measures of effect between having access to the 2009 Children's Act was weak but significant, $\lambda = 0.22$, $p<0.01$. Measures of effect between having access to the Penal Code and Domestic Violence Act was very weak, $\lambda = 0.09$.

Youth-friendly Strategies, Protocols, SOPs, and Best Practices

When asked about strategies, protocols, SOPs, and best practices, 84% of the respondents had no access to youth-friendly strategies. Data show that 80% lacked access to protocols or SOPs to support implementation of CSAE services to survivors. The study also found that 56% of the respondents had no youth-friendly practices to support survivors of abuse and exploitation.

The study found significant association between having youth friendly strategies describing organizational goals X2 (6) = 22.0, p>0.01 by ministries. Significant associations were observed between SoPs describing how to support survivors of abuse and exploitation (6) = 32.6, p>0.001), and implementation of youth-friendly best practices ((6) = 37.6, p>0.001) and participating ministries.

AVAILABILITY OF CSA SERVICE PERSONNEL; THEIR COMPREHENSION AND APPLICATION OF CSA STATUTES, POLICES, AND PROTOCOLS

The study investigated whether participating ministries had designated gender focal persons and whether they provided 24 hour services to CSAE survivors. The study also inquired about service providers' understanding and application of the main statutes when addressing sexual violence.

Overall, only 27% of the respondents reported having designated gender focal persons in their departments. Results suggest that only 19% of the focal persons were available 24 hours a day to support survivors.

When asked about their comprehension and application of the main CSAE statutes, 85% of the respondents could not state what the 2009 Children's Act says about sexual violence. In
addition, 86% could not explain what the Domestic Violence Act states about the processes of reporting sexual violence. Furthermore, 64% of the respondents were not knowledgeable about sexual offenses as described in the Penal Code.

Data suggest that 61% of the respondents were knowledgeable about their roles as service providers as stated in Botswana statutes. Table 8 summarizes the respondents' level of comprehension and application of the main statutes that govern sexual violence and child sexual abuse and exploitation in Botswana.

Table 8

Frequency distribution of respondent's comprehension and application of CSA statutes in Botswana

Exploratory variables	Three-point Likert Scale: Definitely Yes (%)	Some but not all (%)	None at all (%)
Can staff state what the 2009 Children's Act says about sexual violence? ***			
Defense, Justice, and Security	30 (38.0)	17 (21.5)	32 (40.5)
Education and Skills Development	6 (6.3)	36 (37.9)	53 (55.8)
Health	5 (4.3)	20 (17.2)	91 (78.4)
Local Government & Rural Development	6 (33.3)	8 (44.4)	4 (22.2)
	47 (15.3)	**81 (26.3)**	**180 (58.4)**
Can staff state Domestic Violence Act processes for responding to sexual violence? ***			
Defense, Justice, and Security+	32 (39.5)	19 (23.5)	30 (37.0)
Education and Skills Development+	5 (5.3)	33 (35.1)	56 (59.6)
Health+	4 (3.4)	21 (18.1)	91 (78.4)
Local Government & Rural Development	2 (11.1)	7 (38.9)	9 (50.0)
	43 (13.9)	**80 (25.9)**	**186 (60.2)**
Is staff knowledgeable about what the sexual abuse offenses in the Penal Code are? ***			
Defense, Justice, and Security	66 (79.5)	15 (18.1)	2 (2.4)
Education and Skills Development	24 (25.5)	38 (40.4)	32 (34.0)
Health	17 (14.5)	38 (32.5)	62 (53.0)
Local Government & Rural Development	4 (22.2)	9 (50.0)	5 (27.8)
	111 (35.8)	**100 (32.2)**	**101 (32.6)**
Is staff knowledgeable about the laws in Botswana related to sexual violence of minors (children)? ***			
Defense, Justice, and Security	58 (70.7)	18 (22.9)	6 (7.3)
Education and Skills Development	45 (47.4)	34 (35.8)	16 (16.8)
Health	31 (26.1)	50 (42.0)	38 (31.9)
Local Government & Rural Development	9 (50.0)	8 (44.4)	1 (5.6)
	143 (45.5)	**110 (35.0)**	**61 (19.4)**
Is staff knowledgeable about their roles as service providers as defined by law? ***			
Defense, Justice, and Security	76 (92.7)	6 (7.3)	0 (0.0)
Education and Skills Development	51 (53.1)	27 (28.1)	18 (18.8)
Health	52 (43.7)	26 (21.8)	41 (34.5)
Local Government & Rural Development	13 (68.4)	4 (21.1)	2 (10.5)
	192 (60.8)	**63 (19.9)**	**61 (19.3)**

p=0.05,p<0.01, ***p,<0.001*

The study also asked respondents about the application of best practices required when providing services to survivors of abuse and exploitation. When respondents were asked whether they had mandatory debriefing sessions in their respective departments to support and guide staff handling traumatic cases of abuse and exploitation, 75% reported lack of mandatory debriefing sessions. The study also found that only 54% of the respondents reported having a staff policy on confidentiality related to CSA services.

Cross-tabulation analysis found that 74% of respondents from MoDJS were more likely to report having a staff confidentiality policy than other ministries; while 64% of respondents from MoH were more likely to report having a staff confidentiality policy than other ministries. Conversely, 67% of the respondents from MoESD and 84% from MoLG&RD reported that they did not have staff confidentiality policies in their ministries (See Appendix IV).

CSAE SKILLS, COMPETENCIES, AND RESPONSIBILITIES

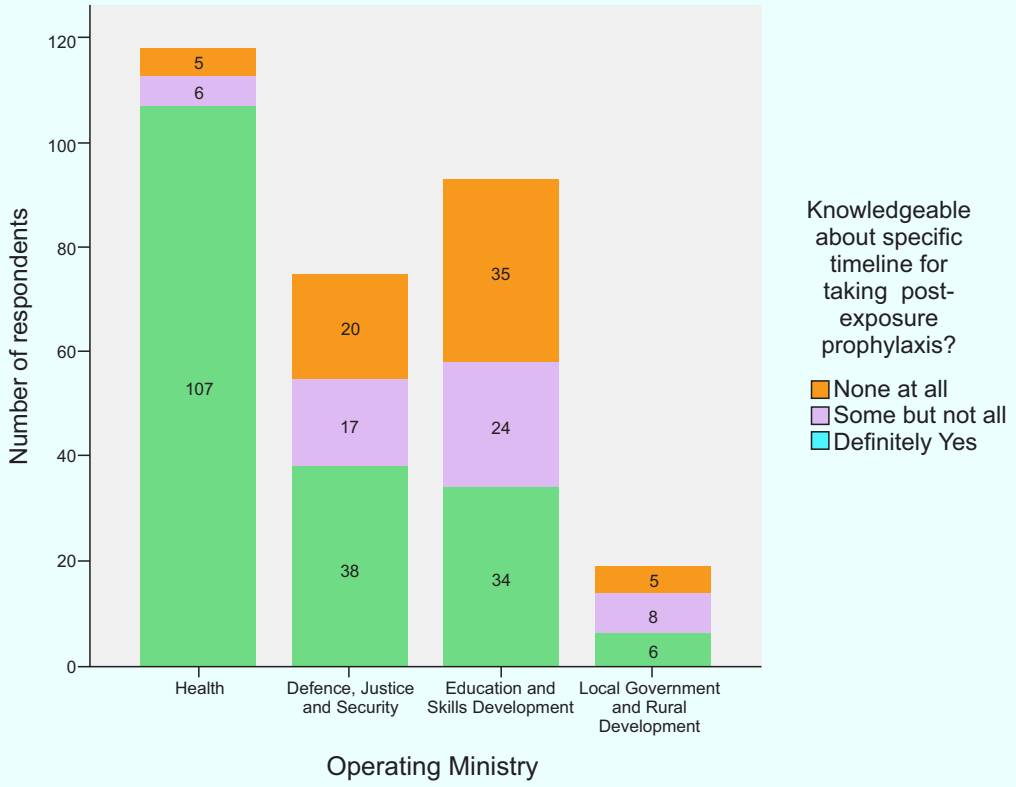
The study inquired after respondents' level of skills and competencies about specialized training concerning key counseling concepts. The study also questioned respondents' level of awareness on the impact of sexual abuse and exploitation on adolescents. In addition, respondents were asked whether they were responsible for reporting cases of sexual abuse to the police. In addition, the study asked respondents about the specific timeline for taking post-exposure prophylaxis to prevent HIV infection among sexually abused children.

The study found that only 9% of the respondents had ever received training on how to adequately support CSAE survivors. Measures of association using Chi-square test was significant between training to adequately support survivors and participating ministries, $\chi^2 (6) = 35.7, p>0.001$.

Results also suggest that 72% of the respondents were aware of the impact of sexual abuse and exploitation on adolescents. About 77% reported being responsible for reporting cases of child abuse to the police. However, only 57.5% (n = 138) of the 240 respondents had ever dealt with a case of child sexual abuse and exploitation. There was no statistical association between reporting cases and dealing with abused victims and participating ministries, $\chi^2(6) = 1.22$, p = ns).

About 60% of the respondents were aware of the specific timeline for taking post-exposure prophylaxis to prevent HIV transmission among victims of sexual abuse (Appendix V). Cross-tabulation analysis revealed that of the 185 respondents who reported being knowledgeable about the specific timeline for taking post-exposure prophylaxis, most (about 58%) were from MoH.

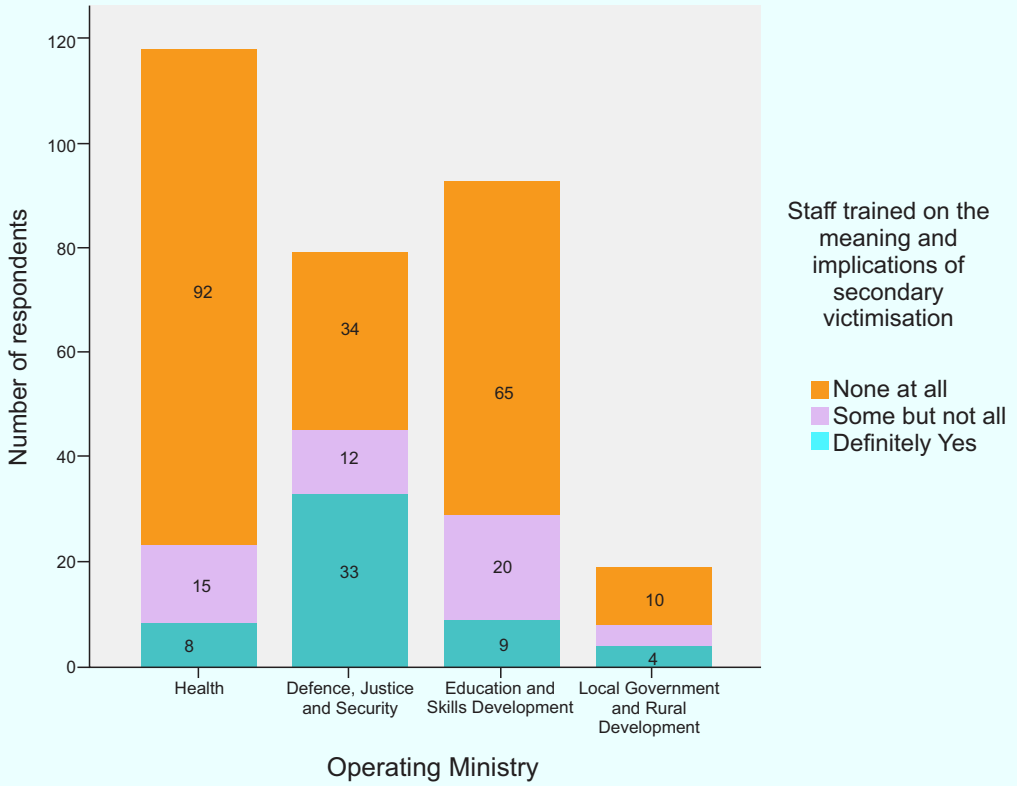
Figure 4: Number of respondents reporting being knowledgeable about specific timeline for taking HIV prophylaxis to prevent HIV transmission



When respondents were asked whether they had ever received training in the meaning and implication of secondary victimization on the victims of sexual violence, the study found that 82% had never received this type of training.

Cross-tabulation analysis results suggest that 41.8% (n = 33) of the respondents from MoDJS had been trained in the meaning of secondary victimization. Figure 5 shows the number of respondents trained in the meaning and implication of secondary victimization.

Figure 5: Number of respondents trained in the meaning and implication of secondary victimisation



Respondents were then asked whether they were trained in competency areas including counseling child victims of sexual abuse, crisis counseling, trauma management, and adolescent counseling. Table 9 details the level of self-reported competency levels in specialized training programs necessary to provide effective services to child survivors of abuse and exploitation in the study areas.

Data show that more than 90% had never received specialized training in specialized counseling. About 94% of the respondents had never received specialized training in counseling of sexually abused children and youth (Table 9).

Table 9

Frequency distribution of self-reported competency and skill levels in specialized CSA areas among respondents

Exploratory variables	*Three-point Likert Scale* Definitely Yes (%)	Some but not all (%)	None at all (%)
Is staff trained in:			
Specialized counseling in sexual abuse? **			
Defense, Justice, and Security+	9 (11.0)	21 (25.6)	52 (63.4)
Education and Skills Development+	5 (5.3)	15 (15.8)	75 (78.9)
Health+	4 (3.4)	7 (6.0)	106 (90.6)
Local Government & Rural Development	1 (5.3)	2 (10.5)	16 (84.2)
	19 (6.1)	**45 (14.4)**	**249 (79.5)**
Specialized crisis intervention? ***			
Defense, Justice, and Security	15 (18.5)	17 (21.0)	49 (60.5)
Education and Skills Development	3 (3.2)	13 (14.0)	77 (82.8)
Health	6 (5.2)	6 (5.2)	104 (89.6)
Local Government & Rural Development	4 (21.1)	3 (15.8)	12 (63.2)
	28 (9.1)	**39 (12.6)**	**242 (78.3)**
Specialized trauma management? ns			
Defense, Justice, and Security	12 (14.4)	15 (18.1)	56 (67.5)
Education and Skills Development	4 (4.3)	12 (14.0)	76 (81.7)
Health	13 (10.9)	21 (17.6)	85 (71.4)
Local Government & Rural Development	3 (15.8)	4 (21.0)	12 (63.2)
	32 (10.2)	**53 (16.9)**	**229 (72.9)**
Specialized adolescent counseling? *			
Defense, Justice, and Security	10 (12.5)	17 (21.2)	53 (66.3)
Education and Skills Development	8 (8.8)	23 (25.3)	60 (65.9)
Health	6 (5.0)	18 (15.1)	95 (79.8)
Local Government & Rural Development	5 (26.3)	4 (21.1)	10 (52.6)
	29 (9.4)	**62 (20.1)**	**218 (70.6)**
Specialized forensic social work? ***			
Defense, Justice, and Security	11 (13.6)	13 (16.0)	57 (70.4)
Education and Skills Development	1 (1.1)	3 (3.2)	90 (95.7)
Health	4 (3.3)	6 (5.0)	110 (91.7)
Local Government & Rural Development	0 (0.0)	0 (0.0)	18 (100.0)
	16 (5.1)	**22 (7.0)**	**275 (87.9)**

*ns p>0.05, *p=0.05,**p<0.01, ***p,<0.001*

In addition, 91% had not been trained in crisis counseling and 90%of the respondents had never received specialized instruction in trauma management. Results also indicate that 91% of the respondents had not received exclusive training in counseling adolescent victims of sexual abuse and exploitation in the study areas. The study found that 95% of the respondents had never established specialized training in forensic social work.

The study found significant statistical association at $p \leq 0.05$, using Chi-square test between specialized counseling in CSAE and participating ministries ((6) = 22.3, p<0.01). The study also found that specialized crisis intervention training and participating ministries were significantly associated, ((6) = 32.2, p <0.001). Specialized adolescent counseling and participating ministries ((6) = 14.4.2, p= 0.04), and specialized forensic social work and participating ministries ((6) = 33.4, p>0.001) were also significant. The study did not find significant statistical association between specialized traumatic management and participating ministries ((6) = 7.9, p = ns).

DATA MANAGEMENT FOR CASES OF SEXUAL ABUSE AND EXPLOITATION

Respondents were asked a series of questions about data management processes of CSA data in the respective ministries. The questions included segregation of data by sex and age groups, and record keeping and documentation of information pertinent to survivors of CSA and exploitation.

Results show that 60% of respondents reported segregating CSAE data by age and sex. Segregation of data varied significantly by participating ministries, (6) = 16.0, p = 0.01. Results indicate that MoDJS respondents were 72% more likely to report segregating data than other ministries. However, there was no effect on the association between data segregation and participating ministries using the lambda test of strength. Figure 6 illustrates the percentage of respondents reporting data segregation in each of the participating ministries.

Figure 6: Percent of respondents reporting segregation of child abuse and exploitation statistics by gender and age

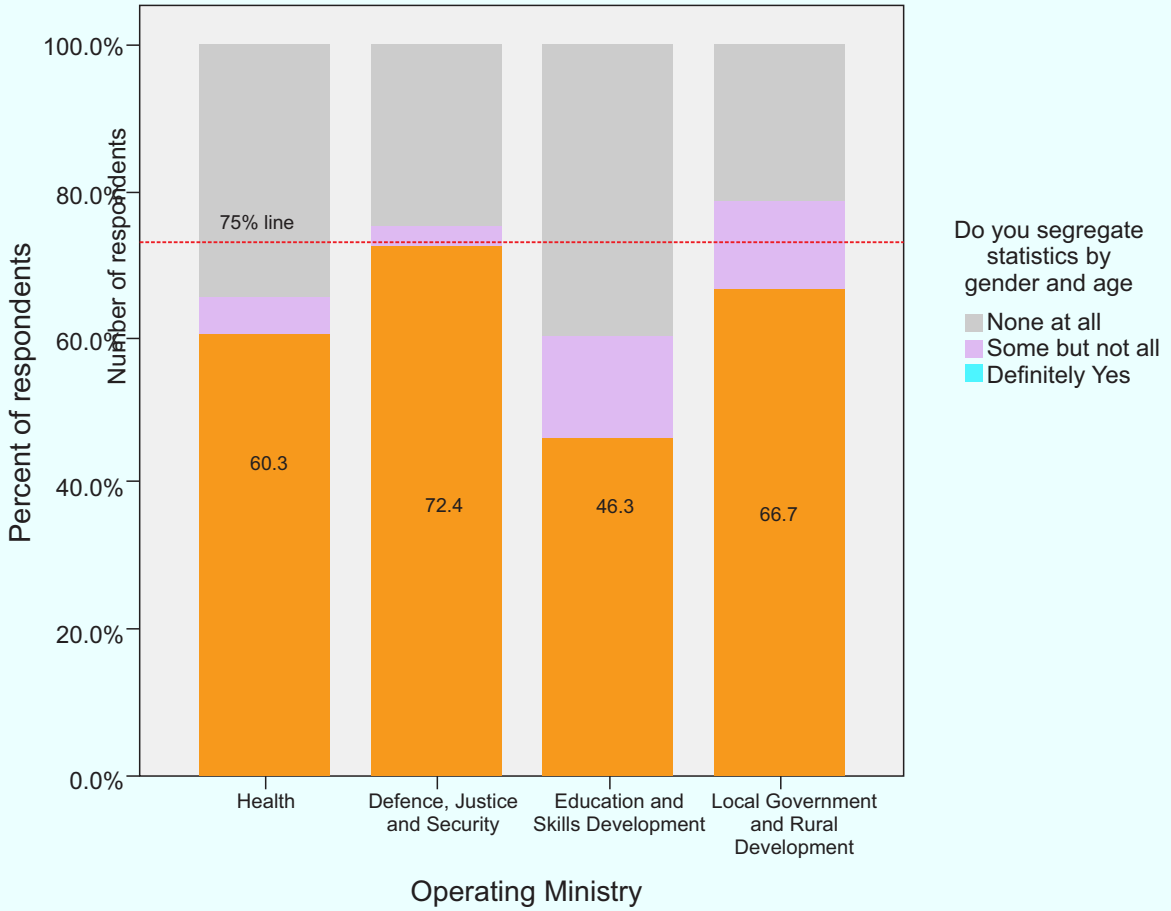


Table 10 provides summary findings about record keeping and documentation of CSAE data among participating ministries in the study areas. Data indicate that respondents from MoDJS were 86% more likely to report having appropriate forms for documenting statements from CSAE survivors than other ministries.

MoDJS respondents were also more likely to record the number of child sexual abuse cases and the number of withdrawn cases than others among the participating ministries. About 60% of MoH respondents were more likely to report recording the number of sexual violence cases receiving post-exposure prophylaxis (Table 10).

Table 9

Frequency table showing availability of forms and information gathering for survivors of sexual abuse and exploitation, grouped by participating ministries

Exploratory variables	Three-point Likert Scale: Definitely Yes (%)	Some but not all (%)	None at all (%)
Does this organization:			
Have appropriate forms for statement documentation? ***			
Defense, Justice, and Security	71 (85.5)	- (0.0)	12 (14.3)
Education and Skills Development	12 (13.9)	9 (10.5)	65 (75.6)
Health	29 (24.8)	12 (10.3)	76 (64.9)
Local Government & Rural Development	11 (57.9)	0 (0.0)	8 (42.1)
	123 (40.3)	**21 (6.9)**	**161 (52.8)**
Record child sexual abuse cases? ***			
Defense, Justice, and Security+	72 (86.7)	1 (1.2)	10 (12.0)
Education and Skills Development+	61 (75.3)	10 (12.3)	10 (12.3)
Health+	69 (60.0)	6 (5.2)	40 (34.8)
Local Government & Rural Development	19 (100.0)	0 (0.0)	0 (0.0)
	221 (74.2)	**17 (5.7)**	**60 (20.1)**
Record number of withdrawn cases? ***			
Defense, Justice, and Security	62 (79.5)	4 (5.1)	12 (15.4)
Education and Skills Development	29 (39.2)	7 (9.6)	38 (51.4)
Health	12 (10.9)	3 (2.7)	95 (86.4)
Local Government & Rural Development	9 (47.4)	3 (15.8)	7 (36.8)
	112 (39.9)	**17 (6.0)**	**152 (54.1)**
Have a safe place to lock confidential files? ***			
Defense, Justice, and Security	71 (89.9)	1 (1.2)	7 (8.9)
Education and Skills Development	66 (71.7)	2 (2.2)	24 (26.1)
Health	60 (52.2)	8 (6.9)	47 (40.9)
Local Government & Rural Development	11 (57.9)	2 (10.5)	6 (31.6)
	208 (68.2)	**13 (4.3)**	**84 (27.5)**
Record the number of survivors who received PEP? ***			
Defense, Justice, and Security	26 (43.2)	1 (1.3)	49 (64.5)
Education and Skills Development	11 (14.2)	4 (5.2)	62 (80.5)
Health	64 (57.7)	5 (4.5)	42 (37.8)
Local Government & Rural Development	3 (15.8)	1 (5.2)	15 (78.9)
	104 (36.7)	**11 (3.9)**	**168 (59.4)**
Document counseling sessions? ***			
Defense, Justice, and Security	42 (54.5)	6 (7.8)	29 (37.7)
Education and Skills Development	64 (71.9)	14 (15.7)	11 (12.4)
Health	70 (60.3)	18 (15.5)	28 (24.1)
Local Government & Rural Development	13 (68.4)	5 (26.3)	1 (5.3)
	189 (62.8)	**43 (14.3)**	**69 (22.9)**

p=0.05,p<0.01, ***p,<0.001*

REFERRAL PRACTICES OF CSAE SURVIVORS

The study asked respondents several questions concerning the state of the referral system of CSAE in their respective ministries or departments. The study also inquired about availability of reliable transportation system to transfer CSAE survivors.

Overall, 89% (n = 274 of 308) of respondents reported referring CSAE survivors outside their respective department or ministries. At least nine of every ten respondents interviewed in each department or ministry reported referring a CSAE survivor.

The study then asked the 274 respondents:

a) whether they follow up referred cases,
b) whether they received feedback on the cases they referred,
c) whether they received cases from other departments, and
d) whether they received feedback of referral of cases in timely manner.

Results indicate that only 52% (n = 143) of the respondents who referred cases outside their department followed up on the cases they referred. About 41% (n = 131) received feedback, and 57.6% (n= 158) received cases from outside departments. Results suggest 23.3% (n = 64) of the respondents received feedback in timely manner.

Of the 64 respondents who claimed receiving feedback in timely manner, 51.6% (n = 33) were from MoDJS, 35.9% were from MoH, 9.4% were from MoESD and 3.1% were from MoLG&RD. Chi-square measures of association between 'timely follow-up and feedback' and participating ministries was significant, (6) = 47.5, p <0.001. Measure of effects using lambda was weak but significant, λ = 0.26, p<0.001.

INFRASTRUCTURE FOR CSA SERVICES

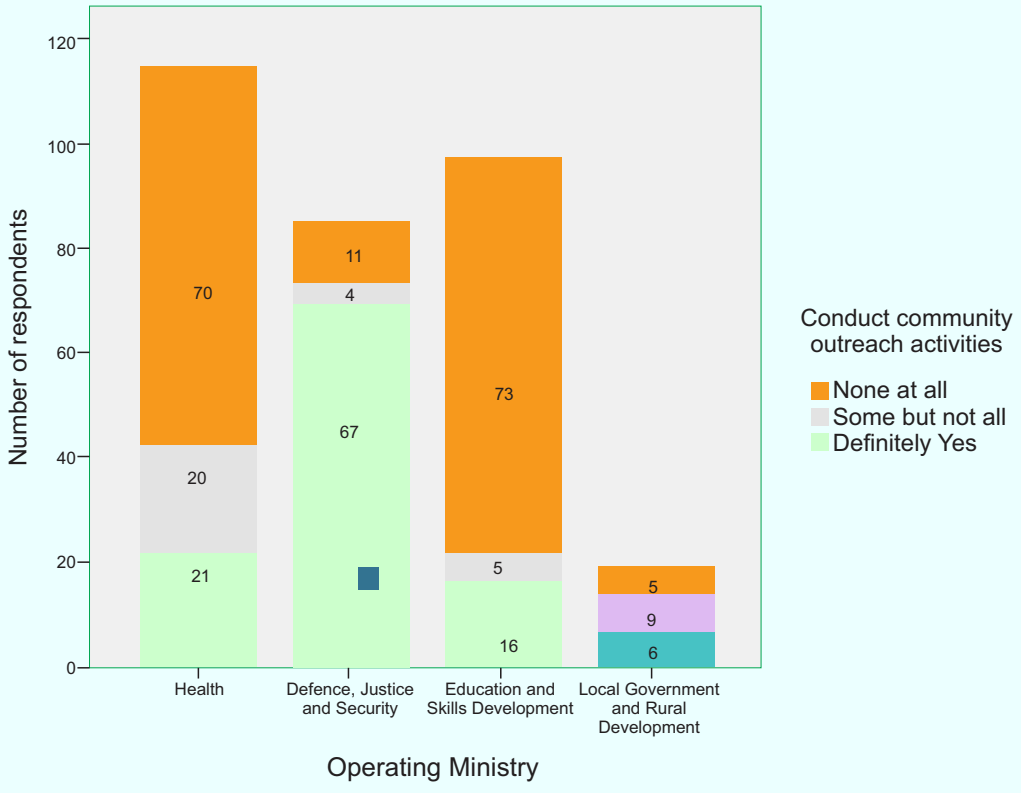
The study asked respondents whether they had adequate space and setting to provide CSAE services in their respective department. Results show that 47% reported having adequate space and setting for offering CSAE services.
Among participating ministries, 59% of the respondents from MoESD reported having adequate space and setting in the study areas. Chi-square measures of association between 'having a private and confidential space' and participating ministries was significant, X2(6) = 13.1, p <0.04; however, lambda measure of effect between the two variables was very weak and insignificant.

COMMUNITY OUTREACH PROGRAMS

The study inquired whether ministries conduct community outreach programs to raise CSAE awareness. The study also investigated whether the participating ministries had handouts or brochures about CSAE.

Results show that 36% (n = 110) of the respondents across all the ministries reported having CSAE community outreach programs. Of the 110 respondents, 60.1% (n = 67) were from MoDJS, the police department. Chi-square measures of association between 'community outreach program' and participating ministries was significant, X2(6) = 127.3, p <0.001. Measure of effects using lambda was moderate and significant, λ = 0.40, p<0.001. Figure 7 shows the number of respondents reporting community outreach programs across participating ministries.

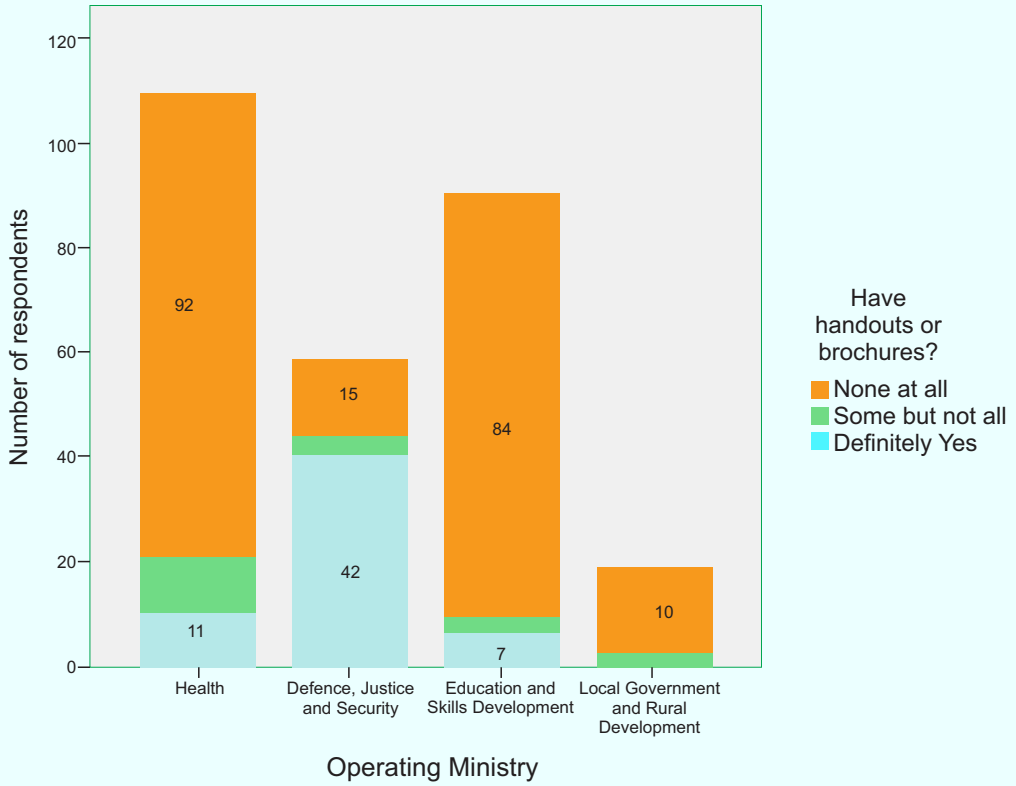
Figure 7: Number of respondents reporting community outreach programs raise awareness about sexual violence



On the availability of CSA handouts and brochures, 21% (n = 60 of 288 who answered the question) of the respondents reported having handouts or brochures in their respective departments. Of the 60 respondents, 70% were from MoDJS, 18.3% were from MoH and 11.7% were from MoESD. However, respondents could not provide copies of such handouts or brochures to the research to validate their claims. Chi-square measures of association between 'handouts or brochures' and participating ministries was significant, X^2 *(6) = 116.0, p <0.001*. Measure of effects using lambda was weak but significant, $\lambda = 0.33$, $p<0.001$.

Figure 8 shows the number of respondents reporting having handouts or brochures across participating ministries.

Figure 8: Number of respondents reporting having handouts and brochures about what to expect when reporting a case of sexual violence



DEPARTMENT-SPECIFIC QUESTIONS

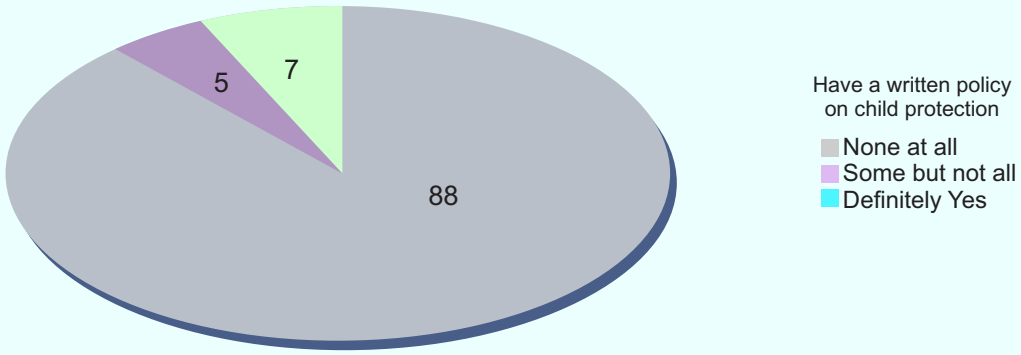
The study included ministry-specific sets of questions targeting MoESD, the police department in MoDJS, and MoH. This section presents descriptive analysis of data from these ministries or departments.

Ministry of Education and Skills Development

The study asked 100 respondents from MoESD if they had a ministerial or departmental written policy on child protection. The research also inquired from the respondents about the prevalence of sexual abuse involving teachers and students in their respective schools.

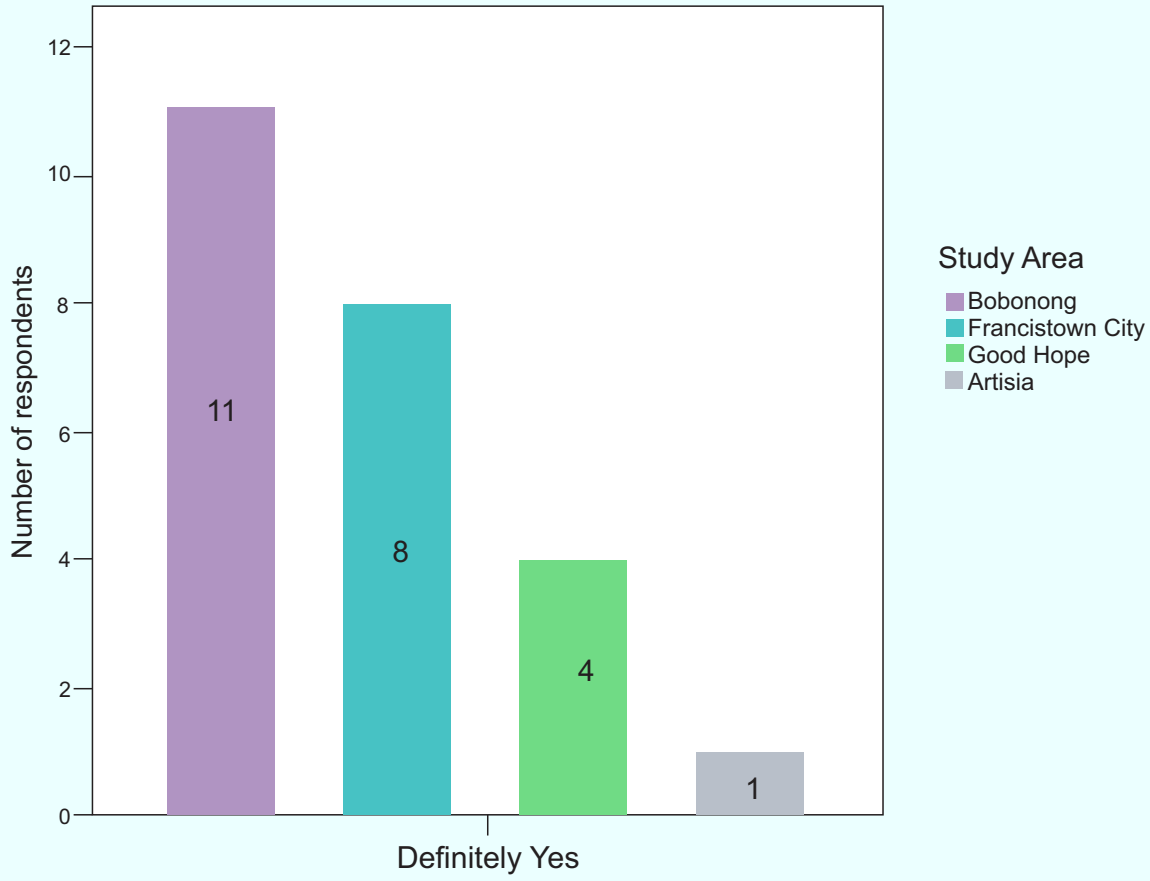
Overall, 88% of the MoESD respondents reported that they had no written policy about child protection. Figure 10 shows the percent distribution of participants' responses about a written policy on child protection.

Figure 10: Percent distribution of respondents reporting on MoESD written on child protection



When asked about prevalence of sexual abuse of school children involving teachers, 84 of the 100 respondents answered the question. Among the 84 respondents, 28.6% (n =24) reported occurrences of sexual abuse involving teachers and students in their schools while 71.4% said they have never witnessed such occurrences. Of the 24 respondents, 11 reported such occurrences in Bobonong. Figure 11 shows the number of respondents who reported incidences of sexual abuse involving teachers and students.

Figure 11: Respondents who reported incidences of sexual abuse involving teachers and students (n = 24)



Ministry of Defense, Justice, and Security: The Police Department

The study asked 65 police officers questions about equipment and CSAE services in the selected survey areas. The questions included availability of rape kits in their respective stations and access to a secure place for keeping evidence. The study also inquired about timeliness of transporting evidence samples for forensic examination from their respective stations. Table 10 summarizes responses from the police officers.

Table 10

Frequency table reporting on police department structural and process elements supporting sexual violence interventions

Exploratory variables	Three-point Likert Scale: Definitely Yes (%)	Some but not all (%)	None at all (%)
Does the police department have:			
Rape kits available (n=65)	65 (100)	-	-
A secure place to keep evidence (n = 62)	59 (95.2)	1 (1.6)	2 (3.2)
A working refrigerator (n = 56)	40 (71.4)	2 (1.8)	16(28.6)
Timely processes to transfer evidence to forensic laboratory (n = 61)	49 (80.3)	9 (14.8)	3 (4.9)

Data suggest that rape kits were available in all police stations in the selected areas (Table 10). The data also suggest all police stations have secure places to keep evidence and most of the police stations had refrigerators to store evidence in the survey areas (Table 10). Cross-tabulation analysis by survey areas revealed that Francistown and Artesia had incidents where some police stations did not have access to fridges to store evidence.

The study also found that most of the police stations in selected survey areas had vehicles to transport evidence to forensic laboratories in timely manner (Table 10). Cross-tabulation analysis revealed that surveyed police stations in Bobonong were more likely to report transporting evidence to forensic laboratories late compared with police stations in Francistown, Good Hope and Artesia.

Ministry of Health

The study asked 120 respondents from selected hospitals, clinics, and health posts several questions related to CSAE services. Results are summarized in tables 11, 12, 13, 14, and 15. Overall, 45% of respondents reported that CSAE survivors had access to gynecologists in primary care settings. Results suggest CSAE survivors in Francistown were more likely to receive specialized services from gynecologists than other CSAE survivors from Artesia, Goodhope, and Bobonong.

Common practices among healthcare workers indicate that 37% of the respondents needed written consent from survivors and 50% needed a police report before providing the medical examination to CSA survivors. In addition, 16% of the respondents needed presence of a social welfare officer to offer medical examination to CSAsurvivors. Common practices also suggest that 78% of the healthcare workers will provide medical examination to CSA survivors in the presence a family member. Results also indicate that 75% of healthcare workers in the survey areas examine incidents of child abuse even before reporting the incident of abuse to the police. Results indicate that 85% and 93% of the healthcare workers who participated in the study, reported availability of post-exposure prophylaxis and antiretroviral therapy, respectively. (Table 11).

Table 11

Frequency distribution of personnel and health services pertinent to survivors of sexual violence

Exploratory variables	Three-point Likert Scale: Definitely Yes (%)	Some but not all (%)	None at all (%)
Does this facility have…			
Gynecologists?	53 (44.9)	1 (0.8)	64 (54.2)
A written consent for survivors?	41 (36.9)	4 (3.6)	66 (59.5)
Consent for a sexual abuse medical examination?	55 (50.0)	2 (1.8)	53 (48.2)
A police report filed prior to providing medical examination to survivors of sexual abuse?	61 (55.0)	5 (4.5)	45 (40.5)
Does the facility provide…			
Sexual abuse medical examinations for children in presence of a social worker?	18 (16.1)	8 (7.1)	86 (76.8)
Privacy for children and youth to disclose the incident of sexual abuse in absence of family members?	88 (77.9)	13 (11.5)	12 (10.6)
Sexual abuse services to people who have not reported the case to the police?	86 (74.8)	7 (6.1)	22 (19.1)
Does the facility provide…			
Post-exposure prophylaxis to prevent HIV transmission?	99 (85.3)	-	17 (14.7)
ARV therapy?	110 (93.2)	-	8 (6.8)

On availability of infrastructural structures within primary care setting, the results suggest most of the facilities had private and secure toilet facilities for CSA survivors. About 91% of the surveyed health institutions had examination tables and proper light facilities to examine CSA survivors. Data also suggest that most primary care settings in selected survey areas had access to regular electric power in their facilities. Table 12 provides a summary of infrastructural data found in the selected primary care settings.

Table 12

Frequency distribution of available infrastructural information structures necessary for providing CSA services to survivors

Exploratory variables	Three-point Likert Scale: Definitely Yes (%)	Some but not all (%)	None at all (%)
Does this facility have			
A toilet in a private and secure location?	84 (71.2)	5 (4.2)	29 (24.6)
Does the facility have			
An examination table?	106 (91.4)	2 (1.7)	8 (6.9)
Appropriate examination light for examining sexual abuse survivors?	84 (71.8)	7 (6.0)	26 (22.2)
Regular electric power?	96 (82.0)	14 (12.0)	7 (6.0)

Table 13 summarizes equipment and supplies, drugs, and service tests necessary to provide basic required care to CSA survivors. According to the data, more than 75% of respondents reported availability of the following equipment and supplies in selected facilities: autoclaves, specimen glass slides, speculum, laboratory containers, tapes to measure bruises or lacerations, and gowns to cover victims.

Data also reveal that more than half of the respondents did not have access to rape kits, paper bags to preserve evidence, or seals for evidence bags. In addition, more than half (>50% but <65%) of the respondents had combs and colposcopy in their facilities. The study found that 90% of the respondents reported availability of universal precaution supplies in their respective health facilities. Furthermore, 90% of the respondents reported access to antibiotics, anesthetic, and pain medication drugs. Results also indicate that most facilities in the study areas offered pregnancy test to sexually abused girls (Table 13).

Table 13

Frequency distribution of equipment and supplies available in selected primary care settings in selected survey areas

Exploratory variables	Three-point Likert Scale: Definitely Yes (%)	Some but not all (%)	None at all (%)
Does this facility have			
An autoclave?	89 (76.1)	3 (2.6)	25 (21.4)
A rape kit on site?	49 (43.4)	3 (2.6)	61 (54.0)
Swabs?	115 (97.5)	-	3 (2.5)
Specimen glass slides?	115 (97.5)	-	3 (2.5)
A comb	56 (50.5)	4 (3.6)	51 (45.9)
A speculum	114 (96.6)	1 (0.8)	3 (2.5)
Laboratory containers	115 (97.5)	-	3 (2.5)
Magnifying glass/colposcopy	75 (64.7)	2 (1.7)	39 (33.6)
Paper bags for evidence	56 (49.1)	1 (0.9)	57 (50.0)
Seals for the evidence bags	53 (46.5)	1 (0.9)	60 (52.6)
A gown sheet to cover a victim	90 (76.9)	2 (1.7)	25 (21.4)
A tape to measure bruises or lacerations	99 (86.8)	2 (1.8)	13 (114)
Does the facility have the following universal precaution supplies			
Soap?	113 (95.8)	3 (2.5)	2 (1.7)
Sterile medical instruments?	116 (98.3)	1 (0.8)	1 (0.8)
New needles and syringes?	116 (98.3)	-	2 (1.7)
Sanitary supplies?	106 (89.8)	5 (4.2)	7 (5.9)
STI treatment drugs	115 (97.5)	-	3 (2.5)
Emergency contraceptives available	101 (87.1)	2 (1.7)	13 (11.2)
Does your facility have			
Antibiotics?	96 (99.0)	-	1 (1.0)
Anesthetics?	108 (91.5)	1 (0.8)	9 (7.6)
Pain medications?	115 (97.5)	-	3 (2.5)
Does this facility			
Conduct pregnancy tests to sexually abused girls?	97 (85.1)	6 (5.3)	11 (9.6)

The study also found that more than 70% of the respondents reported having access to sexually transmitted infections (STI) protocol, post-exposure prophylaxis protocol, and the emergency contraceptive protocol. However, most of the respondents reported lack of access to medico-legal protocol, reporting teen mothers, and the post-rape abortion protocol in the primary care settings in survey areas. Table 14 summarizes availability of technical documents necessary for providing basic CSA services to survivors in selected survey areas.

Table 14

Frequency distribution of availability of technical documents necessary for providing basic CSA services to survivors

	Three-point Likert Scale		
Exploratory variables	Definitely Yes (%)	Some but not all (%)	None at all (%)
Does this facility have			
Medico-legal pictogram?	27(24.3)	4 (3.6)	80 (72.1)
Information pamphlets?	53 (45.7)	10 (8.6)	53 (45.7)
A camera?	3 (2.6)	2 (1.7)	111 (95.7)
Does the facility have the following protocols			
STI treatment protocol?	113 (96.6)	1 (0.9)	3 (2.6)
Post-exposure prophylaxis protocol?	101 (88.6)	2 (1.8)	11 (9.6)
Emergency contraceptives protocol?	99 (78.1)	6 (5.3)	19 (16.7)
Medico-Legal protocol?	39 (36.1)	4 (3.7)	65 (60.2)
Reporting teen mothers?	29 (29.9)	7 (6.7)	68 (65.4)
Post-rape abortion protocol?	52 (48.1)	2 (1.9)	54 (50.0)

The research inquired whether the selected facilities had on-site laboratory services. According to the results, 96% of hospital respondents and 11% of clinic respondents reported having on-site laboratory services. The study found that health posts surveyed in this study did not have access to on-site laboratory services.

About 96.4% of respondents reported providing 24-hour laboratory services while 18% of the respondents from clinics reported access to the services. Data show that health posts in the selected survey areas did not have access to 24-hour laboratory services. Table 15 provides summarizes laboratory information services in survey areas.

Table 15

Frequency distribution of accessibility to laboratory services aggregated by type of health facility

	Three-point Likert Scale		
Exploratory variables	Definitely Yes (%)	Some but not all (%)	None at all (%)
Do you have a laboratory on site?			
Hospital	80 (96.4)	-	3 (3.6)
Clinic	3 (10.7)	-	25 (89.3)
Health Post	-	-	7 (100)
Do you have access to 24-hour lab services?			
Hospital	80 (96.4)	-	3 (3.6)
Clinic	5 (17.9)	-	23 (82.1)
Health Post	-	-	7 (100)

Chi-square measures of association between 'having a laboratory on-site' and type of facility was statistically significant, $(2) = 91.3$, $p < 0.001$. Measure of effects using lambda was very strong and significant, $\lambda = 0.829$, $p<0.001$. The study also found a statistical association between 'having access to 24-hour laboratory services' and type of facilities, $(2) = 75.7$, $p < 0.001$. Measure of effects using lambda was moderate and significant, $\lambda = 0.68$, $p<0.001$.

CSAE PREPAREDNESS SCORECARD (CPS)

The research created a CSAE Preparedness Scorecard (CPS) based on the main thematic areas of the questionnaire (and responses). The thematic areas of the questionnaire included structural factors such as space and settings for service, CSAE-related laws, human resources (service personnel), cross-sector collaboration and linkages (referral system), and data management system (record keeping and documentation).

The process questions included competence and skills of service providers. Competencies and skills questions included specialized training, use and application of existing laws, availability of CSA services, and outreach programs. The process questions included accessibility to technical documents necessary to develop CSA preparedness systems.

The study computed exploratory factor analysis on thematic areas of the questionnaire to establish questions that measured the same aspects (construct validity). Factor loading on each theme was set at ≥ r =.40. Factors that loaded together were added to create an index or score measure. Index measures were tested for internal consistency reliability using the Cronbach α coefficient. Index measures with of coefficient measures ≥ .60 were included in the CPS. Table 16 shows the components of the CPS matrix and respondent's ratings.

Table 16

Frequency distribution of respondents rating of CSA services based on CSA Performance Preparedness Scorecard

	Three-point Likert scale			
CSA PPS Factors	"0 - 0.5" score (%)	"0.6 – 2.5" score (%)	"2.6 – 3.0" score (%)	Mean on "0 -3 scale (±)
Structural factors				
CSA main statutes	166 (53.4)	112 (36.0)	33 (10.6)	0.8 (1.0)
Space and setting for CSA services	125 (40.5)	39 (12.6)	145 (46.8)	1.5 (1.4)
CSA service personnel	165 (51.9)	124 (39.0)	29 (9.1)	0.8 (1.1)
Data management system	32 (10.0)	225 (70.3)	63 (19.7)	1.6 (0.9)
CSA referral system	72 (22.9)	198 (62.9)	45 (14.2)	1.4 (1.0)
Process factors				
CSA basic services	19 (5.9)	91 (28.3)	212 (65.8)	2.4 (1.0)
CSA counseling services	44 (13.8)	223 (70.1)	51 (16.0)	1.6 (0.9)
CSA access to protocols and SOPs	140 (43.9)	142 (44.5)	37 (11.6)	1.0 (1.0)
CSA competencies in specialized training	226 (70.6)	87 (27.2)	7 (2.2)	0.4 (0.6)
Knowledge and application of CSA laws	56 (17.5)	238 (74.4)	26 (8.1)	1.3 (1.8)
CSA community outreach programs	189 (60.0)	76 (24.1)	50 (15.9)	0.9 (1.1)
CSA Preparedness Scorecard Index	**49 (15.2)**	**268 (83.2)**	**5 (1.6)**	**1.5 (0.6)**

Note:
"0-0.5" denote lack of preparedness
"0.6-2.5" denote sub-optimal preparedness
"2.5-3.0" denote optimal preparedness

Results based on the CSAE Preparedness Scorecard suggest both structure and process factors (83.2%) fell within the sub-optimal preparedness of CSAE services. The overall mean on the '0 – 3" scale was 1.5 (±0.6), consistent with the sub-optimal CSAE service preparedness.

The CPS mean index scores varied significantly across ministries. The MoDJS had the highest mean score, M = 1.8 (± 0.6compared with other participating ministries followed by MoLG&RD with a mean score of M= 1.4 (± 0.4). The mean score for MoESD was 0.95 (± 0.4) and MoH was M = 0.89 (± 0.4) on the "0 – 3" scale.

One-way ANOVA comparing of means suggests CPS mean differences were statistically significant, $F(3, 318) = 67.3$, $p<0.001$. Post-hoc analysis using Tukey HSD revealed that means between MoDJS and other ministries were statistically different ($p\leq0.05$). Similarly, the mean difference between MoLG&RD and other ministries was statistically significant ($p<0.015$). There was no significant mean difference between MoESD and MoH.

While current results indicate that participating government entities are not oriented to achieve optimal preparedness for CSAE services, MoDJS and MoLG&RD had relatively better structures and processes for supporting CSAE services than MoESD and MoH. Results also suggest that MoESD and MoH lack structures and processes to support CSAE services.

CSAE CULTURE OF QUALITY IMPROVEMENT (CQI)

The research created a culture of quality improvement (CQI) matrix about preparedness of government ministries offering CSAE services to survivors. CQI preparedness matrix was developed based on 12 items. Six of the items examined structures and the other six examined processes of the government systems. The study conceptualized the CQI preparedness matrix from the Donabedian model of quality care, extensively used to monitor performance, design continuous quality improvement, and strengthen the performance of health systems. The study calibrated CQI scale on a seven-point Likert scale, with "1" denoting strongly disagree and "7" being strongly agree to measurement items.

Table 17 summarizes the overall rating of CSA CQI preparedness in selected survey areas. More than half of the respondents (57%) ranked CSA CQI preparedness in selected ministries as lacking appropriate structures and processes necessary to create culture of quality improvement for child sexual abuse services, while 24% were uncertain. Only 18% of the respondents believed their ministries had a structure and process necessary to create CQI for CSA services in the selected ministries. The overall median score (Mnd = 3.2, IQR = 2.0) and mean score (M = 3.4, ± 1.2, 95% CI: 3.3, 3.5) was within the "1-3" category of the CQI scale.

Table 17

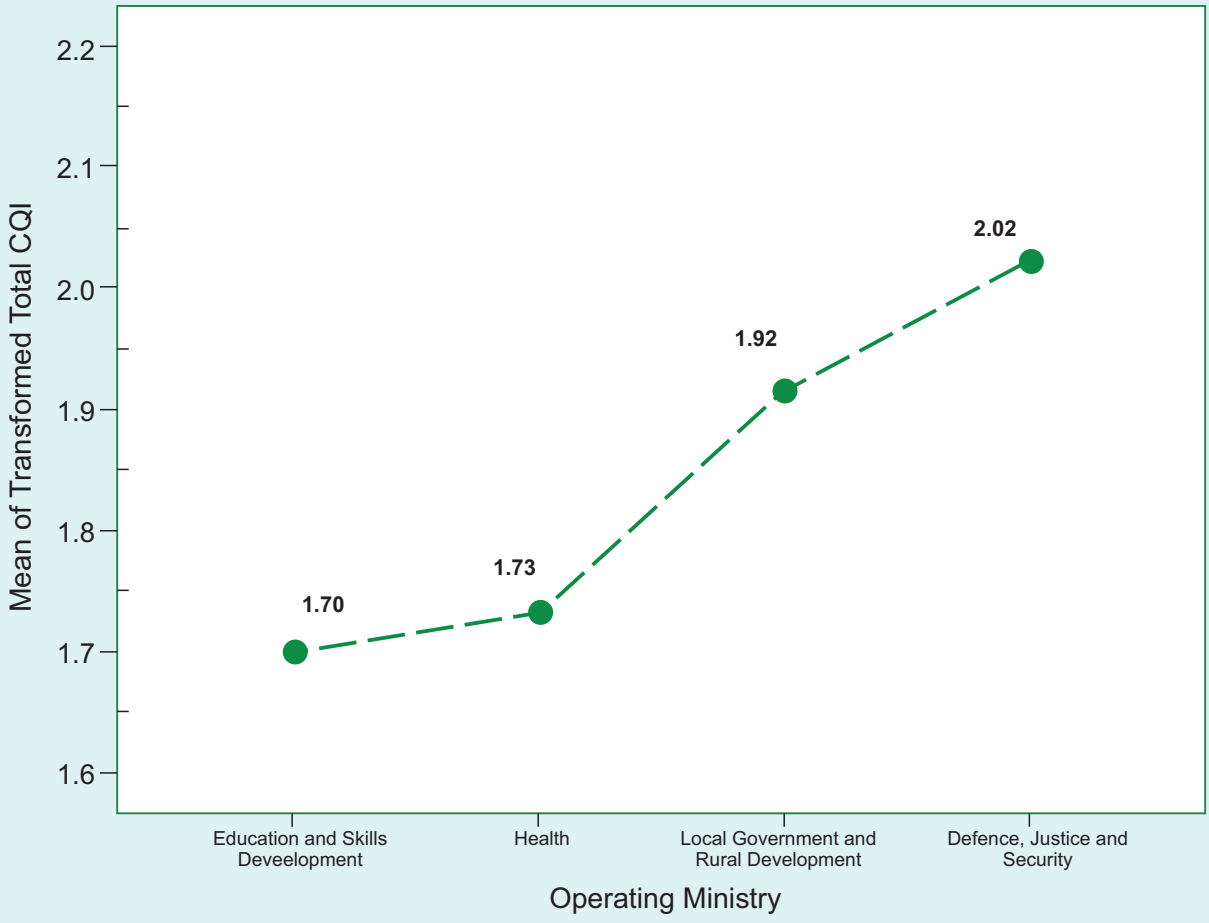
Frequency table showing accessibility to laboratory services by type of health facility

	Seven-Point Likert Scale			Measures of central tendency		
Exploratory variables	"1-3" Lack of CQI	"4" Threshold	"5-7" Evidence of CQI	Median (IQR)	Mean (SD)	(95% CI)
Structures of CQI	131 (40.7)	96 (29.8)	92 (28.6)	3.8 (2.0)	3.9 (±1.3)	(3.7, 4.0)
Processes of CQI	218 (67.7)	54 (16.8)	47 (14.6)	2.8 (2.2)	2.9 (±1.4)	2.7, 3.0)
CSA CQI	**183 (56.8)**	**78 (24.2)**	**58 (18.0)**	**3.2 (2.0)**	**3.4 (±1.2)**	**(3.3, 3.5)**

The study assessed mean differences of the preparedness CQI ratings across ministries using one-way analysis of variance. ANOVA results were significant at $p \leqslant 0.05$, $F(3,315) = 19.66$, $p<0.001$. Tukey HSD test results found that MoDJS mean score was significantly different from other ministries taking part in the study ($p<0.001$). The study also found that MoLG&RD mean score was significantly different from MoESD ($p = 0.04$).

However, there were no statistical differences of mean indices between MoLG&RD and MoH ($p>0.05$) and MoH and MoESD. Figure 13 show the mean score difference between ministries taking part ministries.

Figure 13: Transformed mean plot of culture of quality care for child sexual abuse cases across primary ministries



While respondents' ranking of CSAE CQI Preparedness was below the threshold, results indicate MoDJS (from judicial and police) and MoLG&RD had better structures and processes relative to other participating ministries. Results also suggest that MoESD and MoH had low CQI score relative to other participating ministries.

INFERENTIAL ANALYTICAL APPROACH

Inferential analytical approach is often used to model data or test hypothetical proposition. In this study, we computed inferential analytical approach to answer the main research questions. The research evaluated the preparedness of government CSAE service providers in four selected areas. The information was necessary to develop interventions critical for improving CSAE services to survivors. Evaluating preparedness for CSAE primary ministries hinged on answering the following research question: "How prepared are government service providers to support CSAE survivors?"

Hypothesis Testing

Research Question: How prepared are government service providers to support CSAE survivors?"
To answer this question, the study used one-way hypothesis testing to examine whether the current CSAE Preparedness was optimal or not optimal using 2.6 cut-off point. The study computed regression modeling to predict the impact of change, i.e. forecast how much the dependent variable (CSAE Preparedness mean) will change if the predictors are changed. In addition, the study modeled culture of quality improvement (CQI) to assess the impact of change and predict future trends.

i) Null hypothesis: $H_0: \mu 0 < 2.6:$ CSAE preparedness in government ministries does not meet the optimal criteria cut-off point on the preparedness scale

ii) Alternative hypothesis: $H_A: \mu 1 \geq 2.6$: CSAE preparedness in government ministries meets the optimal criteria cut-off point on the preparedness scale

The determinant cut-off point for assessing 'CSAE preparedness' on the measurement scale was 2.6. The CSAE preparedness measurement scale was calibrated on a three-point Likert scale where "2.6-3.0" stood for optimal CSAE preparedness, "1.6 - 2.5" corresponded to sub-optimal CSAE preparedness, and "0 -1.5" meant lack of CSAE preparedness. The hypothesis tested whether there was sufficient evidence to conclude that the CSAE preparedness in the government ministries in selected areas was different from the hypothesized mean population.

Box I

Hypothesis testing decision process

Hypothesis in plain English	Government ministries are not prepared and capable of offering best practice support child sexual abuse survivors.
	Government ministries are prepared and capable of offering best practice support child sexual abuse survivors.
Statistical measure	Statistical measure of interest was population mean (μ =2.6)
Study goal	Determine whether there is sufficient evidence to conclude that CSA preparedness in government ministries offering best practice support (optimal) to child sexual abuse survivors. The study was one-sided.
Hypothesis in statistical terms	$\boldsymbol{H_0: \mu_0 < 2.6:}$ CSA preparedness in government ministries is not optimal based on the preparedness scale.
	$\boldsymbol{H_a: \mu_1 = 2.6}$: CSA preparedness in government is optimal based on the preparedness scale.
Level of test	$\alpha = 0.05$
Test statistic	z- Test statistic.
Critical value	Critical value is ±1.645 (one-sided). If the $\bar{x}$ is greater than μ by +1.645, then the study will reject the null hypothesis, otherwise the study will fail to reject the null hypothesis.

The study applied the Pagano & Gauvreau (2000) equation (p.239) to calculate the z-test statistic

$$z_{obt} = \frac{\bar{x} - \mu_0}{SE_{\bar{x}}}$$

The overall mean index score of the preparedness scale was, = 1.5168 and the standard error for the mean was = 0.0213, and the hypothesized population mean was μ0 = 2.6. The mean difference between the sample mean and population mean, M_{diff} = -1.437, 95% CI: -1.502, 1.372, p<0.0001. The statistic was:

$$z_{obt} = \frac{1.161 - 2.6}{0.0331}$$

$$z_{obt} = -43.39$$

Results indicate that the z-test statistic is significantly below the critical value of 1.645 at α = 0.05 test level. The study failed to find sufficient evidence to support the alternative hypothesis (Ha: μ1 ≥ 2.6), i.e., that CSA preparedness in main government ministries is capable of offering best practice support for child sexual abuse survivors in selected areas. The study failed to reject the null hypothesis (H0: μ0 ≤ 2.6); and concluded that CSA preparedness in the main government ministries in selected study areas is not capable of offering best practice support for child sexual abuse survivors.

REGRESSION ANALYSIS

Multivariate Ordinal Regression Modeling Predicting CSAE Preparedness

The study performed an ordinal regression analysis to identify high impact variables for predicting CSAE optimal preparedness based preparedness scoreboard developed in the study. Model predictors included organizational information, respondents' demographic characteristics, and structural and process subscale measures. The model dependent variable was the CSAE preparedness scorecard, and was coded in three categories: "2.6-3.0" denoting optimal preparedness, "0.6–2.5" corresponding to sub-optimal preparedness, and "0.0-0.5" meaning lack of preparedness.

Post-hoc diagnostic test to examine model accuracy and generalizability was satisfactory. The model fit was significant p<0.001 (Table 18); the Pearson and Deviance goodness-of-fit was non-significant, p>0.05; and the Cox and Snell and Negelkerke pseudo R2tests were satisfactory. Proportional odds assumption test was non-significant suggesting the data were appropriate for ordinal regression analysis. The threshold categories were significant, p<0.001 suggesting the CSAE preparedness categories were truly different (Table 18).

Results show that structure, process, and demographic characteristics of the respondents were significant predictors of improving CSAE to survivors in the future. Structure predictors including data management system *(OR adjusted = 14.15, p<0.001)*, referral system *(OR adjusted = 9.12, p<0.001)*, and access to CSA statutes *(OR adjusted = 5.10, p = 02)* were significant predictors of CSAE preparedness. Data show that processes including knowledge and application of statutes, strategic plans and policy guidelines *(OR adjusted = 23.57, p = 0.001)*, specialized training (OR adjusted =11.47, p = 02), provision of counseling services *(OR adjusted = 8.33, p = 0.002)* and access to youth-friendly strategic plans, protocols and standard norms *(OR adjusted = 6.23, p = 01)* were significant predictors of CSA preparedness. Results suggest magistrates compared with other professional occupations were significant predictor of CSAE preparedness *(OR adjusted = 1152.8, p = 0.02)*. Table 18 shows multiple predictors of CSA preparedness in the main government ministries based on ordinal regression model.

Table 18

Multiple ordinal regression analysis predicting CSA preparedness in government ministries mandated to support child sexual abuse survivors in study areas

		Estimate	SEB	Wald	df	P-value
Threshold	Lack of CSA Preparedness	10.61	3.57	8.85	1	.003
	Sub-Optimal CSA Preparedness	40.90	7.75	27.82	1	.000
Location	**Structure Factors**					
	Space and setting for service					
	Definitely	-1.21	.93	1.69	1	.194
	Somewhat	-.37	1.14	.10	1	.748
	None at all	0[a]				
	CSA statutes	1.63	.67	5.87	1	.015
	CSA designated personnel	1.37	.78	3.04	1	.081
	CSA data management system	2.65	.73	13.39	1	.000
	CSA referral practices	2.21	.57	15.00	1	.000
	Process Factors					
	CSA general service	.63	.42	2.22	1	.136
	CSA counseling services	2.12	.68	9.68	1	.002
	CSA protocols, plans, service norms and standards	1.83	.72	6.47	1	.011
	Knowledge and application of existing statutes and policies	3.16	.94	11.39	1	.001
	CSA specialized training	2.44	1.12	4.79	1	.029
	Outreach programs	.62	.71	.78	1	.378
	Sex					
	Male	-.39	.69	.32	1	.573
	Female	0[a]				
	Education					
	Secondary & Post Sec	-.95	1.52	.39	1	.530
	University Education	0[a]				
	Occupation					
	Magistrates and Clerks	7.05	3.02	5.44	1	.020
	Other Professions	0[a]				

Link function: Logit.
[a] *Reference Group*
Model Fit (21) = 310.15, p <0.001
Person and Deviance Goodness of Fit = p>0.05
Cox and Snell Pseudo R^2 = .653, Negelkerke Pseudo R^2 = 1.00
Test for parallel lines = p>0.05

Multivariate Ordinary Least Squares Regression Modeling Predicting CQI

The study computed a multiple linear regression analysis to identify high impact variables for predicting culture of quality improvement. Model predictors included organizational information, respondents' demographic characteristics, and structural and process subscale measures. The model dependent variable was CQI matrix mean score.

The study post-hoc diagnostic test to examine the accuracy and generalizability of the ordinary least squares model. The study computed Casewise and Cook's distance diagnostic to examine the accuracy of the model and Durbin-Watson and VIF examined the generalizability of the model. The Casewise diagnostic test found that 4.1% (n =13) of the cases had standard residuals outside the calibrated standard deviation of ± 2. Case summary results found that Cook's distance statistic results were not greater than 1. Casewise and Cook's distance diagnostic tests results suggest the model was accurate.

The study then computed Durbin-Watson and VIF to test the generalizability of the model. Durbin-Watson diagnostic test examined correlation of independent errors residuals. As a rule of thumb, Durbin-Watson test statistic must be within 1.5 to 2.5 ranges. In addition, the study computed VIF test to examine multicollinearity in the model. VIF values less than 10 suggest the β coefficients are trustworthy and, therefore, generalizable. The Durbin-Watson test statistic was 2.02 and the VIF test statistics ranged from 1.00 to 4.97. Durbin-Watson and VIF test statistics were within acceptable ranges suggesting the model was generalizable. Results show that CQI structures (β = .549, p<0.001) and processes (β = .547, p<0.001) were significant predictors of culture of quality improvement. The study also found that being a teacher (β = -.006, p=0.01) compared with being a healthcare worker was a significant predictor of CQI (Table 19).

le 19

tiple least ordinary regression analysis predicting CSA CQI in government ministries mandated to support d sexual abuse survivors in study areas

ɔdel		Unstandardized Coefficients		Standardized Coefficients
		B	*SE B*	*β*
1	(Constant)	.049	.046	
	Transformed CQI	.907	.023	.910***
2	(Constant)	.013	.004	***
	Culture of Quality Improvement			
	Culture of Quality improvement : Structure	.547	.003	.549***
	Culture of Quality improvement : Process	.447	.002	.547***
	Study area			
	Artesia	.006	.004	.003^{ns}
	Goodhope	-.001	.002	-.001^{ns}
	Bobonong	.000	.002	.000^{ns}
	Francistown+			
	Sex			
	Male	-.001	.001	-.002^{ns}
	Females +			
	Prof Occupation			
	Social Welfare Officer	-.003	.003	-.002^{ns}
	Magistrates and Court Clerks	-.002	.003	-.002^{ns}
	Police	.005	.003	.005^{ns}
	Teacher	-.004	.002	-.006*
	Healthcare Workers+			
	Education			
	Primary & Post-Sec Education	-.005	.003	-.005^{ns}

ɾersity Education+

*p>0.05, *p=0.05, **p<0.01, ***p<0.001*

: .827for Step1, ΔR^2 =.171 for Step 2 , *p<0.001*

DISCUSSION

The study evaluated the performance of primary government ministries (departments) mandated in providing CSAE services to survivors using a performance measurement scale. Service providers in selected departments rated the services they provide on a three-point Likert Scale, '0 – 3'. The score of "0 – 0.5"" stood for lack of preparedness to provide CSAE services and the scores of "0.6 – 2.5" meant sub-optimal preparedness. The scores of "2.6 – 3" meant preparedness to provide CSAE services.

The dimension of evaluation was classified into two categories: structure and process factors. The structure factors included accessibility to CSAE statutes, availability of designated human resources, availability of data management system and referral system. Structural factors also included availability of a conducive space (infrastructure) to provide CSAE services. The process dimensions included availability of basic CSAE services to victims, availability of youth-friendly strategies, protocols, and SOPs. Processes included service provider's knowledge about, and application of CSAE statutes in CSAE services. It also encompassed specialized training and availability of community outreach programs on CSAE.

This section discusses research findings tailored to answer the main research question and its corresponding hypotheses. The section also addresses the research objectives and offers information necessary to improve CSAE service delivery and promote cross-sector collaboration to advance CSAE services for survivors.

DISTRIBUTION AND PATTERN OF THE RESPONDENT POPULATION

The study included a sample of primary service providers from the judiciary, security and protection, education, health, and social services working in government ministries. Overall, six in every ten respondents selected in this study were female service providers. Professional healthcare workers, teachers, and social welfare officers were largely female service providers, while police and magistrates were male service providers.

The distribution and pattern of the respondent population in terms of sex, age, and educational characteristics were consistent with previous CSAE or gender based violence studies (Chilisa & Lekoba, 2011; Pavey, 2014). The respondent sex distribution mirrors the composition and pattern of human service personnel in the selected government ministries. United Nations Development Program (UNDP) reported that in 2011, MoH had 65.1% of female employees compared to 34.9% of males. The report also stated that females made up the majority of employees in MoESD and MoLG&RD. However, male employees constituted 79.5% of the employees in MoDJS relative to 20.5% of females. The sample composition in this research suggests the study selected a representation of service providers in selected ministries.

CSAE PREPAREDNESS IN MAIN GOVERNMENT MINISTRIES

The mean index score of CSAE preparedness on the "0 – 3" measurement scale was M = 1.52, within the "0.6 – 2.5" category. The results suggest government ministries are not fully prepared to CSAE services, i.e., the y CSAE service delivery is sub-optimal. Results on the culture of quality improvement suggest CSAE services were below optimal, M = 3.4 on the "1 – 7" measurement scale. Thus, primary ministries mandated to serve CSAE survivors in selected areas do not have adequate structures and processes to improve quality of CSAE services.

While the overall status suggests the selected government ministries provide sub-optimal services to survivors and lack culture of quality improvement, comparative analysis found significant performance variations. Current findings suggest the judiciary and the police departments (MoDJS) and social services department (MoLG&RD) have relatively better structures and processes to support CSAE survivors than MoESD and MoH in Botswana.

Studies to evaluate government performance on CSAE services based on a performance score or benchmark are available in other countries. In a multi-site performance measurement social service study, Brazil, China, Macedonia, Malaysia, Saudi Arabia, and South Africa assessed whether government departments were ready to implement child maltreatment services (Mokoae, Roberts, and Ward, 2012). Results from South Africa showed that government was not ready to implement child maltreatment prevention programs on a large scale. The study found that while legislation and policies were good, the implementation of maltreatment protection services were inadequate (Mokoae et al., 2012).

CSAE STRENGTHS AND GAPS

Summarized results highlight some of the CSAE service strengths and gaps.

1). ***Access to, Knowledge About, and Application of CSAE Statutes***

While Botswana has legal instruments to advance the protection of children from abuse and exploitation, the instruments are not readily available to the primary service providers. Most respondents across surveyed ministries did not have access to the Penal Code, the 2009 Children Act, and the Domestic Violence Act. The majority lacked comprehension, knowledge, and application of the statutes.

2). *Access to Youth-friendly Strategies, Protocols, and SOPs*

Results also suggest most of the service providers lacked access to CSAE strategies, protocols, SOPs, and best practices. Even in ministries where such policy instruments were developed (such as MoH), service providers lacked access to those instruments. Public policies, formal written laws, and regulations are indicative of policymakers' decisions about government's actions. They are legitimate and necessary instruments to ensuring delivery of social services and strengthening service systems (Buse, Mays, and Walt, 2005). Often, policy administrators and service providers translate laws into strategies, protocols, service norms, and standards to guide service delivery (Buse et al., 2005). The results suggest the lack of access to CSAE policies and inability to translate the policies undermine optimal delivery of CSAE services in the study areas. September (2004) observed that one of the significant challenges in CSAE service delivery is government's failure to bridge the gap between policy and implementation. The inability of service providers to understand, interpret, and translate government policies into specific programs and action plans; a lack of competencies at various operation levels; and the absence of in-service training is indicative of gaps with basic CSAE provisions.

3). *CSAE Competencies and Skills*

Results indicate that most of the respondents across participating ministries had never received specialized training to adequately support CSAE survivors. Nine in every ten of the respondents had never received training in counseling of sexually abused children, crisis counseling, or training in trauma management. Again, 91% of the respondents had never received specialized training in counseling adolescent victims of sexual abuse and exploitation, and 95% had never received specialized training in forensic social work. Limited professional competencies and skills in dealing with abused and exploited children and youth among service providers can negatively impact delivery of CSAE services to survivors.

The lack of skills and competencies to provide specialized services across participating ministries is not new among government social service providers in Botswana. For example, Maundeni (2009) reported that social welfare officers in Botswana generally receive generic training and lacked specialized social work training. According to Maundeni (2009) social welfare officers working in local authorities were ill-equipped to provide psychosocial support services, and most focused on clerical work related to material support to vulnerable children.

4). *Availability of CSAE Human Resources*

The findings suggest the ministries selected in this study in selected areas do not have CSAE designated gender focal persons or designated personnel to provide CSAE services. The lack of human resources in CSAE services is evident in many Southern Africa countries (Mokoae et al., 2012). In Botswana, for example, Oitsile (2007) reported that on average, there is one social welfare officer for every five villages instead of individual village coverage. Ntseane and Solo (2007) attribute poor social service delivery in the social service sector to the acute shortage of resources in Botswana. Studies show that human resources are the most important of the service system inputs for any government department. The performance of human resources to deliver mandated services depends largely on the knowledge, skills, attitudes, and motivation of human resources (WHO, 2000). It addition to balancing human, financial, and physical resources, it is essential to maintain an appropriate mix between the different types of service providers to ensure the system's success (WHO, 2000).

5). *Data Management for Cases of Sexual Abuse and Exploitation*

Results indicate that while participating ministries collect and segregate data for CSAE, there is no CSAE information system to allow service providers share information and coordinate provision of service. MoLG&RD (2009) in their SWOT analysis of CSAE service provision in the country highlight lack of data, an effective data management information system can help plan care across ministries, monitor referral system, and assess individual survivor's service outcomes. Data management systems could help service institutions to manage CSAE services and share important information across institutions.

6). *Referral Practices of CSAE Survivors*

Results suggest a high level of referrals of CSAE survivors across participating ministries. However, the referrals are characterized by a lack of follow-up or feedback on referred cases. The study also highlighted that when feedback does occur it is not provided in a timely manner.

The findings in this study are consistent with another CSAE study in Botswana. Chilisa & Lekoto (2011) found that the CSAE referral system across government institutions was poor. The authors asserted that the Botswana judiciary, safety and security, health, and social service systems failed to

deliver referral services that were timely and of acceptable standards. An effective referral system ensures a close relationship between all levels of the CSAE systems and helps to ensure survivors receive the best possible care. It also assists in making cost-effective use of services and outreach services to build capacity and enhance access to better quality care. An effective referral system ensures:

- Clients receive optimal care at the appropriate level in a timely manner,
- Service institutions are used optimally and cost-effectively
- Clients who most need specialist services can access them in a timely manner when they need the services, and
- Referral tools track services along the referral channels (Mariotti, Gentilini, Dapor, 2013).

7). Infrastructure for CSAE Services

Less than half of the respondents (47%) indicated having adequate space for offering CSAE services to survivors. MOESD and MoH reported having an infrastructure conducive to providing CSAE services to survivors.

The study found varied reports of lack of equipment, such as refrigerators and rape kits, in some departments. Most rural police stations lacked functioning refrigerators to keep evidence, while most primary health care settings reported lack of rape kits, making collection of evidence almost impossible. Most rural police stations did not have space for providing services CSAE victims. None of the ministries provided evidence of standardized screening matrix to identify individualized needs among CSAE survivors.

8). Community Outreach Programs

Overall results show that the government ministries participating in the study lack community outreach programs to raise CSAE awareness: only 36% of the respondents across all the ministries reported having CSAE community outreach programs. The police department was 60% more likely to report having community outreach programs.

Community outreach programs are an important tool for bridging service institutions and the community (Wagner, 2001). Effective community outreach programs in CSAE can tap into community resources to raise awareness and quell the increasing burden of child sexual abuse and exploitation. Community outreach programs are an effective tool to engage community constituents on culturally sensitive ways of identifying and reducing incidents of child sexual abuse and exploitation. Well-implemented programs enable the community (parents, community leaders, children, and youth) to become informed, motivated, engaged, and sufficiently skilled in handling CSAE services at the community level.

The community is a double-edged sword that may either promote or hinder effective implementation of CSAE services. On one hand, it is the primary agent of socialization. The family shapes an individual's identity, behavior, values, and beliefs. It is within this unit that individuals are 'taught' how to interact with other members of the family and society, and these relationships are a starting point for implementing effective CASE services. However, evidence also suggests that in many instances the community–and in particular the family--is the main site of violence (Ward, 2009). It is therefore paramount that any implementation effort include the community.

STUDY LIMITATIONS

The research is one of the first gap analysis studies to examine CSAE service provision in government ministries from providers' perspectives. It provides critical information necessary to strengthen the current CSAE services in the selected government ministries. The study provides a performance benchmark of CSAE services in the selected areas. However, this study was based on pre-determined SSI project areas; hence, it does not represent the country as a whole. There is, therefore, a need to replicate the design and approach at a national level. The study did not include other critical areas, such as availability of financial resources and allocation of human resources per population. Future studies may need to take these limitations into account.

STUDY IMPLICATION

Sexual abuse and exploitation of children is unequivocally associated with high level of distress and profound disturbance of the child's physical, emotional, social, moral, and intellectual development. The study suggests CSAE service ministries are not fully prepared to provide optimal services to victims in selected areas. In other words, the primary ministries lack critical tasks and activities necessary to build, sustain, and improve the operational capacity for preventing, protecting against, and responding to incidences of child sexual abuse and exploitation.

The most significant challenges impacting CSAE services in Botswana include the bridging of CSAE statutory provisions and implementation of CSAE services. Evidence suggests in most instances the statutes have not been interpreted and translated into policy guidelines, strategies, protocols, standard operating procedures, and service norms to guide CSAE implementation. In ministries where policy guidelines are available, the guidelines are not implemented. The study underscored inadequate designated human resources, lack of skills and competencies in specialized CSAE services areas, and weak coordination and collaboration across ministries. This section presents suggestions drawn from the results and existing literature aimed at strengthening and improving the quality of CSAE services in Botswana.

National Level Recommendations

Results in this study suggest delivery of CSAE services is vertical and fragmented. Child sexual abuse and exploitation is a health, social, and legal problem. Children sexual abuse and exploitation is a cross-sector problem involving judicial, security and protection, education, health, child protection, and social mandates. Different ministries manage different mandates, often without strong linkages. To improve CSAE service delivery, the study recommends:

- The paradigm shift of CSAE service delivery from ministerial-based implementation to the systems approach. The systems approach considers the role and contributions of each primary ministry (MoDJS, MoLG&RD, MoH, and MoESD) and how each ministry interacts with the community in which the CSAE survivors live. It also builds on strong cross-sector service delivery that requires coordinated effects, strong leadership, and adequate resources in addition to motivated and committed service personnel.

To ensure the systems approach works, the study recommends:

- Strengthening and using the existing national child protection committees at the national, regional, district, and community levels. The CSAE coordinating department should be set outside the current CSAE implementing ministries. The Gender Affairs Department housed within the Ministry of Labor and Home Affairs is ideal for the following reasons:

  - CSAE falls within the GBV interventions. Currently, the Gender Affairs Department coordinates national initiatives surrounding gender and gender-based violence.

  - MoLHA is not a primary service provision ministry; rather, a coordinating body. Its role would be to provide leadership and develop a CSAE national package based on best practices. The coordinating body would also be mandated to develop a standardized CSAE services and performance monitoring scorecard, mobilize resources, develop a CSAE research agenda to inform evidence-based programming, and institute CSAE quality improvement initiatives.

  MoLHA would be held accountable for ensuring partner ministries are implementing CSAE services based on agreed national and accepted international standards.

Policy Level Recommendations

Results suggest that access to, knowledge about, and application of the main statutes that govern CSAE service delivery among service providers is poor. The study recommends:

- A reference group composed of legal (magistrates and human right lawyers), child protection, and service delivery experts be set up to translate the Penal Code and the 2009 Children's Act. The simplified versions created by this group should highlight the purposes and provisions of the Acts in language service providers can understand. Such translation should incorporate the role and responsibilities of service providers in each ministry.

  The Ministry of Local and Rural Development translated the Domestic Violence Act of 2008 into a user-friendly guide for district and community level use. The study recommends replication and use of the approach used to simplify the 2009 Children Act.

Programmatic Level Recommendations

Botswana maintain statute driven policy instruments. Some of the instruments include including the Botswana health sector response to gender-based violence; the child abuse communication strategy (2010-2014); and the protocols and service standards for prevention and management of gender-based violence for health care providers. The sub-optimal implementation of CSAE services across all ministries suggests the available policy instruments are underutilized. To ensure each primary service ministry is accountable to the national CSAE goals, the study recommends the need to strengthening service implementation and accountability by:

- Developing a service provision scorecard (CSAE Preparedness Scorecard) drawn from a compendium of CSAE best practices. The scorecard may be used to establish a service provision benchmark and service implementation monitoring and performance tool(s). The study provides a template of an evidence-based CSAE Preparedness Scorecard that can be replicated for CSAE national use.

Results also highlight the weak linkages among service ministries. To ensure clearly defined linkages through effective implementation, the study recommends:

- Set up clearly defined roles and linkages across ministerial departments based on an active feedback loop referral system.

Findings suggest that most of the ministries do not have active and effective linkages with the communities they serve. The study recommends:

- Establish--through district, Dikgosi, and community child protection committees–an active linkage between service providing ministries and communities. Community linkages create a supportive environment for developing informed, activated, and motivated citizens in matters concerning CSAE.

Findings highlight weak competencies and skills among service providers, particularly among specialized counseling and forensic investigation areas (among social welfare officers and healthcare workers). Improving service delivery and preparing service providers to provide high-quality services requires increasing their competencies and skills. The study recommends:

- Setting up a national continuing professional development (CPD) and/or continuing professional education (CPE) program using accredited institutions. Areas that need professional strengthening include specialized counseling and forensic evidence gathering tools and practices for social welfare officers and healthcare workers.

CONCLUSION

Sexual violence against children occurs everywhere irrespective of location, race, religion, culture, and social class. Child sexual abuse and exploitation occurs in settings in which children live and play: their homes, villages, schools, streets, shopping centers, and community settings. However, despite the extent and impact of sexual violence on children and youth, governments, civil societies, and non-government organizations rarely evaluate their services. In addition, most institutions serving survivors of child sexual abuse lack reliable information about structures and processes that require changes to improve the quality of CSAE services.

“most institutions serving survivors of child sexual abuse lack reliable information about structures”

The study identified important information on CSAE preparedness strengths and weaknesses in Botswana. It provides important planning information for policy makers, program managers, and service providers. The findings give senior CSAE managers information to develop critical tasks and activities necessary to build, sustain, and improve the operational capacity for preventing, protecting against, and responding to incidences of child sexual abuse and exploitation in Botswana.

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Stepping Stones International
St Paul Catholic Church Grounds
Boseja North, Mochudi
Kgatleng
Tel: +267 573 98 58
www.steppingstonesintl.org