Reference Manual

on

Forensic Examination

Of

Sexual Assault

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Rationale

Sexual violence is a heinous and pervasive crime that, in addition to violating human rights, has a significant negative impact on the physical and mental health of the victim. It is an aggressive criminal act where the victims may be of any age or gender and is witnessed in all countries with no geographical, social and economic boundaries. Much of these cases of sexual violence around the world go unreported and it is even more so true in Nepal. Shame, social stigmata, lack of awareness, fear of repercussions, fear of reprisal and further violence, threat from the perpetrator, fear of not being believed and to avoid the traumatizing experience of investigation are some of the reasons that cases of sexual violence are underreported. Due to under-reporting, victims are deprived of timely treatment and management of health, emotional and social consequences, that the victim may suffer from. The under-reporting not only posses the risk of the victim being abused repeatedly but also posses the risk of someone else falling victim to the same crime.

Finally, even if a case is reported and an investigation launched, the lack of proper health care services and support such as medico-legal examination usually leads to justice being denied to the victim.

This guideline aims to alleviate these shortcomings and breach the gap.

The objective of these guidelines is to improve professional health services in Nepal through following ways:

1. Help national health systems improve the quality of treatment and support provided to victims of sexual violence by providing health care workers with the basic knowledge and skills required for the management of victims.
2. The standard protocols will efficiently guide the process of examination and forensic evidence collection and hence aid the justice system.
3. It can also serve as a useful educational tool for health care professionals seeking to improve their capacity to provide an adequate level of care.

Glossary

Child	Individual under the age of 16 years
Consent	Free and voluntary agreement, approval or permission for compliance with some act
Health worker/professional	Trained individual, who provides health services (doctors, nurses)
Intimate partner	Husband, boyfriend or lover, or former husband, boyfriend or lover
Injury	Dissolution or disruption of anatomical continuity of tissues of body
Patient	Individual who seeks service from a health worker
Perpetrator	Individual who commits or perpetrates sexual violence
Sample or Specimen	Representative portion of breath, blood, urine, or other material collected for further investigation
Sexual violence/abuse	Activities, including rape/forced sex, indecent assault and sexually offensive behavior
Universal Precautions	Precautions designed to prevent transmission of blood-borne pathogens when providing first aid or health care (Blood and body fluids are considered potentially infectious)
Victim	Individual subjected to sexual violence/assault

Abbrevations

ABC	Abacavir
AIDS	Accquired Immuno Deficiency Syndrome
ATV/R	Atazanavir/Ritonavir
AZT/ZDV	Zidovudine
COC	Combined Oral Contraceptive
DFSA	Drug Facilitated Sexual Assault
DNA	Deoxyribonucleic Acid
DRV/R	Darunavir/Ritonavir
DSM	Diagnostic and Statistical Manual of Mental Disorders
ECP	Emergency Contraceptive Pills
EFV	Efavirenz
GHB	Gamma-Hydroxy Butyrate
HIV	Human Immuno-deficiency Virus
HBV	Hepatitis B Virus
LPV/R	Lopinavir/Ritonavir
MSM	Men who have sex with men
NVP	Nevirapine
PEP	Post exposure prophylaxis
POP	Progestin-only Pill
PPE	Personal Protective Equipment
PTSD	Post Traumatic Stress Disorder
RAL	Raltegravir
RTS	Rape Trauma Syndrome
STD/STI	Sexually Transmitted Disease/Sexually Transmitted Infection
3TC	Lamivudine
TDF	Tenofovir Disoproxil Fumarate
UTI	Urinary Tract Infection
WHO	World Health Organization
LGBT	Lesbians, Gays, Bisexuals and Transgenders

Introduction

Sexual Assault is an extremely common, widespread and insidious problem that has serious physical, psychological, emotional and social consequences. It has been estimated that one out of every three women and one out of every six men will be sexually assaulted during their lifetime. Data from studies indicate that, in some parts of the world at least, one in five women has suffered from sexual assault, attempt or otherwise, by an intimate partner during her lifetime. Furthermore, up to one-third of women describe their first sexual experience as being forced.

Victims of sexual violence can include women, men or children. Sexual violence can take place in a variety of settings, including home, workplace, schools and community, and can be perpetrated by anyone.

Consequences of sexual assault include unwanted pregnancy, sexually transmitted infections (STIs), human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS), syphilis, gonorrhea etc. Child sexual abuse is a major cause of PTSD worldwide. Victims of child sexual abuse frequently experience mental health problems like depression, substance abuse, post-traumatic stress disorder (PTSD) and are more susceptible to suicide later in life. Sexual violence includes various kinds of sexual behaviors - including sexual attempt, harassment, assault, trafficking for sexual exploitation and female genital mutilation

- While majority of the victims are female, males can also be victims of sexual violence
- Perpetrator is usually a male the victim knows or is an acquainted with
- Sexual assault is an aggressive act of power and control
- Sexual violence is a serious public health problem, having profound effects on the physical and psychological health and wellbeing on the victim, both in the short-term as well as later in life.

Definition of Sexual violence

"Rape", "sexual assault", "sexual abuse" and "sexual violence" are terms often used interchangeably.

The World Health Organization defines Sexual Violence as "any sexual act, attempt to obtain a sexual act, unwanted sexual comments/ advances and acts to traffic, or otherwise directed against a person's sexuality, using coercion, threats of harm, or physical force, by any person regardless of relationship to the victim in any setting, including but not limited to home and work."

Rape can also be defined as "physically forced or otherwise coerced penetration – even if slight – of the vulva or anus, using a penis, other body parts or an object". This definition includes coerced sexual activity, that may not be considered rape if the local legal definition of rape is narrow (example – confined to vaginal penetration with a penis).

Legal Definition of Rape

Muluki Ain, 2020, Chapter 14 on Rape - **"Jabarjasti Karani ko Mahal"** states

"A person is said to have committed rape if he enters in sexual intercourse with a woman without her permission or enters into sexual intercourse with a girl below the age of sixteen with or without her permission". Consent is invalid if

A. Consent has been taken by using force, threat, kidnapping, arousing fear, undue influence, coercion or hostage taking (abducting) and the victim is unconscious is not be considered as consent.
B. Minor penetration of penis in vagina is deemed as sexual intercourse.
C. If penis is inserted in anus or orally or anything inserted apart penis is to be considered as Rape.

Prevalence

While it is undisputed that sexual violence is prevalent worldwide, reliable statistical data regarding the prevalence is scarce. A report compiled by the United Nations, using data obtained from 65 countries, showed that more than 250,000 cases of rape or attempted rape were reported to police annually. Population based studies of abuse by intimate partners indicate that between 6% and 46% of women report have experienced some form of attempted or forced sex by an intimate partner or ex-partner at some time in their lives. Rape and domestic violence account for an estimated 5–16% of healthy years of life lost to women of reproductive age. In Nepal, according to the latest statistics, one woman is raped every 54 minutes.

Only an estimated 15 – 20 % of women who have been sexually assaulted, report to the police; therefore, the real incidence of sexual assault is unknown. There are several reasons why victims of a sexual assault may be unwilling to report the crime to a law enforcement agency. The main reason is that sexual assault violates someone both physically and psychologically. Not only do victims suffer these effects during the assault, many have significant problems for years after the assault.

Holmes et al. found that 71.3% of sexual assault complainants expressed one or more fears following the alleged assault. The most common fear, of retaliation, is expressed when the complainant knows the perpetrator and worries that by filing a police report, the perpetrator will further cause harm to them. Rape Abuse and Incest National Network (RAINN) estimates that two-thirds of sexual assault victims were acquainted with the assailant.

Many complainants also may not want friends and family to find out about the assault, so they do not report it. Some complainants also believe that the assault is their fault or that they will not be believed. Another factor in the underreporting of sexual assault could be due to the increase in alcohol or drugs related sexual crimes, which would cause the victim, and society, to impart part of the blame on herself. Other factors that could hinder the reporting are religious, social and cultural factors.

These factors show that under-reporting of sexual assaults is a reality, what is not known is the degree of under-reporting of sexual assaults. According to the American Medical Association (1995), sexual violence is the most underreported crime. A 2007 government report in England states “Estimates suggest that between 75 and 95 % of rape crimes are never reported to police.”

Child sexual abuse is rarely reported at the time of abuse, and most prevalence data comes from asking adults about their childhood experiences. The data available from studies conducted in different parts of the world suggest that between 7% and 36% of girls, and between 3% and 29% of boys, have suffered from child sexual abuse. The majority of studies concluded that sexual violence against girls is 1.5–3 times more when compared to sexual violence against boys. Of the reported cases of child sexual abuse, 10–15% involve boys, a finding which highlights the difference between reporting and occurrence of sexual violence in boys.

The trafficking of women and children for prostitution is becoming one of the fastest growing areas of international criminal activity. According to official estimates, somewhere between 1 and 2 million women and children are trafficked each year worldwide for forced labor, domestic servitude or sexual exploitation.

Types of sexual violence

Sexual violence occurs in different forms, ranging from mere touching of another person's body in a sexual way without the person's consent, to forced sexual intercourse, oral and anal sexual acts, child molestation, fondling and attempted rape. Some forms are customary to a particular culture or country, but such customs result in sexual violence towards the women none the less.

Sexual violence can occur to anyone at any age. Though the majority of the victims of sexual violence are women, it can also happen to men, children as well as to third-genders or the LGBT community. It occurs in times of peace as well as during times of armed conflict and takes place within a variety of settings, including home, workplace, schools etc.

Some of the types of sexual violence include:

- Coerced/forced sex in marriage or live in relationships or dating relationships
- Rape by strangers
- Rape during armed conflict, sexual slavery
- Sexual harassment
- Sexual abuse of children
- Sexual abuse of people with mental and physical disabilities
- Forced prostitution and trafficking for the purpose of sexual exploitation
- Child and forced marriage

Denial of the right to use contraception or to adopt other measures to protect against STI

- Forced abortion and forced sterilization
- Genital mutilation
- Inspections for virginity
- Forced exposure to pornography
- Forcibly disrobing and parading naked

In Nepal there are some traditional practices such as early marriage, jhooma, deuki, chaupadi and badi which are forms of sexual violence. While most of these practices are dwindlimg, traditional practices like chuapadi are still very much prevalent sometimes leading to fatal consequences for the victim.[RS1]

Rape myths

It is believed that women in our society are sexually passive and do not initiate sexual activity, engage in sex only in marriage, and remain faithful to their husbands. This kind of belief can affect the outcome of the case of a sexual offence. Common myths about rape include:

- Sex is the primary motivation for rape
- Only certain types of women are raped
- Women falsely report rape
- Rape is perpetrated by a stranger
- Rape involves a great deal of physical violence
- Every rape has obvious physical injuries
- When women say “no” to sex, they actually mean “yes”
- Sex workers cannot be raped
- A man cannot rape his wife

Risk factors of sexual violence

There are factors that increase the risk of someone being coerced into sex or of someone forcing sex upon another person. Major risk factors involved in sexual violence are as follows:

- Single female
- Children and young adults
- Children in foster care
- Physically and mentally disabled men and women
- Individuals in prison or held in detention
- Individuals with drug or alcohol problems
- Individuals with a past history of rape or sexual abuse
- Individuals in prostitution
- Individuals in an abusive intimate or dependent relationship
- Victims of war or armed conflict situations
- Poor individuals

Perpetrators of Sexual Assault

The primary motives behind acts of sexual violence are believed to be a sense of power and control, and not sexual desire. Sexual violence is primarily used as means to degrade, dominate, humiliate, terrorize and control women. It is an aggressive and hostile act displaying power over the victim. Some of the other reasons for committing sexual violence are that it reassures the offender about his sexual adequacy; it discharges frustration; compensates for feelings of helplessness; and achieves sexual gratification from mere touching of body parts to forceful penetration.

The perpetrator of sexual violence is usually a male but in some cases, it can be committed by a woman. The perpetrator is usually an acquaintance, someone the victim knows for some time, compared to a complete stranger. There is no stereotypical profile of a perpetrator and hence can be anyone: a boyfriend, a friend, a family member, a neighbor , an intimate partner or former intimate partner or a complete stranger. The perpetrator can come from any backgrounds, rich or poor, educated or uneducated, religious or non-religious. He can also be the one the victim respects and trusts (example – a teacher, doctor, police officer, employer etc).

Factors which increase men's risk of committing rape

Individual risks factors:

- Alcohol and drug use
- Delinquency
- Empathic deficits
- General aggressiveness and acceptance of violence
- Early sexual initiation
- Coercive sexual fantasies
- Preference for impersonal sex and sexual-risk taking
- Exposure to sexually explicit media
- Hostility towards women
- Adherence to traditional gender role norms
- Hyper-masculinity
- Suicidal behavior
- Prior sexual victimization or perpetration
- Witnessed family violence as a child

Relationship risk factors:

- Family environment characterized by physical violence and conflict
- Childhood history of physical, sexual, or emotional abuse
- Emotionally unsupportive family environment
- Poor parent-child relationships, particularly with fathers
- Association with sexually aggressive, hypermasculine, and delinquent peers
- Involvement in a violent or abusive intimate relationship
- Strongly patriarchal relationship or family environment
- Family honour considered more important than health and safety of victim.

Community risk factors:

- Poverty
- Lack of employment opportunities
- Lack of institutional support from police and judicial system
- General tolerance of sexual violence within the community
- Weak community sanctions against sexual violence perpetrators

Societal risk factors:

- Societal norms supportive of sexual violence
- Societal norms supportive of male superiority and sexual entitlement
- Weak laws and policies related to sexual violence
- Weak laws and policies related to gender equality
- High levels of crime and other forms of violence

Drugs and sexual violence/ Drug Facilitated Sexual Assault:

The usage of drugs for the purpose of sexual assault is not uncommon. Perpetrators use drugs in order to facilitate the assault and control the victim. The drugs sedate the victims or make her unconscious, which makes it impossible for her to help herself in such situations.

Researchers have found that alcohol facilitated SA is the most common form of sexual assault against woman. However, the use of the "date rape" drugs are gaining popularity and studies show a marked and continuing increase in DFSA since 1999.

The most commonly used drugs in Drug Facilitated Sexual Assault (DFSA) are flunitrazepam (Rohypnol) and other benzodiazepines, gamma-hydroxybutyrate (GHB), ketamine, cocaine, methamphetamine and marijuana. In many cases, victims are drugged surreptitiously and are unaware that they have been drugged while in the others the victim consumes alcohol or drugs voluntarily and are then sexually violated by opportunistic perpetrators.

There is a double standard that exists between men and women in terms of drinking alcohol or using drugs. If a woman drinks or uses drugs she is often blamed for the sexual abuse incident. On the other hand, if a drunk perpetrator happens to be involved in these cases, they are excused saying that he was "under the influence" and thus was unable to control his behavior. Studies have shown that the victims of who suspect of themselves having been drugged and sexually assaulted take longer to present to the hospital for treatment.
Health workers should suspect Drug Facilitated Sexual Assault if a patient presents with anyone of the following symptoms:

- Patient gives history of vague sensation that something is wrong or something sexual has happened to her.
- Impaired conscious state, partial or total amnesia, disorientation or confusion
- Slurred speech; impaired vision, impaired motor skills, paralysis.
- Unexplained bodily injury, particularly over genitals
- Talking about having an "out-of-body experience".
- Unexplained loss or rearrangement of clothes
- Intoxication that does not correspond to alcohol consumed.

Health workers suspecting victims of DFSA should:

- Give first priority to victim(s) presenting with altered conscious state and treat them immediately in the emergency department with access to full resuscitation facility;
- Collect specimen for laboratory detection at the earliest.

Consequences of Sexual Violence

Sexual violence may lead to several direct and indirect health consequences that include both physical and psychological effects.

Physical health consequences

Sexual violence victims suffer wide range of physical injuries, genital and non-genital.

Genital injuries

Genital injuries are commonly seen in the posterior fourchette, the labia minora, the hymen and/or the fossa navicularis. They are classified according to TEARS classification, which include:

- "T" stands for Tears
- "E" stands for Ecchymosis (i.e. bruising)
- "A" stands for Abrasions
- "R" stands for Redness

  "S" stands for Swelling

Non-genital physical injuries

These typically include the following:

- Abrasions and contusions;
- Lacerations over different body parts including frenular tears in children;
- Ligature marks over the ankles, wrists and neck;
- Patterned injuries (i.e. hand prints, finger marks, belt marks, bite marks);
- Anal or rectal injuries.

  In addition to the physical (genital and non genital) injuries victims of sexual violence are at an increased risk from:
- Unwanted pregnancy
- Unsafe abortion
- Sexually transmitted infections (STIs), including HIV/AIDS
- Sexual dysfunction
- Infertility
- Pelvic pain and pelvic inflammatory disease
- Urogenital tract infections example – urinary tract infections (UTI)

Severe cases of sexual violence can lead to death, either due to the act of violence itself, or from retribution (example – "honor" killings or punishment for reporting the crime) or from suicide.

Psychological consequences

The long-term psychological effects can be devastating that influences and radically alters the victims' entire life course.

Victims may present with the following effects:

- Rape trauma syndrome
- Post-traumatic stress disorder
- Depression
- Disbelief in relationship (especially in marital or date rape victims)
- Anxiety
- Increased substance use or abuse
- Suicidal behavior

In longer term, the victims may complain of the following:

- Chronic headaches
- Generalized body ache and fatigue
- Sleep disturbances (i.e. nightmares, flashbacks)
- Eating disorders
- Menstrual disturbances
- Sexual difficulties

In adult survivors of child sexual abuse, more exaggerated form of symptoms are seen which may include:

- Emotional disturbances including depression
- Anxiety
- Post-traumatic stress disorder(PTSD)
- Cognitive disturbances

  Personal problems, including sexual problems

Rape trauma syndrome (RTS)

Rape Trauma Syndrome is the group of reactions – emotional, physical, and behavioral – reported by victims of attempted or completed rape. It can be manifested in somatic, cognitive, psychological and/or behavioral symptoms in two phases: acute and long-term.

The acute phase:

It is a period of disorganization. It begins immediately after the rape and persists for approximately 2–3 weeks. Emotional responses can include:

- Crying
- Smiling and laughing
- Flat affect
- Mood swings
- Feelings of humiliation, degradation, or shame
- Guilt
- Embarrassment
- Self-blame
- Hopelessness
- Anger
- Revenge
- Fear of another assault

The chronic (long-term) phase

It is also called as phase of reorganization, and ordinarily, begins approximately 2–3 weeks after the event. It may be either adaptive or maladaptive. Reactions during this phase depend on the age of the survivor; circumstances surrounding the rape; personality of the victim and the response of the closed ones. Victims usually start bringing out changes in their lifestyle by moving to new places, changing their telephone number, or getting a new telephone number. Some may experience fear of crowds whereas some fear of being left alone. The victim's sex life can be hampered.

Sexual problems that the victim may suffer post assault include:

- Sexual aversion
- Flashbacks of the rape during sex
- Vaginismus
- Orgasmic dysfunction

Post-traumatic stress disorder

Post-traumatic stress disorder (PTSD) is more common in victims who were physically abused, resulting in physical injuries and in the victims raped by strangers. PTSD may manifest as intrusions and avoidance.

Intrusions include:

- Flashbacks
- Nightmares
- Recurrent, intrusive thoughts that stay in the mind

Avoidance includes:

- Isolating oneself from family, friends and peers
- Distractions
- Increased drug or alcohol use
- Engaging in high-risk behaviors
- Avoiding places, activities or people that remind them of the assault

Other common PTSD symptoms include dissociation, hypervigilence, irritability and emotional outbursts.

Diagnostic and Statistical Manual of Mental Disorders (*DSM*–5) pays more attention to the behavioral symptoms that accompany PTSD and proposes four distinct diagnostic clusters. They are described as **re-experiencing, avoidance, negative cognitions and mood, and arousal**.

Negative cognitions and mood represents feelings ranging from a persistent and distorted sense of blame of self or others, to estrangement from others or markedly diminished interest in activities, to an inability to remember key aspects of the event. Arousal is marked by aggressive, reckless or self-destructive behavior, sleep disturbances, hyper-vigilance or related problems

Men as victims of sexual violence

Men experience sexual violence acting as recipient in anal/oral intercourse, performing forced masturbation of the perpetrator or the victim.

Studies conducted mostly in developed countries indicate that 5--10% of men report a history of childhood sexual abuse. In a few population-based studies conducted with adolescents in developing countries, the percentage of males reporting ever having been the victim of a sexual assault ranges from 3.6% in Namibia and 13.4% in the United Republic of Tanzania to 20% in Peru.

The prevalence of male sexual violence is less frequent, when compared to that of sexual violence against females in our country. This may be primarily due to the patriarchal society as men are physically and socially empowered in comparison with women. Secondarily men are even more reluctant to report sexual violence due to extreme embarrassment experienced by most males at being a victim of sexual violence and concerns about opinions of other people, their masculinity and the fact that they were unable to prevent the assault leading to underreporting of cases. Sexual violence against males is more common in prisons and the armed forces.

Men have the same physical and psychological responses to sexual violence as women, including:

- Guilt
- Fear
- Depression
- Suicidal ideation
- Anger
- Sexual and relationship problems
- Sexual dysfunction
- Somatic complaints
- Sleep disturbances

Men also experience RTS and PTSD the same way as women do. The only difference is that they are more concerned about their masculinity and opinions of other people (i.e. afraid that others will think they are homosexual). There is also misconception that only homosexual men are raped and not heterosexuals.

Guidance for health workers/Forensic examiners

Any health worker, forensic docter, a gynaecolgist or other general physician can be assaociated with victims of sexual violence. Hence, it is imperitive that the examining person have a basic idea or knowledge to be able to deal with such circumstances. Ideally, all health workers dealing with the sexual violence cases should receive appropriate training following which they can perform both the medical assessment and forensic or medico-legal examination.

Dealing with patients who have been subjected to sexual violence requires:

- Basic knowledge of normal human sexual responses, ano-genital anatomy and physiology;
- Knowledge of medical and similar terms for sexual organs and sexual acts;
- Good communication skills;
- Basic knowledge of the dynamics of sexual violence;
- Understanding of the legal issues surrounding sexual crimes;
- Understanding of relevant cultural and/or religious issues;

Health workers should be able to recognize sexual abuse cases and also be prompt to provide services to the victims of these cases. Not all sexually assaulted victims present with the complaints of having been sexually assault. Others may present with complaints of symptoms that have arisen due to past sexual assault such as sexually transmitted infections, pregnancy, sexual dysfunction, depression, suicidal ideations etc, hence, it is essential that the health care workers be able to recognize, and respond to each case of sexual assault acute or otherwise.

Guiding principles for health professionals

1. All victims must be offered complete medical treatment and health care at all health facilities without bias.
2. The victims should first receive appropriate emergency management (i.e.; ABCD) followed by definite treatment (i.e., the treatment of injuries, assessment and management of pregnancy and sexually transmitted infections (STIs).This should be followed by forensic examination (i.e.; documentation of injuries for medico legal purpose).It is unethical and negligent if medico legal examination is proceeded without addressing the primary medical care and needs of the patient.
3. Female nurses or physicians are preferred more compared to the male counterpart for providing this kind of services specially in female victims.

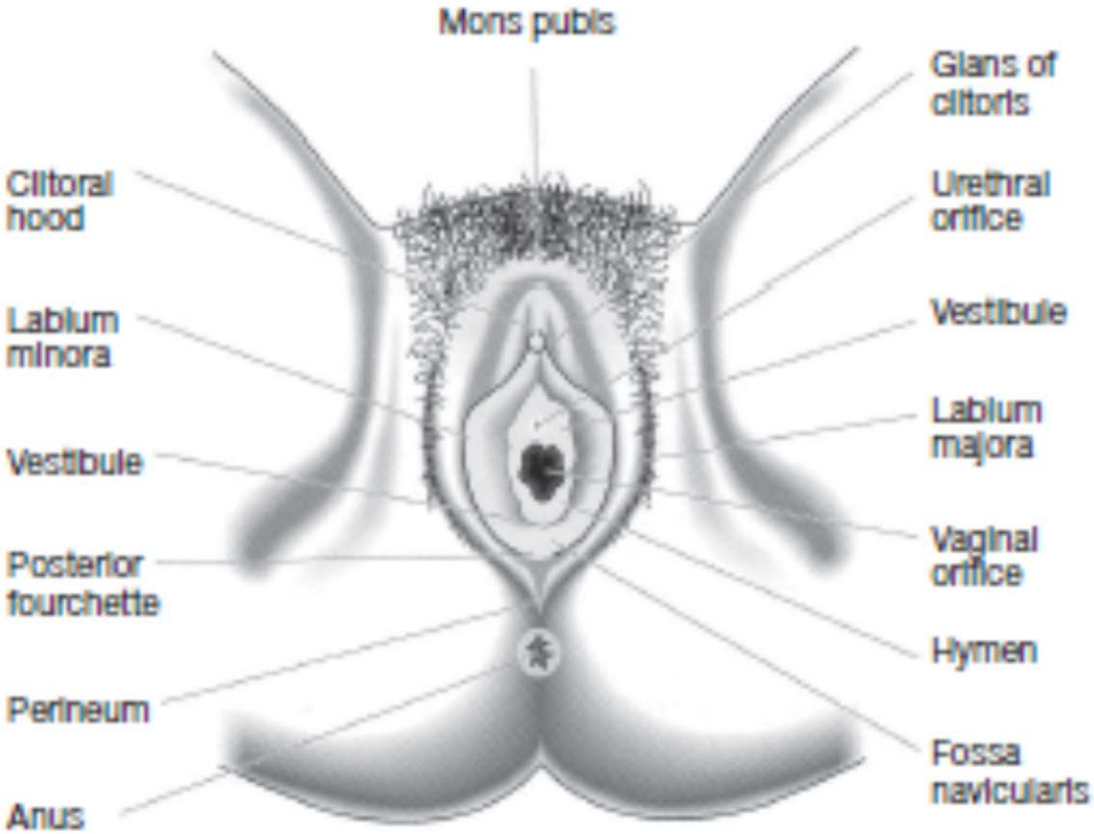
4. It is important to be aware of the possible health consequences that the sexual violence may have resulted in and treat them or refer them.
5. Medical and forensic service providers should aim to minimize the number of physical examinations and interviews that the patient has to undergo.
6. Sexual assault victims require comprehensive, complete and victim-centered health assessment and management, thus, a health worker must aid the victim in referral to the concerned center or organization, example – Law enforcement agencies, social services, rape crisis centers, nongovernmental organizations (NGOs) and other agencies, or ensure that information on referral institutions is available at the health facility.
7. Health professionals must enable the victim to feel at ease and be comfortable to be able to reveal the abuse that they have faced. The health workers must take time to make the victim comfortable and establish trust with the victim, in order to conduct a thorough examination. They also must choose their words carefully and avoid insensitive language or make critical comments..
8. Treat the victim with respect and dignity irrespective of their race, religion, culture, sexual orientation, social status, sex or occupation. Ensure no judgement is passed and avoid blaming and revictimizing the patient.
9. The health worker must demonstrate empathy but be impartial.
10. Health professionals must avoid showing shock, disbelief, ridicule or other negative emotions while interviewing and examining the victim and ensure that no judgment is passed.
11. History must be sought independently, directly from the victim herself/himself.
12. Health workers should collect and document the evidence necessary for corroborating the circumstances of the assault, and for identifying the perpetrator and the health consequences of the event.
13. Only information of the current episode of violence that the survivor is reporting must be documented. Any information of past sexual encounters is irrelevant to the current incident of sexual violence and should not be noted.
14. Health professionals must also understand that the response to a traumatic experience such as sexual assault varies between individuals.

When providing services to victims of sexual violence, the following basic principles are fundamental:

- **Autonomy –** The right of patients to make any decisions should be respected at all times. In case of patients under 16 years of age, i.e. parents or guardians act as their representatives. Informed expressed consent of the patient must be taken while providing health services.
- **Beneficence** – The duty or obligation to act in the best interests of the patient.
- **Non-malefficience** – The duty or obligation not to do any harm to the patient.
- **Justice or fairness –** Providing service without any bias (example – sex, race, religion, socioeconomic status etc)

Basic Anatomy

Health workers performing genito-anal examinations on victims of sexual violence must have a sound knowledge of normal anatomy to be able to detect any abnormality. This chapter will deal with the basic normal anatomy of the external genitalia to guide the health worker.



Anatomy of the Female External genitalia

Anatomy of Female External Genitalia

Vulva: The external female genitals are collectively referred to as the vulva.

Mons Pubis: This is the rounded, hair bearing elevation of skin found anterior to the pubis. It is a pad of fatty tissue that covers the pubic bone between the abdomen and the labia. The pubic hair in females has an abrupt horizontal upper margin where as it extends up towards the umbilicus in male

Labia Majora: These are the prominent hair-bearing fold of skin (outer lips) of the vulva. It extends posteriorly from the mon pubis to unite posteriorly in the midline

Labia Minora: These are the two smaller hairless folds of soft skin (Inner lips) lying between the labia majora. It protects the vagina, urethra, and clitoris. The posterior ends of the labia minora unite to form the posterior fourchette. Anteriorly they split to enclose the clitoris forming an anterior prepuce and posterior frenulum

Vaginal vestibule: This is the smooth triangular space bounded laterally by the labia minora, with the clitoris at the apex and the posterior fourchette at the base.

Clitoris: the small oval body situated at the apex of the vestibule anteriorly. between the top of the labia minora and the clitoral hood, is a small body of highly sensitive spongy tissue.

Urethra: The opening of the urethra is located in the vestibule just below the clitoris.

Hymen: This is the thin mucosal fold found at the entrance of the vaginal opening. The hymen varies greatly in shape which shall be discussed about later in the section of prepubescent females.

Fossa navicularis: It is the concave area between the posterior attachments of the hymen to the vaginal wall and the posterior fourchette (or commissure)

Posterior fourchette: It is the point where the labia minora meet posteriorly and fuse together. It is only present after puberty because the labia minora extend only part way down.

Posterior commissure: It is the point where the labia majora meet and fuse together, both before and after puberty. The posterior commissure, therefore, is present in both pre-pubescent and fully developed females, while the posterior fourchette is only present in the latter.

Perineum: The perineum is the short stretch of skin starting at the bottom of the vulva and extending to the anus. The perineum in women often tears during birth to accommodate passage of the child, and this is apparently natural. Some physicians may cut the perineum preemptively on the grounds that the "tearing" may be more harmful than a precise scalpel, but statistics show that such cutting in fact may increase the potential for infection.

Anatomy of the female internal genitalia:

Vagina: It is not only the female genital canal but also serves as the excretory duct for the menstrual flow from the uterus. It forms a part of the birth canal and extends from the uterine cervix internally to the vulva externally and is lined by rugae throughout.

Uterus: The uterus is hallow pear-shaped female reproductive organ with thick muscular walls located within the pelvis between the bladder and the rectum. It serves as a site for the reception, retention and nutrition of the fertilized ovum.

Cervix: It is the cylindrical shaped inferior portion of the uterus, separating the body of the uterus from the vagina. The external opening of the cervix into the vagina is termed the external os, and the internal opening into the endometrial cavity is termed the internal os. The average length of the cervix is 3-5 cm.

Uterine tubes: The uterine tubes (also referred to as oviducts or fallopian tubes) are uterine appendages located bilaterally at the superior portion of the uterine cavity. Their primary function is to transport sperm toward the egg, which is released by the ovary, and then to allow passage of the fertilized egg back to the uterus for implantation.

Ovaries: These are oval shaped, grayish colored, paired organs located on either side of the uterus. The ovaries are responsible for housing and releasing the ova, or eggs, necessary for reproduction. At birth, a female has approximately 1-2 million eggs, but only 300 of these eggs ever mature and are released for the purpose of fertilization.

Change in the Anatomy of the genitalia

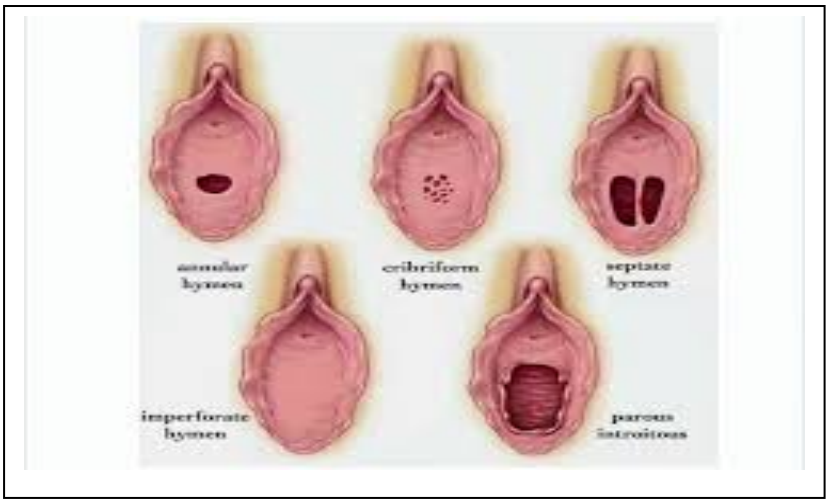
The anatomy of the genitalia in pre-pubertal female children differs from that of adult females. The changes occurs as the child grows and hits puberty and advances into maturity. This is due to the physiological and anatomical development, such as the appearance of hormones and genetic.

The hymen in infants is thick, somewhat convoluted and may be waxy in appearance because of the presence of the maternal hormone called estrogen. This occurs in children below the age of 2 years. As the maternal estrogen disappear from the body the hymen changes to become thin and vascular.

In later childhood, due to the appearance of the estrogen hormone the genitalia begin to show changes. Between the ages of 8 and 13 years puberty begins and takes several years to complete. The onset varies depending on the child's general health and nutritional status, socioeconomic factors and genetic factors.

The shape of the hymen in pre-pubescent girls is variable and can be described as:

- **Imperforate:** no hymenal opening present (very rare);
- **Crescentic**: posterior rim of hymen with attachment at approximately 11 and 1 o'clock positions, i.e. a half moon shape;
- **Annular**: tissue that surrounds the opening at 360°, i.e. a circular shape;
- **Sleeve-like**: an annular shape but with a vertically displaced orifice;
- **Septate**: two or three large openings in the hymenal membrane;
- **Cribiform**: multiple small openings in the hymenal membrane;
- **Fimbriated**: redundant tissue that folds over itself similar to excess ribbon around an opening.



The shape of the hymenal orifice can be described further by the appearance of clefts, bumps, notches, tags, or the presence of thickening or thinning at the edge of the orifice.

Difference in the appearance of external genitalia in pre-pubertal and pubertal females

Anatomy	Pre-pubescent (Infants – <2 years)	Prepubescent (Post Infancy)	Pre-pubescent (Childhood)	Pubertal
	Presence of maternal estrogen	Disappearance of maternal estrogen	Start of appearance of estrogen. Gentalia begins to show signs of early estrogen	Presence of estrogen. External genitalia gradually assume an adult appearance
Mons pubis	The mons pubis is relatively flat.	The mons pubis is relatively flat.	The mon pubis thickens.	Mons pubis is thick and begins to be covered by pubic hair.
Labia majora	The labia majora are flat. The clitoris is usually hidden by the labia majora.	The labia majora are flat. The clitoris is usually hidden by the labia majora.	The labia majora fill out and thicken.	The labia majora is thick
Labia minora	Labia minora are thin (relative to those of the adult). The labia minora extend only part way down from the anterior commissure and do not reach the midpoint posteriorly .	Labia minora are thin (relative to those of the adult). The labia minora extend only part way down from the anterior commissure and do not reach the midpoint posteriorly .	Labia minora become more rounded and extend towards the posterior fourchette.	Labia minora reach down all the way posteriorly and meet to form the posterior fourchette
Hymen	The hymen is thick, somewhat convoluted and may be waxy in appearance. (This is due to maternal estrogen)	The hymen is thin, smooth, usually regular and translucent, and very sensitive to touch.	The hymen thickens and the opening increases in size, (although this is not readily apparent as the thickened hymen covers it more completely.)	The hymen thickens, develops folds and has increased elasticity and decreased pain sensitivity;
Vagina	Mucous membranes of the vagina are thin, pink and atrophic. These tissues have little resistance to trauma and	Mucous membranes of the vagina are thin, pink and atrophic. These tissues have little resistance to trauma and infection.	The vagina elongates and vaginal mucosa thickens.	Mucous production begins; The vagina lengthens to 10–12 cm and mucosa is

	infection.			thick and moist.

Adult women:

In puberty and there after the features vary in appearance from one woman to another:

- Mons pubis is rounded, thick. It is covered with pubic hair but there can be marked variation in its amount and distribution.
- Labia majora are large and fleshy and covered with pubic hair. With variation in its size, pigmentation and shape.
- Labia minora can be very small or up to 2 inches wide and usually pink in colour (due to rich supply of blood vessels).
- Clitoris vary in size and its visibility
- The location of the urethral orifice and the vaginal orifice can vary.
- Hymen is fimbriated (thickened with folds) but has many normal configurations. It is often reduced to a ring of tissue remnants called Carunculae in sexually active women, particularly after childbirth.

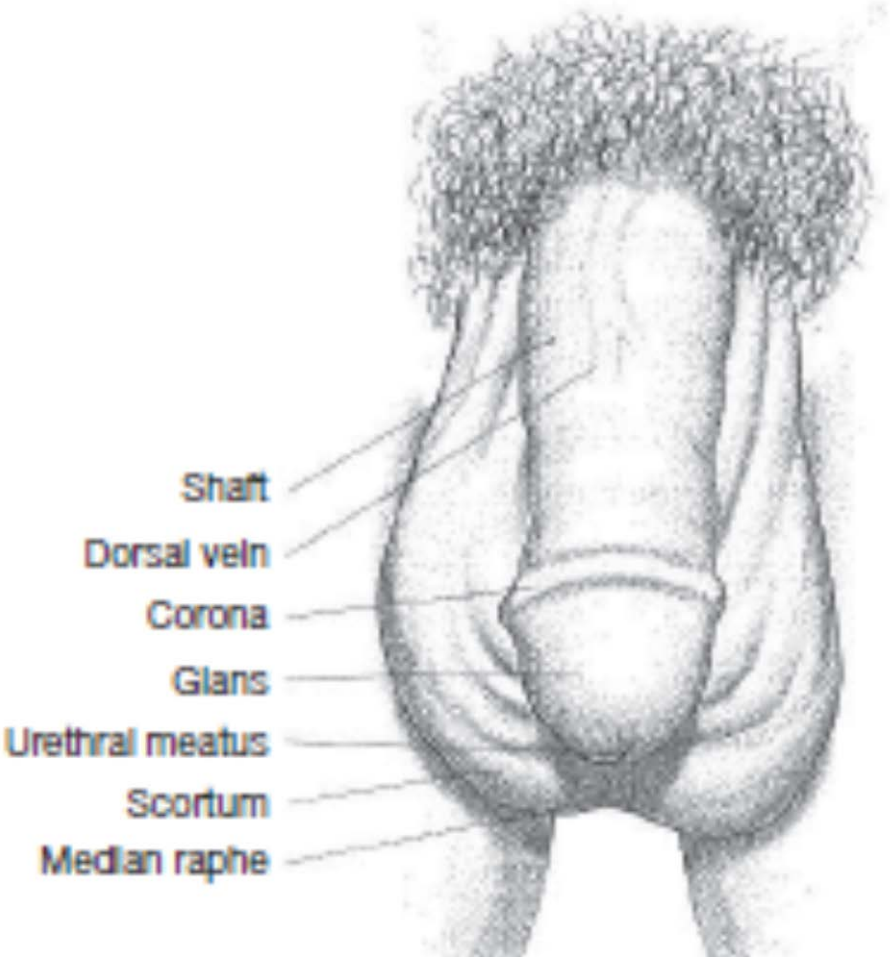
Postmenopausal women

Menopause is the time in a woman's life when estrogen levels drop. As a result menstruation ceases and she is unable to get pregnant naturally. During this time, due to the drop in the estrogen, various anatomical as well as physiological changes takes place:

- Thinning of the hair over the mons pubis and labia majora
- Decrease in subcutaneous fatty tissue
- Inner surfaces of the labia minora become pale and dry
- Vaginal orifice may become smaller (very small speculums may be required)
- Vaginal orifice may gape; rectocele, cystocele or frank uterine prolapse may be seen
- Vaginal walls become smooth, thin, shiny and less elastic
- Less mucus is produced

The possibility of genital injury occurs in elderly victims of sexual violence increases because of the increased fragility of the tissues and decreased lubrication of the vagina.

The Male Genitalia



Scrotum

The scrotum is the out pouching of the lower part of the anterior abdominal wall and contains the testis, epididymides and the lower ends of the spermatic cords. The skin of the scrotum is rugose and covered with sparse hair.

It is divided by a median septum (raphe) to from two compartments, each of which contains a testis, epididymis and part of the spermatic cord.

Testes

These the primary male reproductive organ and are responsible for testosterone and sperm production. They are oval shaped and firm in consistency.

Penis

The penis is the male sexual organ consisting of a root, a body and a glans (enlarged bulbous-shaped tip). The prepuce or the foreskin is the fold of skin that attached to the neck of the penis and covers the glans.

The testes are normally descended into the scrotum at birth, and in pre-pubertal boys are typically less than 2.2 cm in diameter. In boys, puberty begins between 9.5 and 13.5 years of age, and at this time:

- The testes enlarge;
- The scrotum skin becomes thin and reddened;
- The mons pubis begins to be covered by pubic hair.
- The phallus enlarges gradually from birth through to adolescence, when a
- further slight increase in size is observed.

Anal anatomy (both sexes)

Anal anatomy does not change with puberty, except for the appearance of pubic-like hair that can surround the external anal tissues. There is considerable variation between individuals in the appearance of the anus, including:

- Degree of pigmentation;
- Symmetry of the structures;
- rugal patterns;
- tone of the anal sphincter;
- Prominence and distribution of the vascular structures.

Service provision: Settings and facility

The setting: location and services

The patient should be provided with health services at designated places, which should be accessed within the hospital. Round-the-clock service should be provided, as it is impossible for these incidences to occur only at day or only during the night. If this is not possible, services should be provided by trained personnel, on-call.

Patient presenting with acute health problems (example – severe per-vaginal bleeding, fracture and dislocation etc.) should be provided with emergency medical and surgical treatment in the emergency department of the hospital. Further management, including counseling, can be provided later on in-patient basis, if she is admitted or outpatient basis, if she has been discharged from the hospital.

The examination of a child should be conducted in a child-friendly environment with special equipment for interviewing the child (example – toys, colorful images on walls, video recording facilities etc.) should be made available.

There should also be access to a range of laboratory services for diagnostic purposes and for forensic investigation as well. Health workers should co-ordinate with the laboratory and consult laboratory staff as to which specimens are to be collected and handled, and how long the samples will take to process.

If a laboratory is not able to provide all services required, for example, DNA testing, semen analysis or blood test, they should be sent to a laboratory that has the facility and expertise. A compassionate, objective and patient-centered health services should be provided to the victim. Also, safety, security and privacy should be maintained while providing these services.

Timing of examination

The assessment of the patient should be started as soon as possible, after the patient arrives. In case if there is delay in assessing the victim, this can result in the following:

- Delay in providing emergency contraception
- Alteration of physical injuries (healing, treatment etc.)
- Alteration or degradation of forensic evidences (Semen, blood etc.)

In cases of emergency (assault which has happened within 72 hours) the health and medico-legal components of the service should be provided on the same day and at the same place, giving first priority to primary medical care followed by medico-legal documentation .
It would be ideal and less of a hassle for the victim, if the medico-legal and health services were provided in conjunction. Health workers should develop this model of service provision.

Facilities

Fundamental requirements of facilities for treating victims of sexual violence:

Accessibility	Facilities should be easily accessible
Security	Well protected environment
Services	24-hour access to service
Cleanliness	Standard of hygiene maintained
Privacy	Unauthorized people not allowed Assailants and victims examined separately

The ideal facility

The ideal facility for examination of a victim of sexual violence should have the following:

1. An examination room with examination bed positioned such that the health worker can approach, with
    - Clean bed-linen and a gown for each patient
    - Good lighting sufficient to perform a genito-anal examination
    - Hand-washing facilities (with soap and running water)
    - Forensic instruments
    - Table or desk for documenting and labeling specimens
    - Lockable door to prevent entry during the examination
    - Telephone
2. 2. A separate room for changing of clothes
3. 3. Shower and toilet for the patient
4. 4. A room for the police
5. 5. A reception area that could also be used as a waiting room for family and friends.

Equipment

The equipments required for the examination of the victims and perpetrator of sexual assault cases range from a basic equipment like gloves, cotton stick swabs, microscopic slides etc to more sophisticated ones, like colposcope.

Basic equipments are cheap, easily available and these are must/essential instruments to carry out such examination. Financial resources are likely to be the main factor determining the quality and quantity of equipment that can be provided and maintained by any given facility.

Equipment list

Fixtures

- Examination bed
- Desk, chairs
- Mobile light source
- Washing facilities and toilet (including shower, basin and soap)
- Refrigerator and cupboard for storage of specimen (lockable)
- Telephone
- Fax machine
- Computer and printer
- Children's drawing materials/toys(to keep children occupied)

General medical equipment

- Tourniquet
- Syringes and needles
- Swabs
- Blood tubes (various)
- Speculums (various sizes)
- Sterilizing apparatus
- Proctoscope/anoscope
- Examination gloves
- Pregnancy testing kits
- STI collection kits
- Lubricant, sterile water normal saline
- Sharps container
- Weighing machine, Scales and height measure (Stadiometer)
- Measuring device (example – ruler, tape measure, calipers)

Forensic equipment

- Swabs (for collecting semen, blood, saliva etc.)
- Microscope slides
- Blood tubes for DNA or toxicological analysis
- Urine specimen containers for pregnancy and toxicological testing
- Sheets of paper (drop sheet) for patient to stand on whilst undressing for collection of loose, fine materials.
- Paper bags for collection of clothing and any wet items.
- Tweezers, scissors, comb

Items for treatment

- Analgesics(simple analgesics may be useful)
- Emergency contraception
- Suture materials
- Tetanus and hepatitis prophylaxis/vaccination
- STI prophylaxis

Linen

- Sheets and blankets for examination bed
- Towels
- Clothing to replace any damaged or retained items of the victim's clothing
- Patient gowns to allow patient to fully undress for examination
- Sanitary items (example – pads, tampons)

Stationery

- Examination record or proforma
- Labels for attaching to various specimens
- Consent form completed as required by local rules or protocols
- Pathology/radiology referral for referring patient for further investigation or tests
- Information brochure

Sundry items

- Camera – Photography is useful but not mandatory for injury documentation
- Colposcope or magnifying lens
- Microscope – To examine for the presence of spermatozoa

Additional items

- Pre-packaged rape kits
- Examination forms

Rape kits

Pre-packaged kits if available should be used, as it would ease the work of the health worker; even an inexperienced practitioner can collect every specimen without a miss. It contains all the items required for collecting evidentiary materials from rape victims. The alternative to using this kind of pre-packaged rape kits is to get a customized rape kit containing the essential items (example – cotton stick swabs, microscopic slides).

Colposcope

The colposcope is a microscope designed to visualize vaginal walls. Most colposcopes have a camera attached, which allows findings to be photographed or video-taped. However, colposcopes are expensive. In addition, reasonable skill is required in the usage and interpretation of findings. We do not have such facility in our country and genito-anal examinations are usually conducted by an experienced person using naked eye and hand-held lens.

Examination forms

All the findings noted during assessment of the victim should be recorded in a standard format such that details are not missed out. All these records should be confidential, stored securely and accessed only by authorized staff.

Establishing service for victims of sexual abuse

Initial considerations

Different issues need to be considered and addressed while planning to set up a new facility or modifying an existing one. These are outlined below:

- What are the needs of the community?
- What are the existing types of health care facilities, if any, already exist?
- What types of services are to be offered in the facility?
- Where will the facility be located?
- What are the hours of operation of the facility?
- Are there enough qualified female health care providers in the area?
- What are the local laws and regulations governing health care facilities and personnel?
- What are the laws regarding abortion, sexual violence, procedures for forensic evidence collection and the distribution of emergency contraceptive pills?
- Will services be provided to male and child victims?
- What types of laboratory facilities are available?
- What types of medicines and equipment are available?
- What types of referrals are available in the local area (example – specialist physician, rape crisis program, emergency shelter, and specialized children's services)?

The structure of the proposed facility and the staffing requirements also need careful consideration, for example:

- How will the organization be structured?
- What are the mission, goals, and objectives of the programme?
- Who will be in charge and what qualifications do they require?
- Who will provide the services and what qualifications do they need to have (i.e. nurses, physicians, social workers, health aids)?
- How many personnel are required?
- What are the roles of the director and staff?
- Who will conduct programme education, training, research and evaluation of staff and other members of the multidisciplinary team?
- What monitoring and evaluation tools are needed and how will they be developed?

Evaluation and monitoring

Evaluation and monitoring is essential for maintaining high quality services and a satisfactory level of care. This can help administrators and resource managers on deciding how to allocate resources. It can be helpful for the following purposes:

- By surveying those who use the facility, how well services are being delivered (example – by using patient satisfaction surveys)
- The output, performance and type of services provided (example – the number of patients seen monthly, the number of education programmes provided to the community or in-service to health care professionals)
- Outcomes of the patients (example – the patients who acquired STIs, pregnancies resulting from sexual violence)

The planning of an evaluation and monitoring system generally involves the following steps

- Listing the goals of the health care facility
- Identifying questions, problems or areas of concern
- Identifying outcomes of patients who use the facility
- Raising questions for the evaluation or use of existing evaluation tools
- Deciding what type of information is needed to answer the evaluation questions
- Determining how to obtain the information
- Determining who will conduct the evaluation and analyze the data
- Determining the time-frame for collecting the information
- Determining how the information collected will be used

Assessment and examination of adult victims

Overview

Sexual violence victims (man or woman) should be offered a full medical and forensic examination, the main components of which are as follows:

- An initial assessment and management of emergency condition;
- Obtain informed consent;
- History
    - General medical history
    - Gynecological history
    - History of the assault
- Examination
    - “Head-to-toe” examination
    - Detailed ano-genital examination
    - Documentation of injuries
- Collection of medical and forensic specimens
    - Labeling, packaging and transporting of forensic specimens maintaining the chain of custody of the evidence
- Therapeutic management; referral and follow up care
- Storage of documentation
- Provision of a medico-legal report

Special consideration should be taken in case child sexual abuse.

Assessing the patient

Sexual assault victims with serious or life-threatening injuries should be provided with acute medical or surgical care, as appropriate. The safety, health and well-being of the patient should be the cornerstone of the management. Patients should always be accompanied by someone especially the close ones in the hospital to offer them comfort and support.

Consent

Obtaining a fully informed expressed consent is of critical importance prior to interviewing and examining the victim. Failure to obtain informed consent violates the rights of the victim, disrespects and causes harm to the victim. It can also result in the health personnel (examiner) in question being charged with offences of assault or battery.

Not obtaining consent may also result in the documentation not being accepted in legal proceedings on the grounds that the information provided or the examination done was conducted under some kinds of duress, coercion or misleading assurances.

Informed consent:

The person providing the information or being examined must be informed about and understand

1. The purpose and nature of the interview and the examination,
2. The procedures that will follow
3. The risk and benefit of the interview and the examination.
4. Confidentiality: Whether it applies or not. The information may need to be disclosed in future in the proceedings and its intended use.

Consent should be taken before proceeding with any investigation, including history-taking and examination. Separate consent(s) must be obtained for specific activities like taking biological samples, taking photographs, sharing information and contact details with third party or for referral to other services.

Prior to obtaining a consent, it must be ensured that

1. The consent is obtained of the examinee's own free will.
2. The choice must be provided to the victim on whether they want to be interviewd or examined or not
3. The patient should feel secure, free, and not intimidated in any way.
4. Sufficient time should be provided to the victim to make a decision.
5. Choose a language that is readily understood by the victim.
6. The wishes of the patient must be respected (Principal of Autonomy)

The decision to refuse consent even after full explanation and proper counselling, should be respected. He/she should not be forced to give consent neither should he/she made to feel guilty for refusal to give consent.

Confidentiality

All Information provided by the victim must be treated as confidential and must not revealed without his/her consent. The health worker must ensure privacy and respect the dignity of the examinee while examining. Breach in confidentiality can have life-threatening consequences for the victim and the health professional may be liable to legal consequences.

The records and reports should be kept confidential and shared with relevant person or authority only.

History-taking

General medical history

The objective of taking a medical history is to obtain information that can be helpful in the medical management of the patient as well as medico legal investigations to explain findings, example – easy bruising or loss of consciousness or memory loss.

Some questions that can be asked in between are as follows:

- Tell me about your general health
- Have you seen a medical personnel lately?
- Have you been diagnosed with any illnesses?
- Have you had any operations?
- Do you suffer from any infectious diseases?
- Do you have any allergies?
- Do you take any allopathic, homeopathic or herbal preparations?

Gynecological history

These questions are of particular interest and insight regarding the findings and include:

- When was the first day of your last menstrual period?
- Have you had any sexual relationship prior to this event?
- Have you had any pregnancies? How many and how were they delivered?
- How many children do you have?
- Were there any complications during delivery?
- Have you had pelvic surgery?
- Do you use contraception? What type?
- Do you have a current sexual partner? When was the last consensual intercourse?

The assault itself

The main aims of obtaining an account of the violence inflicted are to:

- Detect and treat all acute injuries
- Assess the risk of adverse consequences, such as pregnancy and STI
- Guide specimen collection
- Allow documentation
- Guide forensic examination

When extracting information about the assault from the victim, ask her to tell you every detail about how and what happened. Document her account, in her own words, without

unnecessarily interrupting her; if you need to clarify any details, ask questions after your patient has completed her account.

Avoid questions starting with the word, “Why?” as this tends to imply blame; instead use open-ended, non-leading questions. Be thoughtful but thorough, and try to counsel the patient as some might avoid giving details if he/she is embarrassed about the assault.

Some details must be documented in all cases and hence may need to be enquired

- Occurrence of alleged abuse- time, location
- Person or persons involved
- Threats
- Restraints or weapons used
- Use of medication/ drugs or other Intoxicating substances
- Nature of the assault, i.e. anal, vaginal and/or oral penetration. Ejaculation, use of condoms or other contraceptive
- Any injuries or complaints of pain
- Vaginal or anal pain, bleeding and/or discharge following the event
- Any difficulty or pain with voiding or defecating
- Any urinary or fecal incontinence
- First menstrual period and date of last menstrual period (girls only)
- Details of prior sexual activity
- History of washing/bathing since assault
- Use of tampons

Dealing with victims of sexual violence: useful techniques

- Greet the patient by taking her name concentrating on her sayings and making her feel comfortable with you.
- Introduce yourself to the patient and tell her your role, i.e. physician, nurse, health worker.
- Give her respect and maintain the professionalism with patient.
- Have a calm demeanor.
- Give required time.

The physical examination

Guiding principles

It is important to observe the following general principles and procedures throughout:

- Before starting the physical examination, explain all the procedures to your patient and why they are necessary. Do not hesitate to answer any queries asked by the patient.
- Allow the patient to have a family member or friend present throughout the examination, if she so wishes.
- A chaperone (female) for the patient should always be present, especially if the examiner is male. The primary role of the chaperone, preferably a trained health worker, is to provide comfort and support to the patient. The chaperone can be helpful if there is case of false allegation.
- Always let the patient know when and where you will be touching next. Show and explain instruments and collection materials. Patients may refuse all or parts of the examination and you must respect the patient's decision. This kind of patient approach can speed up the recovery of the victim physically and mentally.
- The examination should be performed in a setting that is warm, clean, private and with proper lighting.
- If the clothing was worn during the assault, the patient needs to undress over a white sheet or large piece of light paper. Try to provide as much privacy as possible while the patient is undressing. You can provide her a gown. If the patient has consented to the collection of her clothing then each item of clothing must be placed by the examiner's gloved hand into a paper bag. If clothing is to be collected for further investigation, replacement clothing needs to be available.
- The following universal precautions should be followed each time health professionals perform the examination:
    - Wear gloves while dealing with blood or other bodily fluids
    - Wash hands with soap and water after contact with body fluids, blood or patient
    - Change gloves when necessary, for example – while dealing with different patients
    - Wearing protective clothings, for example – eye goggles, mask, surgical cap etc.

When conducting a physical examination of a victim of sexual violence, examiners are advised to proceed as follows:

1. Note the patient's general appearance and mental status.
   If the patient's mental status is impaired, attempt to assess whether the impairment is recent – which can be due to the effect of alcohol, sedative drugs or chronic illness as well as disability
2. Note the patient's vital signs (blood pressure, pulse, temperature and respiratory rate).
3. Examine the patient from head-to-toe, concluding with the ano genital area
4. Note and describe in detail any physical injuries, even if forensic evidence is not being collected. Use body maps to indicate location and size of injury
5. Photograph any injuries, if possible. A separate consent form for photography may be required
6. Order diagnostic tests (example – X-rays, CT scan, and ultrasound) to aid in diagnosing fractures, head and neck injuries, brain or spinal cord injuries, or abdominal trauma
7. Draw blood samples for testing for HIV, hepatitis B, syphilis and other STIs, as necessary. Informed consent must be obtained for testing for HIV and other STIs

The “head-to-toe” examination

General physical examination of the patient including ano-genital region should be conducted in a systematic and step-wise manner.

- Start with the vital status of the patient, i.e. pulse, blood pressure, respiration and temperature including the measurement of height and weight
- The examination should start from the head going downwards to the toe
- Special consideration should be taken while examining dark skinned people as injuries like bruising can be masked, thus tenderness and swelling is of great significance
- Any injuries include abrasions, contusions, lacerations, fracture/dislocation, incised wounds etc. should be documented , describing the details of shape, size, site, location and status (fresh, old healing) etc. Beside these injuries, any intravenous puncture sites should also be noted.

Head and neck:

- Scalp should be palpated instead of just observing. Injuries present over the scalp are easily missed. Scalp tenderness and swelling, while palpating, is suggestive of hematoma. Hair may be lost due to pulling (traction alopecia).
- Presence of peri-orbital hematoma (raccoon/panda eyes) as well as rhinorrhea and otorrhea (battle sign) should be correlated with fracture of cranial cavity. These injuries indicate impact at a site other than the visible injury. An otoscope may be required.
- Oral cavity, including frenulum, should be inspected for injury.
- Injuries over the neck should be dealt with meticulously, as patterns of injuries can be present, which can be of great forensic importance. For examples – fingerprint bruises (while applying hands), patterned bruises due to ligature material (used to restrain the victim), suction-type of bruising from bites (love bites) etc. Injury, if present and documented, can be helpful in giving the extent of the nature of the crime.

Chest, abdomen and pelvis:

- During examination of the chest, the breast should also be examined. The patient could be asked to sit up and both breasts should be examined with as much dignity and privacy as can be afforded. Only the area being examined should be exposed. Breast should be examined in turn, noting bite marks, love bites and all other injuries present. If the breasts are not examined, the reasons should be documented
- Abdominal and pelvic examination should be performed to detect internal trauma as well as to detect pregnancy.

Upper and lower extremities:

- Both upper and lower extremities should be examined for signs of restraints. Ankles and wrists should be inspected closely. Palms and soles should not be missed.

Back

- The patient should be requested to stand for the examination of back and buttocks. This position could also help to examine the back of the legs. If the patient is unsteady on her feet then she could be made to sit up. Examination of the back including the gluteal region should not be missed as abrasions could be present, especially if the assault was over a rough surface.
- Any biological evidence should be collected with cotton stick swabs (for semen, saliva, blood) or tweezers (for hair, fibers, grass, and soil).

Ano-genital examination

- The patient should be made to feel comfortable before initiating examination
- The upper portion of body should be covered with a sheet when the ano-genital examination is being performed
- The examination is normally conducted in the lithotomy position. Here the patient is made to lie in supine position with her knees drawn up, and legs separated. There are also other body positions that can be opted for, like left lateral decubitus position with the right leg slightly spread apart from the left one and knee chest position, especially for the child victim.
- Lighting should be directed onto the patient's vulval area.
- Start with the external examination of the genital region and anus including mons pubis. Then proceed with the examination of vaginal vestibule, which includes labia majora, labia minora, clitoris, hymen or hymenal remnants, posterior fourchette and finally the perineum.
- Swab of external genitalia should be taken before any digital exploration or speculum examination is attempted. The victim's pubic hair may be combed if the hair is matted and if seeking the assailant's pubic hair. (Refer to the chapter on forensic specimen)
- A gentle stretch of the posterior fourchette can reveal any injury present. During examination, a cotton stick swab can facilitate in visualizing minute injuries.
- Tenderness can be elicited while touching the injured portions (abraded, contused, lacerated etc.) of the ano-genital region. Sometimes you may need the help of an anesthetic agent for full ano-genital examination, especially in child sexual abuse.

- Management may be required in cases of cervical tear and internal tears or even perforation of the internal genitalia.

Speculum examination

- In order to inspect the vaginal walls for signs of injury, you can use a transparent plastic speculum (Sims speculum). This helps in examining the endocervical canal. This examination may be distressing for the patient as it is intrusive and may remind her of the assault. Therefore, it should be introduced gently, with proper explanation of the importance of this examination. Speculum should warmed by immersing it in warm water before applying it.
- The usual recommended technique for speculum examination is inserting the speculum along the longitudinal plane of vulval tissues and then rotating it into its final position.
- The Duckbill speculum is more popular nowadays. It is also introduced into the patient in lithotomy position, with no twisting, in a downwards direction, opening the duckbills gently as it progresses. This avoids painful urethral contact and allows the cervix to be visualized easily.
- Speculum examination can be useful in cases of vaginal or uterine pain post-assault, vaginal bleeding or suspicion of foreign body in the vagina. Further, it is required to collect an endocervical canal swab (for semen) in cases of sexual assault of duration less than 96 hours. If a speculum examination is not conducted (example – because of patient refusal) it may still be possible to collect a blind vaginal swab.

Anal examination

- Anal examination is usually conducted with the patient in the left lateral position with her legs drawn up. The upper or right buttock needs to be lifted to view the anus. Gentle pressure at the anal verge can reveal injuries.
- A digital rectal examination is performed in case of foreign object insertion in the anal canal, and should be performed prior to proctoscopy or anoscopy. The examining finger should be placed on the perianal tissues to allow relaxation of the natural contraction response of sphincter. Finger can be inserted only after the sphincter relaxes.
- Proctoscopy is reserved for cases of anal bleeding or severe anal pain post-assault, or the presence of a foreign body in the rectum.

Recording and classifying injuries

Any injury present over the body should be recorded, including:

- Nature of injury

- Age of an injury;
- Mechanism of injury production;
- Circumstances of injury production;
- Relationship between history of injury production and the examination findings
- Consequences of the injury.

Injury should be recorded using systematic and scientific approach. When describing genito-anal structures, it is important to aim for consistency and clarity in the terminology used, not only among health care professionals but also within the medico-legal system.

Injuries should be described using standard terminology.

Describing features of physical injuries

- **Site and location:** Site of injury is non-specific whereas location is specific being the distances from any two anatomical landmarks.
- **Size** or dimension of the injury (i.e.length, breadth, depth etc) should be measured.
- **Shape** of the injury (example – linear, curved, irregular).
- **Status** of surrounding tissues (example – bruised, swollen).
- **Color** of the injury (example – red, bluish, yellow etc particularly when describing contusion).
- **Direction** of the force applied (example – epithelial tags in abrasions).
- **Contents** of the injury (example – dirt, glass, fiber, hair etc).
- **Signs of healing** (example – scab in abrasion ,scar in lacerated wound, callus in bone fracture etc)
- **Borders/edges** of the injury can give the indication of the causative agent (example – abraded, contused in injuries caused by blunt edged weapon, clean margin in sharp force injuries etc)

It is beyond the scope of this document to provide a full comprehensive description of the types of injury hence the readers are advised to refer to “Reference Manual on Injury Examination”.

To give an interpretation of injury production requires a deep knowledge and understanding of anatomy, physiology and pathology. (Regarding Injury interpretations see Annex-1) Wrong interpretation made out of inaccurate documentation and inadequate knowledge and understanding on the concerned matter can lead to wrongful prosecution and conviction.

Health workers without the necessary training and skills in giving an interpretation should limit their work to just documenting any injury present using lay terms with photographic documentation and leave the interpretation to trained professionals.

The health worker have an added responsibility of differentiating genuine cases of sexual assault from the cases of false allegation. Accurate documentation of history, along with meticulous examination and interpretation of the nature and pattern of injuries are therefore paramount.

The different variations in injury patterns ranging from absence to fatal injuries sustained during a sexual assault should be considered. A health worker may be summoned to court to clarify doubts about injury patterns and to draw inferences from injury patterns about the circumstances of the alleged assault. A comprehensive statements relating to following facts of injuries are required to be made in a court of law:

- Causative agent of the injury incurred (blunt trauma/sharp trauma/firearm injuries)
- Amount of force required to produce such injuries
- Time of infliction of the injuries
- Manner of the injuries (suicidal/homicidal/accidental)
- Short and long term consequences of the injuries

Diagnostic tests, specimen collection and forensic issues

A number of diagnostic tests, such as simple routine blood test, routine urine test, urine pregnancy test, tests specific for sexually transmitted infections, X-rays, CT scans and/or ultrasound etc can be helpful in any case of sexual assault depending on the need of these tests. If possible it would be easier for patient if any forensic evidence is collected during the medical examination by the health professional as this will prevent repeated examinations which will be inconvenient to the victim.

Forensic Specimen

Forensic examination is essential to collect evidence to show a link between individuals and/or between individuals and objects or places.

A written informed consent should be obtained before evidence collection.
Specimen collection should be conducted in a proper and scientific manner, ensuring:

- Specimen should be collected using proper technique such that the chances of contamination is negligible
- It should be collected as early as possible; 72 hours after the assault the evidentiary value of the material decreases dramatically
- Specimen should be labeled accurately
- All wet specimens should be dried
- Specimen should be secure and tamper proof
- Chain of custody should be maintained

Health workers should be aware of the capabilities of the forensic laboratory prior to sending the specimens for examinations as there is no point collecting specimens that cannot be tested.

Objective

The main objective of forensic evidence is to establish an association that may be either positive or negative between individuals (victim and perpetrator) and objects (example – weapons of offence) or places (example – crime of scene).

The physical contact between assailant, victim and crime scene may result in an interchange of trace evidences (Locard's principle of exchange). Biological trace evidences (i.e. hair, blood, semen etc) may be found on both the victim and assailant; for example – , the victim's blood smeared onto the assailant's clothes. Physical evidences from the crime of scene (example – mud, grass, sand particles etc) may link a victim and assailant, or they may each have left traces of clothing or biological traces at the scene.

The health worker must collect specimens based on the information provided by the patient and facts discovered by the examiner during the examination as collection of all forensic specimen may not be required. e.g oral swab for semen analysis is not required in a case of vaginal penetration. The health worker must be aware of the capabilities of the forensic laboratory as there is no point collecting specimens that cannot be tested.

Guiding principles for specimen collection

The following principles should be strictly followed while collecting forensic evidences:

Avoid contamination

Wear gloves at all times (preferably powder free gloves) and change them between specimen collections. Avoid touching the area where you believe DNA may exist. • Avoid talking, sneezing, and coughing over evidence. • Avoid touching your face, nose, and mouth when collecting and packaging evidence. • Use disposable instruments or clean them thoroughly before and after handling each sample.

Collect early

Collect forensic specimens , including blood samples, as early as possible. The evidentiary value of the collected material decreases with the passage of time. (Alcohol related blood specimens should be collected within the first 45 minutes)

Consent

An informed written consent must be obtained for evidence collection.

Handle appropriately

Ensure that specimens are packed, stored and transported correctly. As a general rule, fluids should be refrigerated; anything else should be kept dry. Put dry evidence into new paper bags or envelopes, not into plastic bags. In the event that the evidence is wet, the items may be first placed in paper bags then into plastic bags, provided that holes for ventilation are made in the plastic bag. Envelopes containing evidence should never be sealed with the examiner's saliva. Self-adhesive envelopes or tape should be used. Paper bags should be sealed with tape, do not use staples to secure the evidence bag.

Label accurately

All specimens must be clearly labeled with the patient's name/ codename, age and sex, the health worker's name, the type of specimen, and the date and time of collection.

Ensure security

Specimens should be packed such that they are secure and tamper proof.

Maintain chain of custody

Once a specimen has been collected, its subsequent collectors t handling should be recorded. Details of the transfer of the specimen between individuals should also be recorded. It is advisable to check with local authorities regarding the protocols for the recording of such information.

Document collection

It is good practice to compile an itemized list in the patient's medical notes or reports of all specimens collected and details of when, and to whom, they were transferred maintaining a chain of custody.

During the collection of the specimen universal precautions should be followed which includes considering all patients as potentially infectious, wearing personal protective equipments (PPE: clean non-sterile gloves ☐sterile gloves ☐fluid-resistant gown ☐mask and eye protection or a face shield.), washing hands frequently and wearing gloves while handling body fluids.

Forensic specimen collection techniques

Below is a table that provides the range of forensic specimens that are typically of interest in cases of sexual violence, together with notes about appropriate collection techniques:

Site	Material	Equipment	Sampling instructions
Anus (rectum)	Semen	Cotton swabs and microscope slides	Use swab and slides to collect and plate material; lubricate instruments with water, not lubricant.
	Lubricant	Cotton swab	Dry swab after collection
Blood	Drugs/DNA	Appropriate tube	Collect 10 ml of blood
Clothing	Foreign materials attached(semen,blood,hair etc)	Paper bags	Clothing should be placed in a paper bag(s).Wet items should be bagged separately.
Genitalia	Semen	Cotton swabs and microscope slides	Vaginal swabs from three sites upper, middle and lower portion.
Hair	Comparison to hair found at the scene	Sterile container	Approximate 15-20 hairs
Mouth	Semen,DNA	Cotton swabs	Swabs or sample of oral washings, rinse mouth with 10 ml water and collect in sterile container
Nails	Skin,blood,fibers	Sterile toothpick or nail cutter	Use toothpick to collect material from under the nails and nails can be cut and the clippings collected in a sterile container.
Urine	Drugs	Sterile container	Collect 100 ml of urine
Skin	Saliva (example – at sites of kissing, biting or licking), blood	Cotton swab	Dry swab after collection.
	Foreign material (example – vegetation, matted hair or foreign hairs)	Swab or tweezers	Place material in sterile container (example – envelope, bottle).
	Semen	Cotton swab	Swab sites where semen may be present

General procedures for collection of forensic specimen:

Swabs collection:

- Use only sterile, cotton swabs (or swabs recommended by your laboratory)
- Do not place the swabs in medium as this will result in bacterial overgrowth and destruction of the material collected. Swabs placed in medium can only be used for collection of bacteriological specimen
- Moisten swabs with sterile water or saline when collecting material from dry surfaces (example – skin, anus)
- If microscopy is going to be performed (example – to check for the presence of spermatozoa), a microscope slide should be prepared. Label the slide. Both swab and slide should be sent, to the laboratory, for analysis
- All swabs and slides should be dried, before sealing in appropriate transport containers. The moisture in the swabs allows microorganisms to grow which can destroy the evidentiary value of the swabs

Foreign material:

There are a number of ways in which foreign material attached to a victim's skin or clothing can be collected.

- If there is a possibility that foreign materials have adhered to the victim's skin or clothing, the victim should be asked to undress over a large sheet of paper. Any loose material will fall onto the paper and can either be collected with a pair of tweezers or the entire sheet of paper can be folded in on itself and sent to the laboratory.
- Alternatively, the victim's clothing can be collected and sent to the laboratory. If clothing is wet, however, it should be dried before being packaged up or sent to the laboratory without delay.

Scalp hair

Collection of scalp hair is rarely required, but may be indicated if hair is found at the scene.

- About 20 hairs can be plucked or cut from the victim
- Ask laboratory regarding preferred sampling techniques for scalp hair
- If root sheath is attached, DNA analysis using PCR technology can detect class characteristics
- If there is no root sheath, microscopic analysis can detect similar characteristics as the victim's/ suspect's hair

Pubic hair:

- The victim's pubic hair should be combed, if seeking the assailant's pubic hair
- The combings should be transported in a sterile container.

Buccal swab

- Firmly wiping a cotton swab on the inner aspect of a cheek (i.e. a buccal swab) will collect enough cellular material for analysis of the victim's DNA.
- Buccal swabs should be dried after collection.
- They should not be collected if there is possibility of foreign material being present in the subject's mouth (example – if ejaculation into the victim's mouth occurred).
- Alternatively, blood may be taken.

Nail scrapping:

- If there is a history of the victim scratching the assailant, material collected from under the nails of the victim may be used for DNA analysis.

Swab for semen:

- The presence of semen is best confirmed by taking a swab followed by microscopy.
- The swab is gently introduced beyond the hymen, taking care not to touch the external structures as it is being introduced and is advanced towards the vaginal vault.
- In the mouth, the spermatozoa and semen tend to collect in the spaces between the teeth and the gingival margins of the lower jaw, a dry swab should be firmly but gently placed in the spaces between the teeth.
- The swab should be dried, capped and labeled.

Toxicological analysis:

This is indicated if there is evidence that a victim may have been sedated for the purpose of a sexual assault.

- In cases where the patient presents within 12–14 hours after possible drug administration, blood samples should be taken
- Urine samples are appropriate where there are longer delays.
- Seek the advice of the laboratory regarding suitable containers for specimen
- Some of the different types of container used for blood samples are:
    - **Gray top vials:** (contain sodium fluoride and potassium oxalate) Useful for alcohol and drug toxicological testing and may not be used for DNA analysis.

- **Red top vials**: (no additives) Useful for conventional serological tests; less useful for DNA testing; can be used for pregnancy and HIV testing.
- **Yellow top vials**: (contain acid citrate dextrose solution) Useful for conventional serological testing and DNA testing.
- **Purple top vials:** (contain EDTA) Useful for DNA testing, may inhibit certain conventional serological tests.

Forensic evidence collection in DFSA

Be aware that the presence of physical evidence, drugs and toxicants in any biological fluid is time-dependent. Timely collection of all forensic specimens including blood specimens is of the utmost importance. Alcohol related blood specimens should be collected within the first 45 minutes.

Guidelines for collecting the sample DFSA for analysis:

Urine

- If patient may have ingested a drug used for facilitating sexual assault within 96 hours prior to the exam, a urine specimen of at least 30 milliliters but preferably 100 milliliters (about 3 oz.) should be collected in a clean plastic or glass container (follow toxicology lab guidelines).
- The urine specimen should be collected as a “voided” sample. The first “voided” specimen, status post-ingestion, is ideal. Do NOT have the patient collect the urine specimen as a “clean catch.” The use of an antiseptic towelette may destroy trace evidence.
- If patient urinates before evidence specimen is collected, document the number of stated times patient urinated prior to collection.

Blood

- If less than 48 hours, Collect a 30 ml blood sample using gray top tubes.

Emesis

- If the patient vomits and drug-facilitated sexual assault is suspected, the specimen should be collected in a clean container and preserved.

Any specimen that is collected should be labeled with case number, subject’s name or codename, item collected and number, date, time, location, evidence collector’s name and the test to be conducted. The collected specimens should be submitted to the laboratory as soon as possible, if not it should be preserved accordingly.

Specimen retention

Any samples/ specimen that are not submitted to the laboratory and requires retention must be stored in a locked container throughout the storage period.

- When storing evidence that may contain DNA, it is important to keep the evidence dry and at room temperature.
- Once the evidence has been secured in paper bags or envelopes, it should be sealed, labeled, and transported in a way that ensures proper identification of where it was found and proper chain of custody.
- Never place evidence that may contain DNA in plastic bags because plastic bags will retain damaging moisture. Direct sunlight and warmer conditions also may be harmful to DNA, so avoid keeping evidence in places that may get hot, such as a room or police car without air conditioning.
- Refrigerate liquid blood samples/ urine samples (do not freeze). Specimen can be refrigerated at 2-8 ^{o}C in an appropriately temperature monitored unit, for at least sixty (60) days.
- Air-dry all wet blood and other body fluid stains on evidence items (do not subject to heat).
- Metal or glass items should be stored at room temperature and submitted to the laboratory as soon as possible.
- Evidence from the suspect and victim must be handled and packaged separately
- Disposal of any sample/ specimen requires an authorization by law enforcement/ police and should be documented within the medical record.

Chain of custody

While medical information and forensic evidence may be collected together, forensic evidence must be collected, preserved and documented. This is accomplished by establishing a "chain of custody." The chain of custody is a legal term describing the movement, location and succession of people responsible for the evidence.

- The collected evidence must be accurately maintained and accounted for from the time it is initially collected, until it is admitted into evidence at trial. This is essential for prosecution in a court of law.
- Each item must be labeled with the initials of everyone who has handled it, the date, a description and source of specimen, the name of the collector, name of the subject, name and case number of the law enforcement agency involved in the investigation.
- The unbroken chain of custody establishes the integrity of the evidence and any subsequent analysis of the evidence and is a prerequisite to admitting the evidence in court.
- Sealing the kit with the evidence tape provided, and initialing that seal, establishes that the medical forensic evidence has not been tampered with and ensures the integrity of the evidence. This also applies to any collected clothing or other items which are not sealed in the kit.
- Additionally; the evidence must be kept in a manner that precludes tampering and keeping the evidence in a secure place.
- Under NO circumstances is a suspect, victim, family member, or support person to handle or transport evidence after it has been collected.
- Never leave the subject or victim alone with the evidence.
- It is important to emphasize the documentation of the chain of custody including the receipt, storage, and transfer of evidence.

Treatment and follow-up care

Sexual assaulted victims are prone to wide range of health problem and must be appropriately addressed with the issues like pregnancy, STIs, HIV and hepatitis B, counseling, social support, consultation including follow up.

- Informed consent should be taken from victims or guardian in case of minor in treatment proceedings.
- Pregnancy possibility can be assessed depending upon the history of sexual assault and possible measure can be made accordingly whether use of emergency contraceptive or terminate the pregnancy on legal basis.
- STIs, HIV, hepatitis B testing where indicated should be done and as well treatment as per the standard protocol.
- Social support and counseling is considered to be best measures helping them to recover physically and emotionally.
- Follow up services should be facilitated.

Physical injuries

Emergency treatment should always be prioritized and made available immediately. Medication like analgesic to relieve pain, anxiety, tetanus booster or vaccination (local protocol) and antibiotics to prevent wounds infection may be indicated.

Pregnancy prevention and management

Victims of sexual violence are concerned with the risk of becoming pregnant. A baseline pregnancy test should be conducted at first, to assess the possibility of pregnancy, though kits available will not detect a pregnancy before expected menstrual date. However, this should not delay the prescription of Emergency contraceptive pill.

Emergency contraception should be offered to all non-pregnant female victims of sexual assault who are of child bearing age. If the victims approach within few hours to 5 days emergency contraception can be offered. If victims present more than 5 days then they can be advised for follow up if they misses the next menstrual period.

Emergency contraception

Oral emergency contraceptive pills (ECPs) also known as morning after pill are widely used to affect an existing pregnancy as it is not an abortion pill.

- If victim approaches within hours to 5 days, emergency contraception can be offered.
- Medical conditions that limit the continuous use of oral contraceptive pills are not relevant for the use of ECPs and are not contraindicated.
- ECPs prevent pregnancy by delaying ovulation, blocking fertilization or interfering implantation.
- They do not cause abortions.
- Informed consent should be taken from victims or guardian in case of minor in treatment proceedings.

ECPs can be categorized into two parts

- Combined estrogen-progesterone pill (COPs)
- Progestin-only pill (POPs, i.e. levonorgestrel only).

The recommended dosing regimens for ECPs are given below in the table:*

Methods	Timing	Remarks	Instructions
Combined oral contraceptives	Taken within 120 hours of unprotected intercourse and repeated after 12 hours.	2% become pregnant **Side effects:** • Nausea • Vomiting • Breast tenderness, headache, dizziness • Irregular uterine bleeding: Some women may experience spotting. If menstrual period is delayed, the possibility of pregnancy should be excluded. • If pregnancy is not prevented, counsel client for antenatal care.	**COCs (low-dose)** containing norgestrel (progestin) 0.3 mg and ethinyl estradiol (estrogen) 0.03mg in each pill Take **4** tablets as soon as possible, up to 120 hours (5 days) after unprotected sex 12 hours later Take **4** more tablets Total = 8 tablets
The most common oral contraceptives available in Nepal are the low dose COCs. The most common COCs, "LOFEMINAL", are available at all Government of Nepal (GoN) facilities. "Lofeminal" contains 28 pills, the first 21 pills contain both norgestrel (progestin) 0.3 mg and ethinyl estradiol (estrogen) 0.03mg in each pill and last 7 brown pills contain 75mg ferrous fumarate (iron). "Nilocon white" and "Sunaulo Gulaf" are some of the other commonly available cocs in nepal. These contain Levonorgestrel 0.15 mg and Ethinylestradiol 0.03 mg in each of the first 21 pills with last 7 brown tablets, each containing Ferrous Fumarate 75 mg.			

Progestin-only Pills (POPs)	Should be taken within 120 hours of unprotected intercourse and repeated after 12 hours	Less than 3% become pregnant Same side effects as with COCs but significantly less severe and nausea, vomiting is minimal If pregnancy is not prevented, counsel client for antenatal care (ANC)	**POPs** (0.75 mg *levonorgestrel*, example – Postinor®) Take **1** tablet as soon as possible within 120 hours (5 days) after unprotected sex 12 hours later Take **1** more tablet **(Total dose = 1.5 mg of levonorgestrel)** _____ **POPs** (0.075 mg *norgestrel,* example – Ovrette®) Take **20** tablets within 120 hours (5 days) 12 hours later Take 20 more tablets (Total dose = 3.0 mg of norgestrel)

*Adapted from National medical standard for reproductive health volume I: contraceptive services

Instructions and information for patients prescribed ECPs

Victims should be given information regarding the following facts of ECPs:

- ECPs decrease the risk of pregnancy if taken within 5 days of assault but are more effective if taken immediately after assault
- ECPs prevent pregnancy by delaying ovulation, blocking fertilization or interfering implantation but do not cause abortion and do not affect an existing pregnancy
- 100 % success rate is not seen in ECPs
- ECPs do not cause immediate menstruation
- Victims must be advised to seek immediate medical care if she experiences any of the following symptoms:
    - Severe abdominal pain
    - Severe chest pain
    - Shortness of breath
    - Severe headaches
    - Blurred vision or loss of vision
    - Severe pain in the calf or thigh

Choices in case of pregnancy:

Victims or guardian in case of minor hold right to choose whether to continue the pregnancy or abort on legal term. As a health professional, we should deliver necessary information to help them make a best choices and should respect their decision.

Abortion has been legalized in Nepal. Legally, abortion is considered valid

- With the permission of the pregnant woman, pregnancy of twelve weeks or three months can be terminated.
- In the cases of rape, or pregnancy resulted due to incest, pregnancy up to eighteen weeks can be terminated.
- If the pregnancy is dangerous to woman physically and mentally, with the suggestion of three physicians, pregnancy can be terminated.

Sexually transmitted Infections

Sexual violence victims may acquire sexually transmitted infection (STI) due to direct result of assault. Infection most commonly seen in sexually assaulted victims are Chlamydia, gonorrhea, syphilis, trichomoniasis, human papilloma virus (HPV), herpes simplex virus type 2 (HSV-2), HIV and the hepatitis B virus etc

STI testing

Where appropriate tests and laboratory facilities exist, the following tests for STIs should be offered:

- Cultures for Neisseria gonorrhoeae and Chlamydia trachomatis (the nucleic
- Acid amplification tests can be substituted for culture);
- Wet mount and culture for Trichomonas vaginalis;
- Blood sample for syphilis, HIV and hepatitis B testing

If the test results are positive, patients can be prescribed treatment according to the regimens. It is important to note that negative test results do not necessarily indicate the absence of infection as STIs can take between 3 days and 3 months to incubate and become identifiable through laboratory testing. Thus if the sexual assault was recent, any cultures will most likely be negative unless the victim already has a STI. Follow-up tests, at a suitable interval to account for each respective infection, are therefore recommended in the case of negative test results.

STI Syndrome Management

Due to the lack of laboratory facilities in Nepal, syndromic management is usually relied on for treatment of sexually transmitted infections. The syndromic management often relies on clinical algorithms and allows health workers to diagnose a specific infection on the basis of observed syndromes (example – vaginal discharge, urethral discharge, genital ulcers, abdominal pain). Though the syndromic management is simple, assures rapid, same-day treatment, and avoids expensive or unavailable diagnostic tests, this approach misses a majority of the infections that do not demonstrate any syndromes. Hence, where available and possible diagnostic tests are advised and treatment made available.

Recurrent Urethral Discharge

Persistent or recurrent symptoms of urethritis may result from drug resistance, poor compliance or re-infection. If there is history of unprotected sexual exposure even with regular but untreated sexual partners, re-treatment for both gonococcal and chlamydial infection is indicated. In some cases, there may be infection with Trichomonas vaginalis that should be treated with metronidazole or tinidazole 2 gm stat dose, if the prior treatment fails.

Note: Single dose treatment regimens are preferred in all cases for better Compliance.

Recommended Treatment for Urethral Discharge

- Tab. AZITHROMYCIN 1gm oral single dose **or** Cap. DOXYCYCLINE 100 mg twice daily for 7 days

Plus

- Tab. CEFIXIME 400 mg oral single dose **or** Inj. CEFTRIAXONE 250 mg IM single dose **or** Inj. SPECTINOMYCIN 2 g IM single dose (reserve drug for gonococcal infection)

Recommended Treatment for Genital Ulcer Disease Syndrome –

- Inj. BENZATHINE PENICILLIN 1.2 million I.U deep IM at each buttock (total 2.4 million IU) single dose (for syphilis)

Plus

- AZITHROMYCIN 1 gm orally as a single dose (for chancroid)

Plus

- **Treatment for Herpes genitalis:** ACYCLOVIR, 400 mg orally three times daily for 7 days (If there is clinical evidence of Gen. Herpes)

Recommended Treatment for Scrotal Swelling

- Tab. AZITHROMYCIN: 1 gm, oral, single dose or Cap. DOXYCYCLINE: 100 mg oral twice a day for 7 days (for chlamydia)

Plus

- Tab. CEFIXIME: 400 mg, oral, single dose or Inj. CEFTRIAXONE – 250 mg, IM, single dose or Inj. SPECTINOMYCIN: 2 gm, IM, single dose (for gonococcal)
- Bed rest, analgesia and scrotal support until local inflammation subsides

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Recommended Treatment for Cervicitis

- Tab. AZITHROMYCIN 1 gm oral single dose or Cap. DOXYCYCLINE 100 mg oral twice daily for 7 days (for chlamydia trachomatis)

Plus

- CEFIXIME 400 mg oral single dose or CEFTRIAXONE 250 mg IM single dose or SPECTINOMYCIN 2 gm IM single dose (for gonnorhea)

Vaginitis Treatment

- METRONIDAZOLE 400 mg oral three times a day for 7 days or TINIDAZOLE 2 gm oral single dose (for bacterial vaginosis, trichomonal vaginosis)

Plus

- FLUCONAZOLE 150 mg oral single dose or CLOTRIMAZOLE 200 mg vaginal pessary each night for 3 nights

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Candidiasis Treatment

- FLUCONAZOLE, 150mg orally, as a single dose

or

- MICONAZOLE or clotrimazole, 200mg vaginal pessaries intravaginally daily for three days

or

- CLOTRIMAZOLE, 500mg vaginal pessaries intravaginally as a single dose

or

- NYSTATIN vaginal pessaries 100000IU intravaginally daily for 14 days

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Recommended Treatment for Inguinal Bubo syndrome

- Tab. AZITHROMYCIN, 1 gm orally in a single dose (for chancroid)

Plus

- Cap. DOXYCYCLINE, 100mg, two times daily for 14 days or ERYTHROMYCIN, 500mg, four times daily for 14 days (for LGV)

Recommended treatment at STI Clinic

Outpatient treatment (for mild to moderate PID)

- Cefixime 400mg oral stat or Ceftriaxone 250 mg IM stat

Plus

- Doxycycline100 mg oral twice a day for 14 days

Plus

- Metronidazole 400 mg thrice a day for 14 days
- Follow up in 3-7 days, if not improved refer to nearby hospital

In-patient Treatment (for severe PID)

- Ceftriaxone or other third generation Cephalosporin IV daily*

Plus

- Doxycycline100 mg oral twice a day for 14 days

Plus

- Metronidazole 400 mg thrice a day for 14 days

*(Dose and duration to be determined on the basis of severity and clinical judgment)

N.B.: In pregnant women, tinidazole and metronidazole are contraindicated in the first trimester. However, metronidazole 400 mg 3 times daily can be used after first trimester of pregnancy. Fluconazole and doxycycline are contraindicated in pregnancy.
Patient taking tinidazole or metronidazole should be cautioned to avoid alcohol at least 12 hours before and 24 hours after taking it.

Treatment of STIs in MSM

The drug treatments and the duration to treat STIs are the same as in other people with STIs. On anoscopy, if there is macroscopic pus or if there are >5 polymorphs/HPF on Gram stain of rectal swabs, treat for both gonorrhoea and chlamydia:

- Tab. Cefixime 400 mg oral: one dose stat

Plus

- Tab. Azithromycin: 1 gm oral one dose stat

Plus

- Metronidazole 400mg oral 3 times a day for 7 days, if diarrhoea, blood and or history of abdominal cramping is present.

If the patient has pharyngeal gonoccoccal/chlamydial infections (diagnosed from the history, clinical findings (and lab support if available), treat both for gonococcal and chlamydial infections with same two drugs and doses as of above.

Prophylactic treatment for STIs

The decision to offer prophylactic treatment should be made on a case-by case basis after the physical examination. Routine prophylactic treatment of patients who have been sexually assaulted is not recommended, as evidence regarding the effectiveness of this strategy is scant.

HIV/AIDS

Although there are no accurate data on the number of victims of sexual violence who become infected with HIV as a result of an assault, the risk of contracting HIV from sexual violence is estimated to be relatively low. The likelihood of acquiring HIV from sexual assault depends on several factors :

- Type of assault (i.e. Vaginal, oral, anal)
- Vaginal or anal trauma (including bleeding)
- Whether and where on, or in, the body ejaculation occurred
- Viral load of ejaculate
- Presence of sti(s)
- Presence of genital lesions in either the victim or perpetrator
- Intravenous drug use by perpetrator
- Frequency of assaults
- Number of perpetrators
- HIV status of perpetrator(s)
- High prevalence of HIV in the area
- Whether a barrier contraceptive method was used

Male victims of sexual violence have a higher risk of acquiring HIV from an assault as they are usually penetrated anally.

Incarcerated males are likely to be at greater risk, given the high prevalence of HIV in prison populations and the fact that incarcerated males are at an increased risk of sexual violence relative to the general population.

HIV testing

Sexual assault victims should be offered a baseline test for HIV. If there are appropriate facilities for confidential HIV testing and counseling, this could be done on-site with the consent of the victim. The testing should be voluntary and the right to decline testing should be recognized. Mandatory or coerced testing by a health care provider, authority, or by a partner or family member is not acceptable as it undermines good public health practice and infringes on human rights.

Alternatively, the patient could be referred to a HIV specialist or to a centre that specializes in confidential HIV testing and counseling. Serological tests, such as RDTs or enzyme immunoassays (EIAs), detect the presence or absence of antibodies to HIV-1/2 and/or HIV

p24 antigen. No single HIV test can provide an HIV-positive diagnosis. It is important that these tests are used in combination and in a specific order that has been validated and is based on HIV prevalence of the population being tested. Appropriate counseling services should be made available before and after HIV testing. Ideally, these services should be available on site. If not, the appropriate referrals should be arranged

Post-exposure prophylaxis

Post-exposure prophylaxis (PEP) is the use of ARV drugs within 72 hours of exposure to HIV in order to prevent infection. This includes first aid care, counseling follow up care and administration of a 28-day course of ARV drugs. First aid care consist of washing the area immediately after contact with running water which if not available should be cleaned with a gel or other hand- rub solution, whatever is customarily available. Strong disinfectants should not be used. In case of oral contacts the fluid should be spat out immediately and the mouth should be rinsed repeatedly. Do not use soap or disinfectant in the mouth.

The risk factors for acquiring HIV from a sexual assault will determine whether or not PEP should be offered to a patient. Health workers should refer to local protocols dealing with PEP, if they exist. The patient and health worker must evaluate the risks and benefits of initiating or refraining from post-exposure prophylactic (PEP) treatment and decide together the best option for the patient.

The patient needs to be fully informed of the following:

- The limited data regarding the efficacy of PEP;
- Possible side effects of the medications;
- The need for strict compliance when taking the medications;
- Length of treatment;
- Importance of follow-up;
- The need to begin treatment immediately for maximal effect of medications.

Drug regimens*

The choice of post-exposure prophylaxis drugs (provided the victim is HIV negative) should be based on the country's first-line ART regimen to treat HIV infection.

Adults & adolescents (> 10 years)	
Preferred regimen	TDF+ 3TC +LPV/r (or ATV/r)
Alternative regimen	TDF+3TC* +EFV (or RAL/r or DRV/r)

Children (≤ 10 years)	
Preferred regimen	AZT+3TC+LPV/r
Alternative regimen	TDF+3TC or ABC+3TC with NVP (or ATV, RAL for <3years) and EFV (or DRV for >3 years)

AZT + 3TC in case of intolerance/contraindication to TDF+3TC

*Adapted from National Consolidated Guideline for Treating and Preventing HIV in Nepal-2014

If prescribed, PEP should be initiated within 72 hours of an assault and be given for 28 days. Antiemetics should be offered to counteract the side effects of the medication. Patient liver enzyme levels should be measured and a complete blood count (CBC) made prior to the commencement of PEP (to establish baseline values) and then monitored at regular intervals until the treatment has been completed.

If the initial test results for HIV were negative, patients should have the test repeated at 6, 12 and 24 weeks after the assault.

Hepatitis B

Victims of sexual violence may be at risk for hepatitis B and should therefore be offered testing and immunization. A variety of hepatitis B vaccines, with varying dosages and immunization schedules, are available throughout the world. Health workers should use the appropriate type of vaccine, dosage and immunization schedule for their local area. Guideline protocols for the administration of the hepatitis B vaccine, according to patient immunization status, are given below. Generally speaking, it is not necessary to administer hepatitis B immune globulin (HBIG) unless the perpetrator is known to have acute hepatitis B. The administration of HBIG or the hepatitis vaccine is not contraindicated in pregnant women.

Hepatitis B immunization for victims of sexual violence

Never vaccinated for hepatitis B	**1st dose:** should be administered at the initial visit **2nd dose:** 1–2 months after the first dose, **3rd dose:** 4–6 months after the first dose.
Not completed hepatitis B vaccinations	Complete the series as scheduled
completed hepatitis B vaccinations	No need to re-vaccinate

- The vaccine should be administered intramuscularly in the deltoid region
- A vaccine without (HBIG) can be used

Patient information:

On completion of the assessment and medical examination, it is important to discuss any findings, and what the findings may mean, with the patient. In particular:

- Give the patient ample opportunity to voice questions and concerns

- Reassure the patient that she did not deserve to be sexually assaulted and that the assault was not her fault
- Teach patients how to properly care for any injuries they have sustained
- Explain how injuries heal and describe the signs and symptoms of wound infection.
- Teach proper hygiene techniques and explain the importance of good hygiene
- Discuss the signs and symptoms of STIs, including HIV, and the need to return for treatment if any signs and symptoms should occur.
- Stress the need to use a condom during sexual intercourse until STI/HIV status has been determined
- Explain the importance of completing the course of any medications given.
- Discuss the side effects of any medications given
- Explain the need to refrain from sexual intercourse until all treatments or prophylaxis for STIs have been completed and until her sexual partner has been treated for STIs, if necessary
- Explain rape trauma syndrome (RTS) and the range of normal physical, psychological and behavioral responses that the patient can expect to experience to both the patient and (with the patient's permission) family members and/or significant others.
- Encourage the patient to confide in and seek emotional support from a trusted friend or family member
- Inform patients of their legal rights and how to exercise those rights.

Give patients written documentation regarding:

- Any treatments received
- Tests performed
- Date and time to call for test results
- Meaning of test results
- Date and time of follow-up appointments
- Information regarding the legal process

Assess for patient safety. If it is not safe for the patient to return home, make appropriate referrals for shelter or safe housing, or work with her to identify a safe place that she can go to. Discuss strategies that may help prevent another assault.

Stress the importance of follow-up examinations at two weeks and three and six months. Tell the patient that she can telephone or come into the health care facility at any time if she has any further questions, complications related to the assault, or other medical problems.

Follow-up care

Medical review

- Follow-up visits are recommended at 2 weeks, 3 months and 6 months post assault

The 2-week follow-up visit

As part of the 2-week post-assault visit, the following routine tasks and checks should be performed:

- Examine any injuries for proper healing
- Photograph injuries if indicated (i.e. to document healing, comparisons in court)
- Check that the patient has completed the course of any medications given for STIs.
- Obtain cultures and draw blood to assess STI status, especially if prophylactic antibiotics were not given at the initial visit
- Discuss results of any tests performed
- Test for pregnancy if indicated. If pregnant, advise about options
- Remind patients to return for their hepatitis B vaccinations in 1 month and 6 months, other immunizations as indicated, and HIV testing at 3 and 6 months or to follow-up with their usual health care provider.
- Make follow-up appointments
- Assess the patient's emotional state and mental status, and encourage the patient to seek counselling if they have not yet done so

The 3-month follow-up visit

- est for HIV. Make sure that pre- and post-testing counseling is available or make the appropriate referral. Assess pregnancy status and provide advice and support
- Discuss results
- Draw blood for syphilis testing if prophylactic antibiotics were not given previously
- Assess patient's emotional state and mental status and encourage the patient to seek counseling if they have not yet done so

The 6-month follow-up visit

- Test for HIV. Make sure that pre- and post-testing counseling is available or make an appropriate referral
- Discuss results
- Administer the third dose of the hepatitis B vaccine
- Assess the patient's emotional health and refer as necessary

Counselling and social support

Not all victims of sexual violence react in the same way. Some victims experience immediate psychological distress, others short-term and/or long-term psychological problems. The amount and length of social support and/or psychological counseling required by victims of violence varies enormously, depending on the degree of psychological trauma suffered and the victim's own coping skills and abilities. The level of social support post assault is therefore best determined on a case-by-case basis. Unfortunately, many victims of sexual violence do not pursue counselling. Counselling services take a variety of forms, and victims interested in counseling can choose between individual, family or group therapies, and/or opt for formal or more informal support groups.

Overall, social support in a group setting is generally recommended as it offers the following benefits:

- It helps to decrease the isolation that victims often feel
- It provides a supportive atmosphere
- Victims are encouraged to share their experiences
- It helps victims to establish their own support network

The group experience is especially helpful to victims who have little or no existing social support. However, individual therapy may be better for victims who have pre-existing psychopathology and thus find group settings more difficult to cope with.

Crisis intervention, critical incident stress debriefing, cognitive-behavioral therapy and feminist therapy are all forms of treatment that have been reported to work well with sexual assault victims. Regardless of the type of therapy used or chosen, the therapist should have special training in matters relating to sexual violence. The role of therapy, or psychological counseling, in recovery is well established, yet many victims do not have access to formal services of this nature. In such cases, informal systems of social support are vital to the healing process and should be discussed with the patient.

Referrals

Patients should be given both verbal and written referrals for support services which may include:

- Rape crisis centers
- Shelters or safe houses
- HIV/AIDS counseling
- Legal aid
- Victim witness programs
- Support groups
- Therapists
- Financial assistance agencies
- Social service agencies

The types of referrals given will vary depending on the patient's individual needs and circumstances, and also on the availability of facilities and resources. Health care providers should be familiar with the full range of formal and informal resources that are available locally for victims of sexual violence. Health workers may be required to provide a certificate for absent from school or work; and the reason should be non-specific for the causation (i.e. not stating that the patient was sexually assaulted).

Child sexual abuse

The main differentiating point of child sexual abuse is disclosure. It is usually noted by the closed ones after physical complaint or a change in behavior. Child assessment requires special skills and techniques compared to that of an adult. It is more preferred if it is conducted by the expert.

Appropriate diagnostic tests (example – for STIs) should be recommended. Presumptive treatment of children for STIs is not generally recommended. Psychosocial counseling should be provided to both the child and the caregiver.

Definition of child sexual abuse

WHO Consultation on Child Abuse Prevention states "Child sexual abuse is the involvement of a child in sexual activity that he or she does not fully comprehend, is unable to give informed consent to, or for which the child is not developmentally prepared and cannot give consent, or that violates laws or social taboos of society. Child sexual abuse is evidenced by this activity between a child and an adult or another child who by age or development is in a relationship of responsibility, trust or power, the activity being intended to gratify or satisfy the needs of the other person. This may include but is not limited to:

- Inducement or coercion of a child to engage in any unlawful sexual activity;
- Exploitative use of a child in prostitution or other unlawful sexual practices;
- Exploitative use of children in pornographic performance and materials".

Risk factors for victimization

Risk factors that make a child vulnerable to sexual abuse are as follows

- Female sex
- Unaccompanied children
- Children in foster care, adopted children, step children
- Physically or mentally handicapped children
- History of past abuse
- Poverty
- War/armed conflict
- Psychological or cognitive vulnerability
- Broken homes
- Social isolation
- Parent(s) with mental illness, or alcohol or drug dependency

Dynamics of child sexual abuse

Child sexual abuse is different from that of an adult sexual abuse in the following ways:

- Perpetrator built a progressive rapport with the child and win the trust of the child. Physical force is very rarely used.
- Perpetrator is usually a known and trusted caregiver.
- It often occurs over a period of time as it takes time to gain the trust of the child.
- Gradual process of sexualizing the relationship over time (i.e. Grooming) occurs.
- Approximately one third of all child sexual abuse cases are due to incest.

Children do not disclose abuse immediately after the event in majority of cases which may be due to the reason that the perpetrator may have made threatened the child. As a result, the child starts adjusting with the change. Disclosure is usually accidental but may be purposeful it usually occur only after a physical complaint, for example, vague abdominal discomfort, burning urination, difficulty in defecation etc. It can also be due to poor academic performance and change in behavior due to psychological problems. Due to this, a disclosure in child sexual abuse is a process rather than a single event. The victim may disclose this to her caregiver (mother) a close friend, teacher etc.

Physical and behavioural indicators of child sexual abuse

Physical indicators	Behavioral indicators
Unexplained genital injury	Poor school performance or delay in developmental milestones
Recurrent vulvovaginitis	Irritability
Vaginal discharge	Sleep disturbances
Bedwetting and fecal soiling	Eating disorders
Anal complaints (example – fissures, pain, bleeding)	Social problems
Sexually transmitted infections(STIs)	Depression
Pregnancy	Poor self-esteem

Sexualized behaviours

Sexualized behaviors inappropriate for the age of the victim may be encountered such as fondling one's own or other's breasts or genitals, masturbation, mature sexual act etc.

Ano genital findings

Physical injuries including ano genital injuries are not common in child sexual abuse as physical force is usually not applied to restrain the victim by the perpetrator. A genital examination with normal findings does not, therefore, preclude the possibility of sexual abuse; moreover, in the vast majority of cases the medical examination will neither confirm nor refute an allegation of sexual assault. Many studies have found that normal and non-specific findings are common in sexually abused prepubertal girls. The force applied is the main determining factor in production of injuries in any sexual assault case. Acute forms of physical injuries to the ano genital region are easier to diagnose, but healed or subtle injuries are more difficult to detect and further interpret. The position in which the child is examined is important. Hymenal abnormalities observed when the child is in supine position should also be reviewed in the knee-chest position to exclude gravitational effects on the hymenal tissues.

Normal and non-specific vaginal findings include:

- Vulvovaginitis
- Hymenal bumps, ridges and tags
- V-shaped notches located superior and lateral to the hymen, not extending to base of the hymen
- Labial agglutination

Normal and non-specific anal changes include:

- Midline skin tags or folds
- Venous congestion
- Fissures
- Minor anal dilatation
- Lichen sclerosis

Findings suggestive of abuse include:

- Acute injuries (for example – abrasions, contusion, lacerations etc) of the labia, hymen, penis, scrotum or perineum
- Hymenal notch/cleft extending more than 50% of the width of the hymenal rim
- Fresh or healed injuries of the posterior fourchette
- Presence of condyloma acuminatum in children over the age of 2 years
- Significant anal dilatation or scarring

Findings that are definitive evidence of abuse or sexual contact include:

1. Sperm or seminal fluid in, or on, the child's body
2. Blood/vaginal swab culture positive for N. Gonorrhoeae or serologic confirmation of acquired syphilis
3. Blunt penetrating injury to the vaginal or anal orifice

Straddle injuries

Straddle injuries are the differential diagnosis of ano genital injuries in child sexual abuse. These are the most common accidental injuries involving the external genitalia, occurring mostly unilaterally, where soft tissues are compressed between an object and the pubic bone resulting in haematomas associated with small linear abrasions seen on the labia majora, labia minora and posterior fourchette. Usually straddle injuries will not cause damage to the hymenal membrane.

Labial fusion

It is usually associated with chronic inflammation of labia. It may be associated with sexual abuse. No treatment is required. Extensive labial fusion is treated with estrogen cream.

Blunt penetrating trauma to the vaginal orifice:

Abrasion, bruising, lacerations etc which are typically seen between the 3 and 9 o'clock positions of the hymen. Such injuries often extend to the posterior fourchette, fossa navicularis and the posterior commissure. Interruptions, which are not completely extending beyond the hymenal membrane edge are called as notches or clefts. Some hymenal notches or clefts are congenital.

Female adolescent victims are less likely show signs of acute trauma. Physiologically female genital tissues, especially the hymenal area, become thicker, moist and elastic (redundant hymen) due to the effect of estrogen, so stretch during penetration. This can be the reason for the less or absent hymenal and vaginal injuries in adolescent females. Furthermore, healed hymenal tears like partial clefts or notches can be confused with an estrogenized, redundant or fimbriated hymen.

In general, anal and perianal region injuries are lesser in frequency compared with genital injuries. Moreover, minor injuries such as anal area redness, abrasions or fissures are found on examination.

Health consequences

The physical health consequences include:

- Gastrointestinal disorders (example – irritable bowel syndrome, indigestion, vague abdominal pain/discomfort etc.)
- Gynecological disorders (example – chronic pelvic pain, dysmenorrhea, menstrual irregularities etc.)

The psychological health consequences include:

- Depression
- Anxiety
- Low self-esteem
- Symptoms associated with PTSD – such as re-experiencing, avoidance/ numbing, hyper-arousal
- Increased or inappropriate sexual behavior
- Social withdrawal
- Cognitive impairment
- Substance abuse

Assessment and examination of children

General considerations

- A request for an examination of a child victim in child sexual assault case is made by the child protection authorities and/or the police. This also can be a referred case.
- The child is usually accompanied by a family member, police or child protection organization members.
- History regarding behavioral or physical discomfort can be collected from the gaurdian (example – by a caregiver, teacher etc).

Physical examination depends on the nature of the presenting complaint, the availability of resources in the community and the need for forensic evidence. As a guiding rule:

- If last contact was more than 72 hours previously and the child has no medical symptoms, physical examination is needed as soon as possible but not done as an emergency.
- If last contact was within 72 hours and the child is complaining of symptoms (i.e. acute abdominal pain, pervaginal bleeding, per anal discharge), the child should be seen immediately and managed as emergency case.

In cases of alleged child sexual abuse, there are two histories i.e.; (a) the medical history and (b) the interview. The medical or health history describes the presenting complaints of the child which include both the physical or emotional component. It helps in giving a medical diagnosis of the victim. The medical history should be taken by a health professional.

The interview of the victim is conducted to extract forensic information directly related to the alleged sexual abuse, for example, details of the assault, including the time and place, frequency, description of clothing worn, number of perpetrator etc. Forensic interviewing of children requires specialized skill and, if possible, should be conducted by a trained professional or more appropriately by a forensic expert.

Both the evaluation of the child should be conducted in a coordinated manner such that the child is not further traumatized by unnecessary repetition of questioning and information is not lost or distorted.

Consent and confidentiality

In child sexual abuse, consent is usually taken from the caregiver to conduct a physical examination and to collect specimens for forensic evidence. The examining health worker

should explain the process of consent and all the minute details of procedures of the medical evaluation to the child and caregiver. In case where the guardian refuses to give consent for medical evaluation the proper authority should be contacted to waive the caregiver's custodial right.

All informations should be made confidential but the child and her/ his guardian need to understand that health workers are legally obliged to report the case and to disclose information received during the course of the consultation to the authorities even in the absence of consent.

Interviewing the child

The interview with the child is an important component in the assessment of the alleged cases of child sexual abuse. The health practitioner should develop rapport and build trust with the child before starting the interview.

Approaches and strategies that may be useful for interviewing children are outlined below:

Interviewing child victims of sexual abuse

Following things should be remembered while handling a case of sexual assault:

- Start the interview with the establishment of a good rapport with the child in order to gain trust of the child
- In the process our understanding should match with the understanding level of a child according to his age and development
- Comforting the child whenever required without giving her undue pressure to answer your questions
- Ask the child to describe what happened, or is happening, to them in their own words
- Interview with open-ended questions. Structured interviewing protocols can reduce interviewer bias and preserve objectivity
- While assessing the victim of child abuse, consider other children (example – siblings) may have been victimized by the same perpetrator. Also consider interviewing the caretaker of the child, without the child present.

History-Taking

History should be obtained from a caregiver rather than from the child directly, if the child is very small in age or does not wish to speak out no matter how much you comfort her. One should try to gather medical information as much as possible. Adolescents are frequently shy or embarrassed to talk about sexual matters.

One should inquire whether the victim want her caretaker to be present or not during the interview as she may be more comfortable to answer sex related matters when she is alone rather than when she is with her caregiver (parents).

Questions asked to the child need to be according to the age of the child. The interview can be started with simpler questions unrelated to the sexual assault like

- What class do you study in?
- Who is your best friend?
- What is her hobby?

Leading questions should not be asked and refrain from interfering while she is giving her statement. All information should be documented as close to verbatim as possible; including all the observations made of her interactions and emotional states.

Following questions should be asked to the victim:

- When did this happen the last time?
- When is the first time you remember this happening?
- Threats made by the perpetrator
- Nature of the assault, i.e. anal, vaginal and/or oral penetration. What area of your body did he touched or hurt you?
- Injuries noted or pain felt by the child victim
- Vaginal or anal pain, bleeding and/or discharge following the event. Do you have any pain in your anal or genital area? Is there any blood in your panties or in the toilet?
- Any difficulty or pain with voiding or defecating. Does it hurt when you go to the bathroom?
- Any urinary or fecal incontinence
- First menstrual period and date of last menstrual period
- Details of prior sexual activity. Have you had sex with someone previously?
- History of washing/bathing since the assault

The physical examination

An informed expressed consent is obtained from the adolescent if aged more than 16 years of age or from the caregiver if the age is below 16 years of age.

Firstly, it is required to create a comfortable environment for the child. Small children can be examined on her mother's lap or lying with her on the examination bed. If the child does not allow you to examine her body, she should not be forced and the examination should be withheld. Child may sometimes require sedation or a general anesthetics in conditions if the child refuses the examination and if she needs medical or surgical management to control bleeding from multiple lacerations or foreign body insertion.

The physical examination of children consist of a head-to-toe review plus a detailed inspection of the ano-genital area, amd can be conducted according to the procedures outlined for adults.

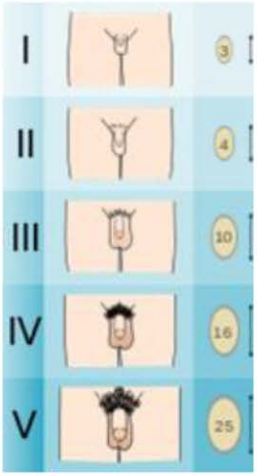
When performing the head-to-toe examination of children, the following points are to be noted:

- Record the height and weight of the child
- Note any bruises, burns, scars or rashes on the skin. Carefully describe the size, shape, site, location, pattern and colour of any injuries (may co-exist with physical abuse)
- Note petechiae of the palate or posterior pharynx, and look for any frenular tears
- Check for injuries produced due to restrainting objects used, especially in the extremities
- Record the child's sexual development (Tanner) stage and check the breasts for signs of injury

Tanner's Stages for Development of Secondary Sexual Characters

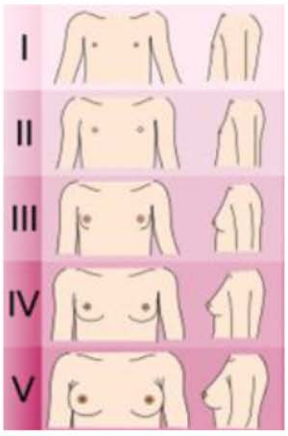
Development of Male Genitalia

Stage	Description	Age
Tanner I (Pre-pubertal)	Testicular volume less than 1.5 ml Penis length — less than 3 cm	< 9 years
Tanner II	Testicular volume between 1.6 and 6 ml Skin on scrotum thins, reddens and enlarges Penis length — unchanged	9–11 years
Tanner III	Testicular volume between 6 and 12 ml Scrotum enlarges further Penis length — less than 6 cm	11–12½ years
Tanner IV	Testicular volume between 12 and 20 ml Scrotum enlarges further and darkens Penis increases in length (10 cm) and circumference	12½–14 years
Tanner V	Testicular volume greater than 20 ml Adult-type scrotum Penis length — 15 cm in length	>14 years



Development of Breasts

Stage	Description	Age
Tanner I (Pre-pubertal)	No glandular tissue Areola follows the skin contours of the chest	< 10 years
Tanner II	Breast bud forms, with small area of surrounding glandular tissue Areola begins to widen	10–11½ years
Tanner III	Breast begins to become more elevated, and extends beyond the borders of the areola Areola continues to widen but remains in contour with surrounding breast	11 ½–13 years
Tanner IV	Increased breast size and elevation Areola and papilla form a secondary mound	13–15 years
Tanner V	Breast reaches final adult size areola returns to contour of the surrounding breast, with a projecting central papilla	>15 years

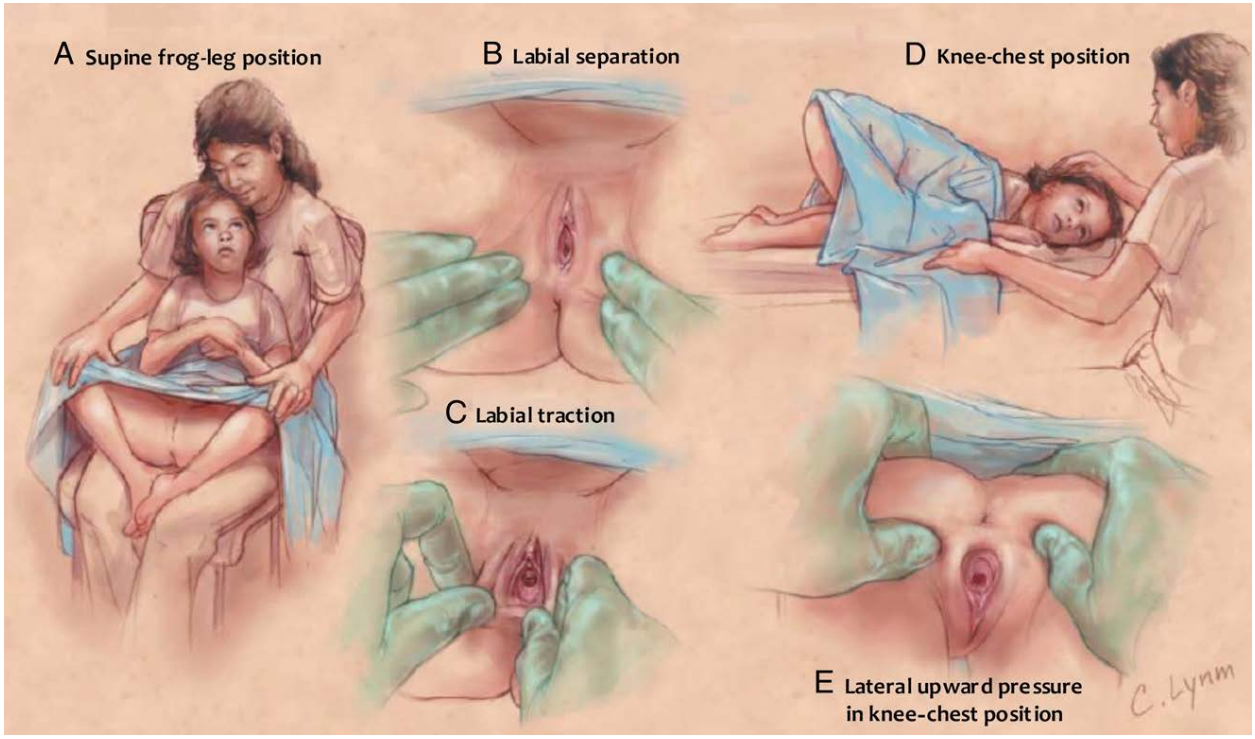


Development of Pubic Hair (Males and Females)

Stage	Description	Age
Tanner I	No pubic hair at all	< 10 years
Tanner II	Small amount of long, downy hair with slight pigmentation at the base of the penis an scrotum and on the labia majora	10–11½ years
Tanner III	Hair becomes more coarse and curly, and begins to extend laterally	11 ½–13 years
Tanner IV	Adult-like hair quality, extending across pubis but sparing medial thighs	13–15 years
Tanner V	hair extends to medial surface of the thighs	>15 years

Ano genital examination

This should be conducted under good lighting in supine in lithotomy position, and/or, if comfortable, in the knee chest position. If available, a colposcope can be very useful to document different types of injuries.



In girls, the external genital structures to be examined are the:

- Mons pubis;
- Labia majora and labia minora;
- Clitoris;
- Urethra;
- Vaginal vestibule;
- Hymen;
- Fossa navicularis;
- Posterior fourchette.

In case the hymen is not easily visible, the following technique may be useful for assisting in the visualizing of the hymen and surrounding structures to check for signs of injury:

- Separate the labia with gentle lateral traction along with anterior traction;
- Gently drop a small amount of warm water on the structures which cause the structures to “unstick” and become more visible
- The child is asked to push or bear down while examining.

Most examinations in pre-pubertal children should be non-invasive and should not be painful. Speculum or anoscope and digital or bimanual examinations are not to be used in child sexual abuse examinations unless medically indicated. If a speculum examination is needed, sedation or anaesthesia should be strongly considered.
Describe the location of any injuries using the face of a superimposed clock, paying close attention to the area in the posterior half of 3 and 9 o'clock hymenal positions.

In boys, the genital examination should include the following structures and tissues, checking for signs of injury (i.e. bruising, laceration, bleeding, discharge):

- Glans and frenulum
- Shaft
- Scrotum
- Testicles and epididymi;
- Inguinal region
- Perineum

In order to examine the anal area (in boys and girls), place the child in the lateral position and apply gentle traction to both buttocks. Observe for any injuries in the following structures:

- Anal verge tissues
- Ano-rectal canal
- Perianal region
- Gluteal cleft

Consider digital rectal examination only if medically indicated, as invasive examination may mimic the abuse.

Collecting medical and forensic specimens

Diagnostic tests, specimen collection and forensic issues have been mentioned in Forensic Sample section.

Treatment

Children and STIs

Age-appropriate diagnostic tests are required and treatment prescribed accordingly. Children and adolescents can become infected by sexually transmitted organisms -

- In uterus (vertical) transmission (example – HIV, syphilis)
- Perinatal transmission via cervical secretions (example – gonorrhoea, chlamydia)
- Direct contact with infected secretions as a result of sexual abuse

STI testing

Testing for Sexually Transmitted Infections(STIs) in case of child sexual abuse should be made on a case by case basis. Testing is strongly indicated in the following situations:

- Child presents with STI signs or symptoms (example – vaginal discharge, genital ulcers)
- Alleged offender is known to have a STI or is at high risk of contracting STIs
- High prevalence of STIs in community
- Siblings or other household members have STIs, or signs or symptoms of STIs
- Patient or parent requests testing

When evaluating a child and the need for STI screening, it is important to bear in mind that if the sexual abuse occurred recently, STI cultures can be negative, unless the child had a pre-existing STI. A follow-up visit 1 week after the last sexual exposure may be necessary in order to repeat the physical examination and to collect appropriate specimens for STI testing. If STI testing is needed, the following should be performed as part of the initial and follow-up examinations:

- Cultures for N. gonorrhoeae and C. trachomatis, using only standard culture systems. Rapid tests are not appropriate for prepubertal children in the context of a child sexual abuse evaluation because of their higher potential for false-positive results.
- Wet-mount microscopic examination of vaginal swab specimen for T.vaginalis.
- Dark-field microscopy or direct fluorescent antibody testing of specimen(s) collected from vesicles or ulcers for T.pallidum; tissue culture for HSV.
- Collection of a serum sample for analysis in the event of positive follow-up tests, or, if the last incident of sexual abuse occurred more than 12 weeks, immediate analysis for antibody to sexually transmitted agents.

Treatment of STIs

Generalized treatment of children who have been sexually abused is not generally recommended for the following reasons:

- Estimated risk of contracting STIs through sexual abuse is low
- Pre-pubertal girls appear to be at lower risk of ascending infection than adolescent and adult women

WHO recommended STI treatment regimens for children and adolescents

Gonorrhoea	Ceftriaxone – 125 mg IM in a single dose or Cefixime – 400 mg orally in a single dose or for children under 12 years, 8 mg/kg body weight orally in a single dose
Chlamydia	Doxycycline – 100 mg orally twice a day for 7 days if body weight ≥45 kg, 2.2 mg/kg body weight orally twice a day for 7 days if body weight < 45 kg or Azithromycin – 1 g orally in a single dose
Trichomoniasis and Bacterial Vaginosis**:**	Metronidazole – 2 g orally in a single dose or 1 g orally every 12 hours for 1 day
Syphilis	Benzathine penicillin Gc – 2.4 million IU IM in a single dose or Tetracycline – 500 mg orally twice a day for 14 days

HIV and post-exposure prophylaxis (PEP)

The efficacy and safety of post-exposure prophylaxis for HIV in children are inconclusive. However, if the child presents within 72 hours of an assault and a) the perpetrator(s) are at high risk for HIV infection, and b) compliance with treatment regimens is likely to be high, HIV prophylaxis should be considered. If available, a professional specializing in HIV infection in children should be consulted prior to prescribing PEP. (Refer to chapter treatment and follow up)

Pregnancy testing and management

Refer to the chapter: Treatment and follow up

Follow-up care

The following conditions need special attention:

- Recent initial exposure to sexual abuse at the time of the first examination, a follow-up visit at 1 week may be required, to conduct STI testing
- Blood tests for HIV, hepatitis B and syphilis, may require repeating at 3 months, and again at 6 months.

Diagnostic conclusions

Diagnostic conclusions regarding the likelihood of sexual abuse from observations made during the course of a patient evaluation from the following findings:

- History;
- Physical findings and behavioral changes;
- STIs;
- Forensic evidences collected

In some cases, physical findings alone will confirm abuse; for example, penetrating trauma to the hymen without an explanation. In others, forensic findings, such as sperm on a child's body will be sufficient to make the diagnosis. In the absence of physical findings , the diagnosis of abuse can be made on the basis of the child's statement or that of an eye-witness to the abuse.

Diagnostic tool in child sexual abuse cases

Conclusive diagnostic evidence

- Finding sperm or seminal fluid in, or on, a child's body
- Pregnancy
- Positive cultures for *N. gonorrhea*
- Evidence of syphilis or HIV infection (excluding perinatal transmission or transmission via blood products or contaminated needles)
- Clear evidence of blunt force or penetrating trauma to the hymenal area
- Clear videotape or photograph of abuse or eyewitness of abuse

Probable abuse

- Positive culture for C. trachomatis
- Positive culture for HSV Type II
- Trichomoniasis infection (absence of perinatal transmission)
- Child gives clear, consistent and detailed description of abuse, with or without abnormal or physical findings

Possible abuse

- Normal or non-specific physical findings in combination with significant behavioural changes, especially sexualized behaviours
- HSV Type I
- Condyloma accuminata
- Child made a statement which is not clear,consistent and detailed

No indication of abuse

- No history, no behavioural changes, no witnessed abuse. Normal examination.
- Non-specific findings with the same as above.
- Physical findings of injury consistent with history of unintentional injury that is clear and believable.

Reporting abuse

In our jurisdiction, a suspicious case of child sexual abuse should be reported to the police as soon as possible.

Counseling and social support

Counseling and social services should be provided in a coordinated manner as follows:

- Abuse-specific cognitive behavioral treatment is generally the most effective form of therapy for post-traumatic stress reactions.
- Group therapy for children is not necessarily more effective than individual therapy.
- Many sexually abused children may have co-morbid conditions that require specific treatment.
- Younger children may not understand the implication of abuse and therefore may appear to be less distressed than older children.

Documentation and reporting

Standard examination forms and formats should be used for documentation. All documents, including consent, history of abuse, outcome of the physical examination, samples collected, different tests advised, treatments and medications prescribed, schedule of follow-up care as well as referrals should be preserved. Patient records should be confidential.

If health workers are not trained in medico-legal matters, they should only provide treatment and document findings, consulting with qualified personnel for interpretation of observations.

Documentation

The health worker should preserve notes of history of the sexual abuse in the language of the victim and should try to retain the integrity of the words used by the victim. Similarly, physical findings should be noted down as it was seen while she was being examined by the health worker. In cases of alleged sexual abuse, the taking of accurate and complete notes during the course of an examination is essential for the following reasons:

- Proper documentation of medical records can be of great help in court of law
- Documentation also can be helpful to other health care providers in providing appropriate treatment and follow-up care to the victim of sexual abuse.
- Documentation can provide administrators and policy-makers with information on incidence and prevalence of sexual violence to guide policy-making decisions.

How and what should be documented?

Documentation can be hand-written notes, diagrams, body charts and photographs. Standard forms or proforma should be used for documenting the examination of sexual assault victim and perpetrator. In sexual abuse cases, documentation should include the following:

- Demographic information (i.e. Name, age, sex)
- Consents
- History (i.e. General medical and gynecological history)
- Account of the assault
- Results of the physical examination
- Tests advised
- Treatment plan
- Medications given or prescribed
- Patient education
- Referrals made

Check-list for health workers for documenting cases of sexual abuse:

- Document all information accurately and legibly.
- Notes and diagrams should be made during the consultation rather than after the consultation; this would be more accurate than that created later on from memory.
- Notes should not be altered unless required. Deletions should be scored through once and signed, and not erased completely.
- Record verbatim any statements made by the victim regarding the assault. This is preferable to writing down your own interpretation of the statements made.
- Record the extent of the physical examination conducted and all "normal" or relevant negative findings.

Storage and access to records

All health care workers should maintain and respect patient confidentiality and autonomy. Records and information should not be disclosed to anyone except in situations where disclosure is a must (in a court of law). Patient's records should be stored in a safe place.

Epidemiological surveys

Medical records of cases of sexual violence can provide huge data for surveillance purposes. Information can be used to determine:

- Patterns of sexual violence
- Risk prone individual/group for becoming the victim of sexual violence
- Areas of high prevalence and incidence of sexual violence
- Time of day when majority of the sexual offences take place
- Resources required to improve the care of, and services to, victims of sexual violence
- Prevention measures to be undertaken to reduce the prevalence

Photography

While taking photo of different injuries of the victim, the following should be considered:

- Victim's discomfort or embarrassment while taking photo can be overcome by comforting the patient and explaining the importance of photography.
- **Informed expressed consent** should be obtained
- **Identification** – Each photograph must include the date and time of the photograph
- Scales are required to demonstrate the size of the injury
- Maintaining of chain of custody. This should be logged as for other forensic evidence
- **Security** – Photographs form part of a patient record and should be preserved

Providing written evidence and court attendance

In order to assist the court of law in justice administration, a health worker should be:

- Be readily available;
- Be familiar with the court procedures and basic legal system of the country;
- Make sound clinical observations;
- Collect samples from victims of crime.

Health workers may be called upon to give evidence, either in the form of a written report or as an expert witness in a court of law. While providing expert opinion in court, you should not do the following things:

- Give opinions which are beyond the expertise of the witness;
- Give opinions that are based on false assumptions;
- Give opinions based on inadequate scientific or medical analysis;
- Give opinions, which are biased.

Providing evidence in sexual violence cases: guiding principles for health workers	
Writing reports	**Giving evidence**
1. Explain what you were told and observed 2. Use precise terminology 3. Maintain objectivity 4. Stay within your field of expertise 5. Distinguish findings and opinions. 6. Detail all specimens collected\ 7. Only report what you would repeat in court, under oath	Number 1. Be prepared. Number 2. Listen carefully. Number 3. Speak clearly. . Number 4. Use simple and precise language Number 5. Stay within your field of expertise Number 6. Separate facts and opinion Number 7. Remain impartial

Annex 1 – Injury pattern and interpretation

Interpretations of injury patterns and their cause requires meticulous and conscientious documentation as well as training and experience . The ability to interpretate also requires sound knowlegede and understanding of basic genito-anal anatomy and physiology as well as pathology. A definitive conclusions can almost never be drawn.

Assaults produce a variety of injureis and hence complicates injury interpretation. Nevertheless, inferences can be made from the pattern of injury in many cases.

Action	Site	Possible injuries
Bite	**Neck**	• Bite marks, bruising, abrasions • Suction-type petechial bruising
	Breasts	• Bite marks, abrasions/lacerations to nipples
Blows	**Scalp**	• Bruising (including haematomas), lacerations
	Face	• Fractures (cheek, jaw, nose), Dental trauma, Facial bruises (slap marks) Intra-oral bruises/abrasions, frenulum damage
	Eyes	• Periorbital haematomas (black eyes), Subconjunctival haemorrhage
	Ears	• Eardrum perforation (usually slapping) • Bruises/lacerations to ear • Bruises on scalp behind ear
	Neck	• Laryngeal skeleton trauma • Voice changes (i.e. hoarseness, dysphonia), difficulty in swallowing
	Hands	• Knuckle abrasions (punching), bruising, lacerations, fractures
	Limbs	• Bruises, abrasions, lacerations, fractures
	Trunk	• Bruises, abrasions, fractures (especially ribs)
Burns (cigarette)		• Circular burns, 5–15 mm, on any part of body • Partial or full thickness (flame, scald, contact)
Defensive responses	**Limbs**	• Bruising (especially medial and lateral aspects of forearms and hand), “warding off” injuries, Incised wounds (knife, bottle) • Lacerations, fractures (blunt implements)
	Hands	• Incised wounds to palms and web space (grasping sharp weapon) • Incised wounds and bruises to dorsum (deflecting blows) • Nail damage (may also occur in counter assault, example – scratching)

Dragging	**Limbs** **Trunk**	• Abrasions, bruises on exposed skin surfaces • Embedded foreign material
Falls	**Limbs**	• Abrasions, bruising especially to bony prominences (example – elbows, knees and heel of hands) • Lacerations, fractures
Scratches		• Linear scratch abrasions to any part of body
Resistance	**Limbs**	• Linear curved scratch abrasions (contact with vegetation) • Bruises from contact with other objects • Abrasions, bruises on knees, elbows, hands and hips from falls
Grasping	**Ears**	• Bruising, Trauma secondary to earring contact/loss
	Limbs	• Fingertip bruises, especially to medial aspect of upper arms and forearms, and medial thighs
Hair pulling		• Hair follicle haematomas, bald patches, tenderness
Injections	**Upper limbs**	• Puncture site over the course of a vein
Kissing	**Multiple sites**	• Contact with whiskers may cause superficial abrasions and erythema
Ligature/manual compression	**Neck**	• Ligature marks or imprint bruising (necklace, clothing) • Fingertip bruises, abrasions (due to fingernails) • Facial petechiae, intra-oral petechiae, conjunctival haemorrhages
Penetration	**Mouth**	• Pharyngeal bruising, palate bruising, frenulum trauma
Restraint	**Limbs**	• Ligature marks (wrists and ankles), fingertip bruising
Squeeze/ Pinch	**Breasts**	• Bruising
Whipping with rope/cord	**Trunk/limbs**	• Linear, curved or looped bruising, abrasions • Trainline bruises

Genito-anal injuries related to penetration

Trauma to the female genitalia and anus can be caused by forceful penetration. Penetration may be by an erect or semi-erect male penis, by other parts of the body including the fingers and tongue, or by objects of various dimensions and characteristics. The act of penetration causes the soft tissues around the orifice to stretch.

The likelihood and extent of any resultant injuries will depend on:

- State of the tissues (i.e. Size, lubrication, durability)
- Size and characteristics of the penetrating object
- Amount of force used
- Degree of relaxation in the pelvic and perineal musculature
- Position of the perpetrator and angle of penetration

The posterior fourchette, the labia minora and majora, the hymen and the perianal folds are the most likely sites for injury, and abrasions, bruises and lacerations are the most common forms of injury.

The distinction between genital injury caused by consensual penetration and that caused by non-consensual penetration is an important one. Genital injuries may occur during consensual intercourse, but visible signs of injuries (to the naked eye) are rare, and usually confined to minor abrasions to the posterior fourchette and introitus.

Injury to the hymen, sufficient to cause bleeding, may occur in some females previously unaccustomed to sexual intercourse. Anal and rectal injuries are seldom seen after consensual penetration.

However, the absence of injury in a woman who allege sexual assault does NOT disprove her claim specially if she does not resist, through fear of force or harm. Most studies indicate that less than 30% of premenopausal women will have genital injuries visible to the naked eye after non-consensual penetration. This figure increases to less than 50% in postmenopausal women. An understanding of this issue is of fundamental importance in sexual assault medicine.

The following points should be kept in mind when assessing injury patterns in cases involving sexual violence:

- The pattern of injuries sustained during a sexual assault show considerable variation. This may range from a complete absence of injuries (most frequently) to fatal injuries (very rare).

- A definite conclusion regarding to an injury production and the object causing it can rarely be given. In most of the cases it can only be concluded that the injury was caused by blunt trauma (example – "a black eye" or bruising about the eye) or sharp trauma (example – an incised wound to the head).
- Falls during an assault or when fleeing from an assailant may produce a number of injuries. These will usually be abrasions or bruises (and occasionally lacerations) to the bony prominences (example – forehead, nose, elbows, knees, hips), with the severity of the injuries being proportional to the distance fallen.
- There are situations, in which an individuals may deliberately inflict injuries upon themselves. This could be for a number a reasons including an underlying psychiatric illness or secondary gain. These cases require very careful consideration before the diagnosis of self-inflicted injury is made.

Information about injuries and patterns of injury is often vital in cases of sexual assault. In the event of a case proceeding to criminal prosecution, health workers may be required to answer questions about injury patterns and to draw inferences from injury patterns about the circumstances surrounding the alleged assault, either in court or in the form of a written report. A comprehensive assessment of injuries sustained *may* allow comments to be made about:

- Whether the injuries were due to blunt or sharp trauma (or both);
- How many applications of force were required to produce the injuries, and the amount of force required to produce such injuries;
- Whether the injuries were sustained at or about the same time;
- Likelihood of the injuries being sustained in the manner alleged or whether there may be some alternative explanation that could also explain the injuries;
- Possible immediate or long-term consequences of the injuries.

Health workers required to perform this function should consider carefully their responses to each of the above questions.

Annex-2 – Legal Provisions

Muluki Ain, Part – 4, Chapter – 14: Jabarjasti Karani Ko Mahal (Rape)

Number 1. "A person is said to have committed rape if he enters in sexual intercourse with a women without her permission or enters into sexual intercourse with a girl below the age of sixteen with or without her permission".

(1) Consent taken by using force, threat, kidnapping, arousing fear, undue influence, coercion or kidnapping or hostage taking (abducting) is not be considered as consent.

(2) When the victim is unconscious is not considered as consent.

(3) Minor penetration of penis in vagina is deemed as sexual intercourse.

(4) If penis is inserted in anus or orally or anything inserted apart penis is to be considered as Rape

Number 2. Committing rape within kinship is punished as per the punishment laid down in Incest act.

If the offender is charged with lifelong imprisonment, additional punishment for rape is not imposed.

Number 3. Punishment

An offender or offenders is/are liable to imprisonment of:

(1) Ten to fifteen years if girl is below ten years

(2) Eight to twelve years, if girl is between ten and fourteen years

(3) Six to ten years, if girl is between fourteen and sixteen years

(4) Five to eight years, if women is between sixteen and twenty years

(5) Five years if the girl is twenty years and above.

Number 3 A. If a woman is gang raped or is pregnant, or disabled or mentally unsound when the offence is committed, the offender is held in prison for additional five years.

Number 3 B. If a person with HIV rapes a woman fully aware about his health status, he is imprisoned for additional one year.

Number 3 C. In case of marital rape, the husband is held in prison for three to six months.

Number 4. Any individual who teams up in gang or helps in committing rape is imprisoned for three years.

Number 5. If a person attempts rape and is not successful then offender is charged with half the punishment of rape

Number 6. If a person has encouraged someone to rape; s/he is liable of half the punishment imposed on offender.

Furthermore, if a person is encouraged to rape but is unable to commit rape, the one who encourages bears half the punishment.

Such act is not considered to be crime

Number 8. In cases where a person with intention to attempt rape assaults, rounds up (chhekthun), ties up (bandchhand) or uses force (jorjulum) by any other means to a victim and it is not possible to save the chastity (dharma) for the victim upon rescuing herself from the offender by shouting, requesting for the help or by any other means immediately, or where the victim is in a situation that if she does not do anything with her idea (akkal) or power (barkat) she may not be able to save her chastity due to serious fear or threat so created over there before the com-mission of rape or even after the commission of rape where she could do nothing due to lack of her power or force immediately, if such a victim, out of anger of such act, strikes a weap-on, stick (latho) or stone at the place of commission of rape immediately or within one hour upon pursing the offender from such place and the offender dies over there, such an act shall not be deemed to be an offence.

In case the victim kills the offender after one hour, she shall be liable to a fine of up to Five Thousand Rupees or imprisonment not exceeding ten years.

Number 9. A person who commits or causes to be committed rape with a woman for the purpose of grabbing her property through inheritance is not eligible for inheritance to be received from the victim of such rape.

Unnatural sexual intercourse with minor

Number 9 A. Number 9 a. "A person who commits or causes to be committed sodomy (any kinds of unnatural sexual intercourse) with a minor, it is considered as an offence of rape and the offender will have an additional punishment of imprisonment

for a term not exceeding One year as referred to in Number 3 of this Chapter, and the court will make an order to provide appropriate compensation to such a minor from the offender, upon considering the age and grievance suffered by the minor."

Number 10. If a woman declared raped through sexual means, compensation is provided as per the severity of crime, pain suffered by dependent minor and whether the victim has died or not.

Number 10 A. **Statement of victim**

During the investigation of the rape, statement of victim should be recorded by female police officer or in front of female social worker in her response.

Number 10 B. **Right to privacy** of victim should be maintained in the process of FIR, statement of victim, investigation process, hearing process in the Court. Hearing can be attended by the lawyer, police, court employee, accused and the victim.

Number 10 C. Court is responsible to direct compensation from the offender to the victim if the offence is proven.

Number 11. Time limitation of FIR: within 6 months of incident of rape.

Muluki Ain, Part – 4, Chapter – 13: Asaya Karani Ko Mahal (Sexual Harrasment/Attempted Rape)

Number 1. " If a person, without the consent of a woman, touches or attempts to touch her sensitive organ, puts off her inner clothes (under garments), takes her to an unusually lonely place, makes her touch or catch (hold) his sexual organ or uses vulgar or other similar words or indications or shows her such drawing or picture or teases or harasses her for the purpose of sexual intercourse, or treats her with any unusual behavior or holds her with intention of having sexual intercourse, he shall be deemed to have done sexual harassment".

Punishment : The offender is liable to the punishment of imprisonment for a term not exceeding One year and a fine of up to Ten Thousand Rupees. The victim of such an offence shall be entitled to a reasonable compensation from the offender.

Number 5. "If a person lures a woman to have illegal sexual intercourse with himself or with any other person or contacts and manages for prostitution, the person is liable to the punishment of imprisonment for a term ranging from Six months to Two years or a fine of Five Hundred Rupees to Six Thousand Rupees or with both".

Number 6. The lawsuit should be filed within Thirty Five days after the date on which the matter became public.

Muluki Ain, Part – 4, Chapter – 15: **Haadnatama** Ko Mahal

(Incest)

Number 1. "A person who commits sexual intercourse with his mother, who gave birth to him, is liable to the punishment of imprisonment for life. A person who commits sexual intercourse with his elder or younger sister, born from the same father from whom he was born, or with his own daughter is liable to the punishment of imprisonment for a term of Ten years."

Other punishment differs depending on the relationship and takes into consideration the nature of relation (Nata) and generation (Pusta). The imprisonement ranges from 1 year to 6 yaers.

Number 10 A. In instances where the marriage or sexual intercourse is considered to be valid in accordance with their tradition followed by their caste (race) or ancestry (Kul) there is no punishment.

Number 12. The suit should be filed during the life of the offender, otherwise it is not entertained.

Muluki Ain, Part – 4, Chapter – 19: **Adal Ko Mahal**

(Decency/Etiquette)

Number 5. "..... any medical practitioner or health worker who commits sexual intercourse with a woman who has come to avail medical service at time of rendering medical service or in the place of rendering such service, or any guardian or caretaker who commits sexual intercourse with a women who is under his guardianship or care,..... who commits sexual intercourse with such a woman shall be liable to the punishment of imprisonment for a term ranging from One year to Three years. If such an act is an offence under this Act or any other prevailing law, the punishment imposed there under shall be added to such punishment".

Muluki Ain, Part – 4, Chapter – 09: **Kutpitko** Mahal

(Hurt/Battery)

Number 1. "If a person causes bloodshed *(Ragatpachhe)*, wound, injury, grievous hurt (*Angabhanga)* or causes any pain or harm to the body of another person, the person shall be deemed to have committed the offence of hurt/battery."

Number 2. "If the following occurs in the course of hurt/battery, it shall be considered to be a grievous hurt:

- Loss of eyesight or blind
- Deprivation of smelling capacity of the nose
- Making deaf upon damaging the hearing capacity of the ear
- Damage to the speaking capacity of the tongue
- Making useless upon cutting the breast of a woman
- Making impotent upon destroying the capacity of the male organ and testicle *(Nal fal)*
- Making useless the backbone (Vertebra/Spine) hands, legs or joints of such organs upon causing destruction, fracture or dislocation"

Punishment ranges from a fine of Five Thousand Rupees to Ten Thousand Rupees and imprisonment ranging from two years to eight years

Number 14. Causing bodily pain by burning (Poli), branding (Dami), forcefully rubbing (Dali) or otherwise using fire, fire like burning material or acid, excluding grievous hurt carries a fine of Five Hundred Rupees and imprisonment for a term of Two months. In cases where front part of body, mouth (face) or ear has not been burnt, the offender is liable to a fine of One Thousand Rupees and imprisonment for a term of Four months for burning the nose or eyes, to a fine of Two Thousand Rupees and imprisonment for a term of Eight months for burning the anus. Burning the male sex organ, carries a fine of Four Thousand Rupees and imprisonment for a term of One year and Four months.

Burning of the female sex organ carries a fine of Eight Thousand Rupees and imprisonment for a term of Two years and Eight months.

In cases where a person gives a poisonous fume *(Dhunwa)* to another person or causes that other person to inhale *(Sunghaunu)* any substance which results

in unconsciousness, the person is liable to a fine of One Thousand Rupees and imprisonment for a term of Two months.

A woman should not be burnt or attacked with fire or acid. Doing otherwise is deemed as an offense and punishable by law. The complaint of such offence should be filed in district police office.

Number 22. "In cases where any person, in a suit filed on the case of hurt, knowingly conceals the measurement or type (nature) of the wound (Ghau) inflicted (caused) in the body or increases or decreases the number of wounds in the deed of examination of the hurt (Ghau), such a person shall be liable to a fine of up to Two Hundred Rupees, upon considering the fact that to what extent such concealment may have affected the punishment."

Number 23. "If a person who appears before an office for the examination of hurt, with a fake wound, mark or contusion/bruise or brand (Dam), the person shall be liable to a fine of One Hundred Rupees451 if it is so proved (confessed)."

Number 27. In case of grievous hurt the suit should be filed within 3 months suit in any offence from the date of the cause of action, and within Thirty Five days in the case of other hurts.

Muluki Ain, Part – 4, Chapter – 8A: Apharan Garne/Sarir Bandak Lineko Mahal (Kidnapping/Abduction and Hostage-taking)

Number 3. "If a person kidnaps/abducts or takes hostage of another person, with intention to kill somebody else, to cause hurt by battering, to rape or to have unnatural sexual intercourse, to sell, to enslave a person, to deploy somebody in work forcefully, to cause torture, to engage into prostitution, to compel to work or cause to work, ... such an act, shall be liable to the punishment of imprisonment for a term ranging from Seven years to Fifteen years and a fine from Fifty Thousand Rupees to Two Hundred Thousand Rupees. …

In cases where the offence is committed against a woman or a minor, the person involved in such offence shall be liable to the punishment of imprisonment for a term of Two years, in addition to the punishment mentioned in this Chapter."

Muluki Ain, Part - 4, Chapter – 10: Jyan Sambandhi Ko Mahal

(Homicide)

Number 28. Any person who commits abortion or causes abortion by doing any act with intention or knowingly or with sufficient reasons to believe that such an act is likely to cause an abortion shall be punished as follows:

- Imprisonment for a term of one year if fetus is upto twelve weeks
- Imprisonment for a term of three years if fetus is upto twenty-give weeks
- Imprisonment for a term of five years if fetus is above twenty-five weeks

Number 28 A. No one shall cause abortion upon causing coercion, threat, lure or offer *(Pralovan) to a pregnant woman. In cases where a person causes abortion* in that manner, the person shall be liable to the following punishment:

- Imprisonment for a term of one year in case the fetus is up to Twelve weeks
- Imprisonment for a term of three years in case the fetus is upto Twenty Five weeks
- Imprisonment for a term of Five years in case the fetus is above than Twenty Five weeks.

Number 28 B. Notwithstanding anything contained in Number 28 of this Chapter, if an abortion is carried out by a qualified and registered health worker upon fulfilling the procedures as prescribed by the Government of Nepal, it shall not be deemed to be the offence of abortion, in the following circumstance:

- If the abortion of a fetus of upto Twelve weeks is carried out with the consent of the pregnant woman
- If the abortion of a fetus of up to Eighteen weeks caused by rape or incest is carried out with the consent of the pregnant woman
- If the abortion is carried out with the consent of the pregnant woman and on the advice of an expert pursuant to the prevailing law that if abortion is not carried out, the life of such a woman may be in danger or the physical or

mental health may be deteriorated or a disabled child may be born

Number 28 C. No one shall commit or cause to be committed an act to identify (determine) the gender of the fetus for the purpose of committing the offence of abortion. (Sex can be identified as early as the 16th to 18th week of your pregnancy.)
A person who commits this offence shall be liable the punishment of imprisonment for a term ranging from Three months to Six months.

Number 28 D. A person who commits, or causes to be committed, abortion upon identifying the gender of the fetus as referred to in Number 28C, the person shall be liable to the punishment of imprisonment for a term ranging from Six months to Two years.

Annex 3 – Confidentiality

The procedural guideline to maintain Confidentiality for parties of the court cases 2064 – Supreme Court Nepal. In a writ petition, supreme court of Nepal produced a procedural guideline to maintain **confidentiality** by keeping **personal identity** of the parties of the case as a secret which must be followed by all relevant authorities **including medical examiners during examination, documentation and report preparation of any medico- legal case.** Following sections of the guideline are relevant and should be understood by all concerned.

Section 2. Definition

(a) For the purpose of this guideline "case" (Mudda) means court cases of following nature where the concerned officer decides to keep the personal identity related to the case secret or confidential :

(1) According to nature of the criminal cases where there will beadverse effects on women victim, if personal identity is disclosed like in **rape, abortion, indecent asaaults assaults, incest, human trafficking and gender based violence**

(2) The criminal cases trialed by **children** benches of the court where the party is child

(3) The court cases where it is known that the **party** is effected of **infected by HIV/AIDS.**

(b) "Personal identity" means

(1) For (a) (1) above the details of female victim including her name, address and other details which can identify the person

(2) For (a) (2) above the details of child as party of the case including name, address and other details which can reveal the identity of child

(3) For (a) (3) above the details of that individual which can expose that person is infected with HIV AIDS

(c) "Concerned officer" means The district Judge for district Court, registrar of that court for high and supreme court and the chief of the office for other offices.

Section 3. To keep confidential the personal identity

(1) The personal identity if the victims as per section 2 must be kept confidential by all concerned authorities from the time of FIR,

investigation, prosecution hearing, verdict, during and after implementation of verdict.

Section 5. The procedure for confidentiality

(1) As per section 3 of this guideline, the personal identity detail is provided with either code name or number or symbol authenticated by concerned officer and the real details are documented in separate paper and sealed and kept separately.

Human trafficking, transportation (control and punishment) act 2064

Human transportation is an act of taking a person within or out of the country for buying or selling. Taking the person within or out of the country from the place of residence or from a person by the use of false information, force, abduction, hostage, enticement, inducement, threat, forgery and use of power to the victim or the guardian in order to keep in custody or handover to someone else for prostitution and exploitation is human transportation.

- The complaint of human trafficking and transportation should be registered at nearby police station.
- Anyone who comes to know about this offence can register the complaint and can conceal his/her identity if s/he wishes.
- If the victim registers the complaint, statement should be taken straightaway and should be certified in the nearest district court.
- Even if the case does not fall under the jurisdiction of the court, the judge should certify the statement reading it aloud to maintain precision.
- The statement itself can be taken as evidence despite the absence of victim in the court proceeding.

Arrest and investigation

Immediate action should be taken and reported by the police officer when the act of human trafficking and transportation has been committed or attempted.

- The activities of inspecting the site of offence (house, place, vehicle), arresting and searching the accused and taking the evidence in custody comes under immediate action.
- The accused should be kept in custody during the prosecution. The accused should provide evidence to prove s/he is not guilty.
- The victim can keep an additional or separate lawyer for representation in the course of court hearing.
- In case the victim is unable to understand the working language of the court of the police office, s/he can keep a translator or interpreter after the consent from the court.

Rescue, rehabilitation and reconciliation

Nepal government manages the rescue of Nepali citizen from foreign land. Nepal Government should establish rehabilitation center or give permission to some other organization for physical, mental and social rehabilitation and reconciliation with family Medical treatment and consultation service should be provided. For the management of such works, rehabilitation fund should be established by Nepal government.

Punishment and compensation

Any person who commits the offence is imprisoned for;

1. Twenty years and a fine of two lakh rupees for buying or selling someone .
2. Ten to five years and a fine of fifty thousand to one lakh rupees for forcing someone into prostitution.
3. Ten years and a fine of two to five lakh rupees for extracting human organ .
4. One to three months and a fine of two thousand rupees for engaging in prostitution .
5. Ten to fifteen years and a fine of fifty to one thousand rupees for transporting adults abroad and fifteen to twenty years imprisonment and a fine of one to two lakh rupees for transporting a child for buying or selling
6. Ten years and a fine of fifty thousand for transporting adults and ten to twelve years imprisonment and a fine of one lakh for transporting a child within a country for buying or selling.
7. One to two years for taking someone within a country and two to five years for taking abroad for exploitation
8. Encouraging to attempt and commit human trafficking and transportation is liable for half the punishment intended for the offence
9. Same person engaged in buying and selling is punished for both offences
10. Taking someone to a place within Nepal or abroad to buy, sell or force prostitution is liable for separate punishment for both offences.
11. A person holding public post is liable for additional punishment of twenty five percent .
12. If a guardian or relative of the victim commits the offence, s/he is liable for additional punishment of ten percent.
13. Repetition of the offence will add the one fourth to regular punishment each time .
14. If someone who reports the offence does not appear in the court or contradicts to the statement given earlier, s/he goes to prison for three to one year.

Exemption from punishment

During the process of being bought, sold or transported to engage in prostitution, if the victim inflicts self-defense injures or kills the offender, he/she is not punishable by law.

Compensation

The court provides the compensation to the victim which is half the amount of fine submitted by the offender. In case, the victim has died, the dependent members receive the amount: minor children or parents if children are not there.

In the absence of dependent members and minor children, the amount is collected by rehabilitation fund.

Formation of national or district committee

In order to rehabilitate the victims and control offence, national and district committee may be formed by Nepal government to coordinate work with governmental and non-governmental bodies. The committee can punish anyone obstructing the investigation of offence. The identity of the victim is kept confidentially and if anyone tries to break it, is fined ten thousand rupees.

Security

Security should be provided to the victim or witness to travel for court proceeding, if realistic ground is provided for protection. The court preceding is carried out in camera. Parties to the preceding, their attorney and permitted non-parties by the court can be part of the process.

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