

MELESON NEWSLETTER 2024



M E D I C O L E G A L S O C I E T Y O F N E P A L

Medico-Legal Society of Nepal [MeLeSoN]



776/25, Shanti Nagar, Kathmandu - 34



+977 1 4108560



melesonweb@gmail.com

newslettermeleson@gmail.com



<http://meleson.org>



Executive Committee (MeLeSoN)

Chairperson	:	Prof. Dr. Harihar Wasti
Vice-Chairperson	:	Dr. Arbin Shakya
Treasurer	:	Dr. Samjhana Ghimire Poudel
General Secretary	:	Dr. Kashev Shrestha
Immediate Past Chair	:	Dr. Eugene Dolma
Members	:	Dr. Dhiraj Shah Dr. Madan Prasad Baral Dr. Sabnam Shrestha Dr. Salmalee Yadav

Advisory Board (MeLeSoN)

Prof. Dr. Pramod Kumar Shrestha, HOD, NAIHS, Kathmandu, Nepal.
Prof. Dr. Tulsi Kadel, HOD, MMC-IOM, Kathmandu, Nepal.
Prof. Dr. Bishwanath Yadav, BPKIHS, Dharan, Nepal.

Newsletter Editorial Committee

Editor-in-chief	:	Dr. Alok Atreya
Editors	:	Dr. Sabnam Shrestha Dr. Kashev Shrestha

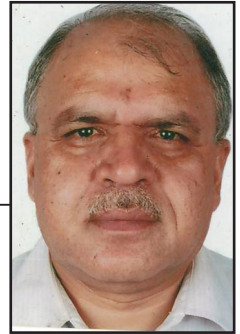
MELESON NEWSLETTER 2024

Published by	:	Medicolegal Society of Nepal [MeLeSoN]
Print Year	:	2024
Issue	:	4
Print copy	:	1000 pcs
Front Cover	:	Mr. Suresh Khanal
Design and layout	:	Mr. Suresh Khanal (sureshsuphal@gmail.com)
Typesetting	:	Dr. Alok Atreya

Message from the President

Prof. Dr. Harihar Wasti

President, MeLeSoN.
Chief Consultant, Forensic Medicine, Govt. of Nepal
Visiting Prof.: TU, PAHS and PU.



Forensic Medicine service sector in Nepal is still on its struggling phase. The key stakeholders of the crime investigation system of the country; police investigator, prosecutors and the judges in the courts time to time request forensic scientists and medico-legal experts about what is going on or coming new in the field of forensic sciences and medico-legal sector. It shows that the requirement of more convincing scientific evidences is now understood and required for the authorities involved in investigation and justice system. The experts in the respective field can inform them with no additional information what we had on many years back.

Few necessary changes in respective laws are made also not enough to address the needs of the society in day to day activities. Expansion of forensic science laboratories in different provinces is going on but the horizon of supposed facilities in modern laboratories are not yet established. Number of medico-legal experts are increasing but the allocation of position at hospitals for

them are not managed by proper way. The government of Nepal is not yet vigilant as required by the situation and need of application of scientific knowledge and skills to manage disputes in society. Voices from the public and academic institutions are also not enough for the management of medico-legal sector with minimum standard.

Medico-legal Society of Nepal (MeLeSoN) has been established to contribute for improvement in the medico-legal services in Nepal and also to suggest government and academic institutions mainly medical colleges to provide medico-legal services through the Departments of Forensic Medicine. MeLeSoN is regularly providing suggestions, recommendations and opinion to concerned authorities for improvement in the pathetic condition of medico-legal services in the country. Preparation of reporting formats after different medico-legal examination, development of standard operating procedures in medico-legal works and designing the training packages in medico-legal training are few examples

which are now seen in the field of work and included in legal and operational framework.

MeLeSoN NEWSLETTER IV is also one of the steps to contribute for the dissemination of scientific information to concerned people and sharing experiences between members of the society and other medical professionals who directly or indirectly involve in medico-legal service sector. Because of deep rooted myths and wrong perception in the mind of public and professionals, it is more necessary to educate people to understand the things rightly.

I like to thank all MeLeSoN members who are interested to be part of advocacy for better management of medico-legal services in Nepal and encouraged to provide scientific information through their case reports, articles and views in this issue of MeLeSoN newsletter to concerned authorities and public.

Lastly, I thank the editor and his team for their efforts and persistence in ensuring the publication of this newsletter.

I wish you the very best in the coming year and hope for your health and safety.

CONTENTS

अपराध अनुसन्धान तथा न्याय निरूपणमा फरेन्सिक सबुदहरुको उपयोग	प्रा. डा. हरिहर वस्ती	6
नेपालको मेडिको-लिगल प्रणालीलाई सुदृढ बनाउन फरेन्सिक मेडिकल बिशेषज्ञहरुको आवश्यकता	डा. आलोक आत्रेय	10
The Importance of Medico-legal Consultation: Safeguarding Healthcare Excellence	Dr. Samjhana Ghimire	15
Current situation of LGBT in Nepal	Dr. Dhiraj Shah	18
Victim Blaming Are We Guilty too?	Dr. Eugene Dolma	20
Hymen and Justice	Dr. Sabnam Shrestha	25
Conducting Child Sexual Abuse Examination in Patan Hospital	Dr. Srijana Kunwar	29
सबै भुन्डिएका लासहरु हत्या होइनन्	प्रा. डा. हरिहर वस्ती	31
Medico-legal services at Jumla	Dr. Apurba Acharya	39
Carbon Monoxide Poisoning: Preventable Death	Dr. Salmalee Yadav	41
Hangman's Fracture in a Case of Long Drop Suicidal Hanging	Dr. Kashev Shrestha	44
The role of Histopathology in Forensic Autopsy: Unveiling the truth beyond the surface	Dr. Nuwadutta Subedi	48
World Conference on Research Integrity	Dr. Sharmila Gurung	51
How the Department of Health Services of Nepal Acknowledges the Medico-legal Services in Nepal on Recent years?	Department of Health Services	53
Dispelling Myths and Educating Legal Professional on The Role of Forensic Odontology	Dr. Anjali Sehrawat Dr. Riyaz Ahmed	57
MeLeSoN Activities		63

अपराध अनुसन्धान तथा न्याय निरूपणमा फरेन्सिक सबुदहरुको उपयोग

प्रा.डा. हरिहर वस्ती

कानूनी चिकित्सा विज्ञ

विज्ञानको क्षेत्रमा भएका खोज तथा आविष्कारले वर्तमान अवस्थामा धेरै फड्को मारेता पनि समाजमा घटिहने अपराधिक क्रियाकलापहरुमा पनि नयाँ-नयाँ तरिकाहरुको प्रयोग हुने हुँदा कतिपय अपराध अनुसन्धानहरु सफल हुन नसकेका उदाहरणहरु पर्याप्त भेटिने गर्दछन् । पुरातन रुपमा प्रयोग गरिने व्यक्तिका भनाई वा साक्षीका बयानका आधामा अदालतहरुले दिने निर्णयमा समेत हालको परिवेशमा परिवर्तन भएको पाईन्छ ।

अपराध अनुसन्धानको शुरुकै अवस्थादेखि अभियोजन तथा न्याय निरूपणका सबै चरणमा भनिएको अपराधिक गतिविधिमा के कस्ता तथ्यगत भौतिक वा विज्ञानले पुष्टी गरेका प्रमाणहरु छन् भनी हरेक प्रकृतिका मुद्दामा हेर्नु पर्दछ । **फरेन्सिक सबुद भनेको के हो ?**

Forensic भन्ने शब्द पुरातन रोमका विवाद निरूपण गर्न अगाडी आउने जानकार व्यक्तिहरुको समुह जसलाई Forum भन्ने गरिन्थ्यो र सोही Forum बाट Forensis हुँदै Forensic भएको भनी विश्वास गरिन्छ । यसको मतलव विवाद निरूपण गर्न चाहिने आवश्यक तथ्यसँग जोडिएको प्रमाण भन्ने बुझिन्छ । विज्ञानका सिद्धान्त तथा प्रयोगबाट प्रमाणित हुन सक्ने प्रमाण नै Forensic सबुद वा प्रमाण हुन । यस्ता सबुदहरु देवानी वा फौजदारी दुवै प्रकृतिका मुद्दाहरुमा प्रयोग भएमा मात्र सत्य तथ्य पत्ता लगाउन सजिलो र सम्भव हुन्छ ।

Forensic सबुद अन्तर्गत दुईवटा सँगसँगै तर फरक क्षेत्रबाट विकास भएका विधाहरु छन् । दुई मध्य एक विधा Forensic Science हो भने अर्को विधा Forensic Medicine हो ।

खास गरी मानव शरीर विरुद्ध हुने अपराधिक गतिविधिहरुमा Forensic Medicine अर्थात् कानूनी चिकित्सा क्षेत्र बढी आकर्षित हुन्छ । किनकि मानव शरीर विरुद्धका अपराधहरु जस्तो कुटपिट, हत्या, हत्याको उद्योग, जवरजस्ती करणी आदीका घटनाहरुमा मानव शरीरको जाँच गराएपछि मात्र के कसो भएको हो भनी लक्षणहरु समयमै खोज्नु पर्ने हुन्छ । यस्ता परीक्षणहरु अस्पतालमा नै गराउनु पर्दछ र सम्बन्धित विषयमा ज्ञान वा तालिम प्राप्त चिकित्सकहरुले मात्र व्यक्तिका देखिएका लक्षणहरुको सही तरिकाले व्याख्या गर्न सक्दछन् । चिकित्सकीय फरेन्सिक सबुदहरु धेरै जसो फौजदारी मुद्दाहरुमा अति आवश्यक र बढी भरपर्दा हुन्छन् । अर्को क्षेत्र भनेको Forensic Science को क्षेत्र हो जो आफैमा असिमित क्षेत्र हो । सबै प्रकारका देवानी र फौजदारी दुवै प्रकृतिका मुद्दाहरुमा वैज्ञानिक सबुद खोज्ने हो भने Forensic Science ले मात्र उपलब्ध गराउन सक्दछ । जस्तो विवादास्पद लिखत वा अन्य कुनै डकुमेण्ट, औँठाछाप, DNA, बन्दुक जन्य हतियार तथा गोली, कुनै रसायनिक तथा विषादी पदार्थको विद्यमानता जस्ता सबै सवालहरुमा प्रयोगशालामा सम्बन्धित विषयको विज्ञद्वारा गराइएका परीक्षण र प्रतिवेदनको रुपमा तयार हुने प्रमाणहरु सबै Forensic Science का प्रमाणहरु हुन् । अस्पतालमा चिकित्सकले तयार गरेका कानूनी चिकित्सा अन्तर्गतका जाँच परीक्षण र तिनका प्रतिवेदनहरु प्राय आँखाले देखे जति वा चिने जती मात्र अभिलेखीकरण गर्न सकिन्छ । आँखाले नदेख्ने तर हुन सक्ने प्रमाणहरुमा विभिन्न नमुनाहरुको परीक्षणबाट मात्र सत्य तथ्य खुल्न सक्दछन् र त्यस्ता नमुनाहरु प्रयोगशालामा परीक्षण गरी

कानूनी चिकित्सकीय र Forensic Science बाट तयार गरिएका प्रतिवेदनको संयुक्त प्रयोग भएमा मात्र मानव शरिर विरुद्ध भएका अपराधिक गतिविधिहरूमा सत्य तथ्यहरू फेला पर्दछन् ।

नेपालका फरेन्सिक क्षेत्रको हालको अवस्था

विधि विज्ञान र कानूनी चिकित्सा क्षेत्रमा २१ औं शताब्दीको तेश्रो दशक आईपुग्दा पनि हुनुपर्ने न्यूनतम पूर्वाधार तथा मापदण्डहरू अझ पनि निर्धारण भएका वा गरिएका छैनन् भन्नुमा अत्युक्ति हुँदैन । प्रचलनले स्थापित गरेका केही जाँच वा परीक्षण प्रक्रियाहरूमा नै अस्पतालबाट तयार गरिने प्रतिवेदनहरू आधारित रहेको देखिन्छन् । विधि विज्ञान प्रयोगशालाबाट तयार गरिने प्रमाणहरूमा पनि प्रमाणिक भार कति भर पर्दो छ भनी सोच्नु पर्ने अवस्था रहेको पाईन्छ । वैज्ञानिक प्रमाण भनी नाम दिन भने अनुसन्धान, अभियोजन र न्याय निरूपणसँग सम्बन्धित निकायहरूले केही हदसम्म सुरु गरेकोसम्म देखिन्छ । तर त्यस्ता प्रमाणहरू तयार गरिने प्रकृया, प्रमाणमा उल्लेख गरिएका लक्षण वा तथ्य र तिनका कारण र परिणामका बारेमा भएको अनभिज्ञताका कारण त्यसलाई सही तरिकाले बुझेर प्रयोग गर्ने कलामा भने अझै पनि पर्याप्त कमी रहेको छ ।

कुनै मुद्दाको निर्णय गर्दा न्यायमूर्तिहरूले त्यस मिसिलमा भएका विभिन्न पक्षका बयानहरूलाई बढी भर पर्दा मान्ने पुरानो प्रचलन अझै हटेको देखिदैन । त्यसै कारणले होला फलानाले दिएको बयानमा कुनै परीक्षणबाट आएको राय वा तथ्यगत प्रमाण पनि मिलेको वा नमिलेको हुँदा यसो ठहर्ने देखिन्छ भनी वैज्ञानिक प्रमाणलाई पुच्छर भुण्ड्याएर राखेको देखिन्छ । व्याख्या गरिनुपर्ने कुरा भने त्यसको ठिक उल्टो हुनु पर्ने हो ।

फरेन्सिक सबुदहरूको उपयोगमा भएका कञ्जुरीका कारणहरू

(क) फरेन्सिक क्षेत्र नै उपेक्षित हुनु :

मुख्य रूपमा अपराध अनुसन्धानदेखि न्याय निरूपणसम्मका सबै क्षेत्रमा काम गर्ने निकायहरूले जसोतसो पुरातन रूपमा नै काम गर्दै जाँदा यो देशमा नीति निर्माण गर्ने तथा कार्य विधिहरूको प्रयोग गर्ने सबै निकायहरूका पदाधिकारीहरूमा

फरेन्सिक क्षेत्रलाई विकास गर्नु पर्दछ भन्ने सोच नै आएको देखिदैन । त्यसैले यो क्षेत्र उपेक्षित अवस्थामा नै रहेको छ । मेडिको लिंगग सेवा मेडिकल अधिकृतहरूले दिई रहेका छन् भने किन विशेषज्ञता चाहियो र भन्ने धारणा स्वास्थ्यका क्षेत्रमा जिम्मेवारी लिनेहरूको दिमागमा जरा गाडेर बसेको पाईन्छ । विशेषज्ञ तथा विशेष तालिम लिएका चिकित्सकलाई मात्र काम गर्ने जिम्मेवारी दिनु भन्ने कानूनी आदेशहरू कार्यान्वयन गर्नेतर्फ अहिले पनि स्वास्थ्य मन्त्रालय तथा स्वास्थ्य सेवा विभागले कुनै खास योजना तथा कार्यक्रम राखेको देखिदैन । मेडिको लिंगग सेवालालाई चाहिने न्यूनतम पूर्वाधारमा धेरै अस्पतालहरू शुन्यको सतहमा छन् । विधि विज्ञान प्रयोगशालाहरूलाई समयोचित विकास गर्नु पर्ने दायित्व पनि सामान्य छोटो तालिम लिएका जनशक्तिहरूद्वारा काम चलाउ अवस्थामा सिमित गरिएको छ । त्यस्ता प्रयोगशालाहरूमा आधुनिक उपकरणहरूको व्यवस्थापनमा समेत कञ्जुस्याई भएको देखिन्छ ।

(ख) फरेन्सिक सबुदहरू सत्य तथ्य एक्कीन गर्ने भरपदा प्रमाण हुन भन्ने ज्ञानको कमी:

पक्ष विपक्ष वा साक्षीहरूबाट लिइएका बयानका आधारमा मुद्दा फैसला गर्ने प्रचलनबाट लामो समय अभ्यस्त भएका नेपालका अभियोजन तथा अदालती निर्णयहरूमा अहिले पनि यदाकदा विवेचना गरिने फरेन्सिक सबुदहरूलाई ठिकसँग बुझ्न नसकेको तथ्यहरू धेरै अदालती निर्णयहरूमा भल्कने गर्दछन् । डि.एन.ए. जस्तो सबुदलाई न्याय क्षेत्रका विज्ञहरूले या त बुझ्दै नबुझेको देखिन्छ वा ठिकसँग नबुझेको धारणा भल्कने गरी व्याख्या गरेको पाईन्छ । विष खाएको व्यक्तिले भुण्डिएर मर्यो भने न्यायमूर्तिहरूले यस्तो हुनै सक्दैन भन्ने निर्णयहरू नजीर कोषमा पाईन्छन् ।^१ जब कि आत्महत्या गर्न प्रयास गर्ने व्यक्तिले एउटा तरिकाबाट तुरुन्त गरिएन भने वा पीडा छटपटी हुन थालेमा अर्को तरिका तुरुन्त अवलम्बन गर्दछन् र एकभन्दा बढी तरिकाबाट अन्यथाका अवस्था बाहेक व्यक्ति मरेको पाईएमा यो पक्का आत्महत्या नै हुने तथ्य सामान्य ज्ञानले नै पुष्टी गर्दछ ।

(ग) भ्रमपूर्ण कानूनी अवधारणाहरूको लामो प्रयोग :

खासगरी विगतमा भएका मुलुकी ऐन लगायत अन्य कानूनी प्रावधानहरूले फरेन्सिक तथ्यहरूलाई गलत तरिकाबाट बुझेको र निर्देशन गरेको कारणले पनि न्याय निरूपण गर्ने सबै निकाय लगायत आम जन मानसमा गलत धारणाहरूको विकास हुन पुग्यो । अनुसन्धान तथा न्याय निरूपण गर्ने निकायहरूमा एकातर्फ सही सामान्य ज्ञान समेतमा कमी र अर्क गलत धारणाहरू सिद्धान्त मै राखी दिँदा गलत बुझाईहरू दिमागबाट नहटने गरी जकाडिन पुग्दछन् । उदाहरणको लागि भ्रुण्डिएर मरेको लासले भुईँमा छुन हुँदैन, दिशा निस्केको हुनु पर्दछ, जिब्रो टोकेको हुनु पर्दछ, मुट्टी कसेको हुनु पर्दछ आदी जस्ता तथ्यहरू सबै भ्रुण्डिएर आत्म हत्या गरेका शवहरूमा पाईदैनन् । त्यसै गरी लास सडीगली गएमा केही पनि जाँच गर्न सकिदैन भन्नु ठूलो बेइमानी हुन जान्छ । विष सेवन गरेका मुर्दाहरूमा कपाल तान्दा सजिलै आउँछ भनि घटनास्थलहरूमा जाने अनुसन्धान अधिकारीले त्यस्तो अभ्यास गर्दै गर्दा अनुसन्धानको बाटो नै अन्यत्र मोडिन पुग्दछ । अहिले संशोधित तथा परिमार्जित रूपमा आएका नयाँ कानूनहरूले पनि समेट्नु पर्ने मुख्य विषयहरू छुटाएकै अवस्था विद्यमान छ । जवर्जस्ती करणीका पिडीत तथा पिडकहरूलाई आवश्यक ज्ञान तथा सिप भएका स्वास्थ्यकर्मीहरूले परीक्षण गर्नु पर्दछ भनी कानूनको कुनै दफा वा उपदफाले निर्देशन गरेको छैन । खाली प्रचलन अनुसार मात्र तिनीहरूलाई स्वास्थ्य संस्थामा लगेर परीक्षण गराईन्छ । तर त्यस्तो जाँच परीक्षण गर्न तयार गरिएका प्रतिवेदनका ढाँचामा भने त्यस्तो परीक्षण विषयको विशेषज्ञले वा सो नभए विशेष तालिम प्राप्त स्वास्थ्यकर्मीले गर्नुपर्दछ भनी भर्खरै उल्लेख गरिएको अवस्था भए पनि सो को पालना वा कार्यान्वयन भने भएको पाईदैन ।

कतिपय वारदातहरूमा भौतिक लक्षण नदेखिए पनि सो घटनाबाट पर्न गएको मानसिक लक्षण पनि सबुदको मुख्य भाग हुन सक्दछ भन्ने तथ्य कानून तथा व्यवहारले अहिले पनि समेट्न सकेको देखिदैन । यसको मुख्य कारण मानसिक

लक्षणहरू देखिदैनन् वा पत्ता लाग्दैनन् भन्ने पुरातन सोच र अज्ञानता नै हो ।

वैज्ञानिक तथ्य भनी अवैज्ञानिक धारणाहरूको उपयोग हुँदा कतिपय अवस्थाहरूमा त्यसको ठीक उल्टो नतिजा समेत निस्कन सक्दछ । यसै कारणले होला हाम्रो देशको सबैभन्दा उच्च स्तरको अदालतबाट भएका विगतका कतिपय निर्णयहरू त्रुटिपूर्ण हुँदाहुँदै पनि व्यवहारिक पक्षमा तिनलाई नजिर मानी उपयोग हुँदै जाँदा थप अन्यथाका अवस्थाहरू सृजित हुन सक्ने सिलसिला रोकिन सकेको पाईदैन ।

वर्तमान अवस्थामा शुरु भएका सुधारका पक्षहरू :

फरेन्सिक क्षेत्रमा वेवास्ता र पद्धतिको चरम अभाव हुँदाहुँदै पनि पछिल्लो समयमा कही थोरै भए पनि आशाका किरणहरू कता कता छरिन थालेको देखिन्छन् । तल उल्लेखित केही अवस्थाहरूमा यदि निरन्तर रूपमा कार्यान्वयन पक्षलाई ध्यान दिने हो भने भविष्यमा फरेन्सिक क्षेत्र न्यूनतम मापदण्डमा पुग्ने आशा गर्न सकिन्छ ।

(क) कानूनी चिकित्सा समाजको स्थापना तथा त्यसका गतिविधिहरू :

७ वर्ष समय व्यतित गरी सकेको नेपालमा कार्यरत फरेन्सिक मेडिसिन विषयका विज्ञहरूको एक व्यवसायिक समाज संगठित रूपमा अगाडि आएको छ । यसको मूल उद्देश्य भनेको कानूनी चिकित्सा (Forensic Medicine) को क्षेत्रमा दिईने सेवाहरू सम्बन्धित विषयको विज्ञद्वारा प्रदान गर्ने र धेरै नै वेवास्ता गरिएको तर नभै नहुने यो क्षेत्र प्रतिको वेवास्ता हटाउन पहल गर्नु हो । हाल करिब ५ दर्जन विशेषज्ञहरू मध्ये विभिन्न धेरैले मेडिकल कलेजमा अध्यापन कार्य मात्र गरेर बाँकी समय बेरोजगार भई आफुले जानेको ज्ञान तथा सिप विर्सनु परेको तितो यथार्थलाई हटाउन कानूनी चिकित्सा समाज (MELESON) लागि परिरहेको छ । यस समाजको पहलमा समेत प्राईभेट भनी विल्ला लाग्ने गरेका तर स्तरीय सेवा दिन सक्ने क्षमता बोकेका मेडिकल कलेजहरू ४ वटा मेडिकल कलेजहरूले स्वास्थ्य मन्त्रालयबाट मेडिको लिगत सेवा दिन पाउने अनुमति पाई सेवा दिन थालेका छन् ।

(ख) मेडिको लिगल सेवा संचालन निर्देशिका-२०७५

मेडिको लिगल क्षेत्रका विशेषज्ञहरूद्वारा गरिएको दशकौंको प्रयासपछि यस क्षेत्रलाई सुधार गर्न र उचित सम्बोधन गर्न एक निर्देशिका जारी भएको छ । यसले मेडिको लिगल भित्र के कस्ता सेवाहरू पर्दछन् भनी परिभाषित गर्नुको साथै मेडिको लिगल विशेषज्ञ भएका सरकारी वा गैर सरकारी सबै प्रकारका अस्पतालहरूले तोकिएका मापदण्ड पुरा गरी सेवा प्रदान गर्न समेत बाटो खोलेको छ । यस निर्देशिकाले समेटेका अन्य धेरै विषयहरू कार्यान्वयनमा अभ्र पनि आउन नसकेको हुँदा कानूनी चिकित्सा समाजका सबै सदस्यहरूले आफ्नो विज्ञताको सेवा सर्वसाधारण जनतलाई दिन पाउँ भनी आफैं जागरुक हुन समेत आवश्यक देखिन्छ ।

अनुसन्धान गर्ने निकाय, अभियोजन गर्ने सरकारी वकिलका कार्यालय तथा न्याय निरूपण गर्ने न्यायालहरूले समेत भरपर्दा सबुदहरूको उपलब्धताका लागि पहल गर्न सकेमा नेपालमा भएका केही दर्जन मेडिको लिगल विज्ञहरूले आफ्नो व्यवसायिक दक्षता देखाउने मौका पाउनुको साथै सबै सम्बद्ध निकायहरूलाई आफ्नो क्षेत्रमा सफल कार्य गर्नमा धेरै मद्दत पुग्दछ ।

(ग) कानून संकायका पाठ्यक्रममा फरेन्सिक विषय समाहित गरी अध्ययन अध्यापन शुरु गरिएको :

केही विश्व विद्यालयहरूले कानून संकायको स्नातक तथा स्नातकोत्तर तहमा Forensic Medicine / Forensic Sciences विषय पाठ्यक्रममा समाहित गरी अध्यापन गराउने कार्य शुरु गरेको एक दशकभन्दा बढी भइसकेको छ । स्नातकोत्तर तहको Criminal Law पढ्ने विद्यार्थीहरूले यो विषय अनिवार्य अध्ययन गर्नु पर्दछ भने स्नातक स्तरको चौथो वर्षमा ऐच्छिक विषयको रूपमा लिन

पाउँछन् । कानूनका धेरै विद्यार्थीहरू यो विषयमा आकर्षित भई अध्ययन गर्न थालेका छन् । तर सबै कलेजहरूले सम्बन्धित विषयका विज्ञ शिक्षकहरूद्वारा प्रशिक्षण नगराउँदा त्यस्ता कलेजहरूका विद्यार्थीको लागि फलदाई बन्न सकेको देखिएको छैन ।

उपसंहार

अपराध अनुसन्धान गर्नु र सहि न्याय सम्पादन गर्नु त्यति सजिलो छैन । २१ औं शताब्दीको समयमा विज्ञान तथा विधिले धेरै फड्को मारी सकेको भए पनि नेपाल जस्तो देशमा त्यसको अधिकतम उपयोग गरी चुस्त अनुसन्धान र वैज्ञानिक सबुदहरूको पर्याप्त उपयोग गरी दुरुस्त न्याय दिन सम्बन्धित निकायहरूले हुनुपर्ने सक्षमता प्राप्त गर्न सहज अवस्था छैन । राज्यले समाजमा कानूनी राज्य भएको अनुभुती गराउन अनुसन्धान, अभियोजन तथा न्याय निरूपणका सबै निकायहरूमा न्यूनतम मापदण्ड पुरा गर्नको लागि अरु धेरै व्यवस्थापन गर्न जरुरी देखिन्छ । देशमा उपलब्ध वैज्ञानिक क्षेत्रका जनशक्तिको सकेसम्म बढी उपयोग गर्दै कतिपय क्षेत्रमा कानूनद्वारा नै सम्बोधन गर्न अभ्र पनि छुटेको अवस्थालाई सुधार गर्नु पर्दछ । मानव शरीर विरुद्धका अपराधिक गतिविधिहरूमा अनुसन्धान सफल हुनको लागि कानूनी चिकित्सा ९:भमष्अय(ीभनर्बि० क्षेत्रको मानव जनशक्ति लगायत भौतिक पुर्वाधारहरूको न्यूनतम मापदण्ड पुरा गर्दै विधि विज्ञान प्रयोगशालाहरूलाई पनि सोही अनुसार समय सापेक्ष विकास गर्न सके मात्र पीडितले न्याय र कसुरदाले मात्र दण्डीत हुनु पर्ने अवस्थाको निर्माण हुन्छ ।

-अस्तु-

नेपालको मेडिको-लिगल प्रणालीलाई सुदृढ बनाउन फरेन्सिक मेडिसिन विशेषज्ञहरूको आवश्यकता

डा. आलोक आत्रेय

एसोसिएट प्रोफेसर, फरेन्सिक मेडिसिन विभाग
लुम्बिनी मेडिकल कलेज, पाल्पा ।



भाग १: पीडितलाई न्यायका लागि फरेन्सिक मेडिसिनको महत्व

फरेन्सिक मेडिसिन एक महत्वपूर्ण चिकित्सा विशेषज्ञता हो जसले पीडित, आरोपित र मृतकको परीक्षण गरेर मेडिकल तथ्य उपलब्ध गराउँछ र अनुसन्धान र न्याय सुनिश्चित गर्न अपराधिक न्याय प्रणालीलाई सहयोग गर्छ । यसका प्रमुख पक्षहरूमा क्लिनिकल फरेन्सिक मेडिसिन, फरेन्सिक प्याथोलोजी र फरेन्सिक एन्थ्रोपोलोजी पर्दछन् ।

क्लिनिकल फरेन्सिक मेडिसिनमा अपराधसँग सम्बन्धित जीवित व्यक्तिहरूको पूर्ण शारीरिक परीक्षण गरी पाईएका मेडिकल तथ्यका निष्कर्षहरूको दस्तावेजीकरण गरिन्छ । यसमा शारीरिक आक्रमण, यौन द्रुव्यवहार, बाल द्रुव्यवहार, यातना, कस्टोडियल हिंसाका पीडितहरूको परीक्षण र यस्ता अपराधका दोषीहरूको कुनै पनि देखिने वा लुकेका चोटपटकहरू, मादक पदार्थ सेवन वा अन्य प्रासङ्गिक निष्कर्षहरूको परीक्षण गर्ने कार्य समावेश हुन्छ । पीडित/आरोपितहरूबाट जैविक तरल पदार्थ वा डिएनए जस्ता क्लिनिकल फरेन्सिक तथ्यहरूको समयमै रीत पुऱ्याएर सङ्कलन गर्दा पीडित र आरोपितहरूका लागि न्याय सुनिश्चित हुन्छ ।

फरेन्सिक प्याथोलोजीमा अप्राकृतिक मृत्यु वा संदिग्ध मृत्यु जस्तै: हत्या, आत्महत्या, दुर्घटना वा अचानक मृत्युका घटनामा शव परीक्षण मार्फत मृत्युको कारण र परिस्थितिको वैज्ञानिक रूपमा अनुसन्धान गरिन्छ । मृत्युको कारण र

परिस्थिति निर्धारण गर्नु अपराधमा संलग्नता ठहर गर्न कानूनी दृष्टिले निकै महत्वपूर्ण हुन्छ र परिवारलाई मृत्युको ठीक कारणबारे जानकारी दिन्छ । त्यसैले शव परीक्षण व्यवस्थित प्रोटोकल र तरिका प्रयोग गरेर सावधानीपूर्वक गर्नुपर्दछ र आवश्यक परेमा मृतकको शरीरबाट नमूना संकलन गर्नुपर्दछ ताकि सम्भव भएसम्म मेडिकल तथ्य निकाल्न सकियोस् । फरेन्सिक एन्थ्रोपोलोजीमा अस्थिपञ्जर र विक्षिप्त वा विखण्डित शरीरहरूको विश्लेषण गरिन्छ र मृतकको पहिचान, मृत्युको समय, मृत्युको कारण र परिस्थितिको निर्धारण गरिन्छ । यसले अस्थिपञ्जर वा क्षतविक्षत, जलेका, अङ्गभङ्ग वा कङ्कालीकृत शरीर सम्बन्धी अपराधहरूको समाधानमा मद्दत गर्छ जहाँ नियमित शव परीक्षण असम्भव छ । अस्थिपञ्जरको उमेर विश्लेषणले मानव अवशेष कुन उमेर समुहको हो भनेर पत्ता लगाउन पनि मद्दत गर्छ जसको कानूनी महत्व हुन्छ ।

यसरी फरेन्सिक मेडिसिन विशेषज्ञहरूको विविध दक्षता ज्यान सम्बन्धी र शारीरिक सम्पूर्णतामा हानी पुऱ्याउने अपराधहरूमा, कानून कार्यान्वयन गर्न प्रहरी, अदालत र मानव अधिकार निकायका लागि अत्यावश्यक छ । उनीहरूको निष्पक्ष वैज्ञानिक तथ्यले न्याय निरूपणका लागि आधार प्रदान गर्दछ । विश्वसनीय फरेन्सिक तथ्यले पीडितले कसरी चोटपटक भयो वा मृत्यु भयो भन्नेबारे वस्तुनिष्ठ बुझाइको आधारमा निष्कर्ष निकाल्न सक्षम बनाउँछ, अनुमानको भरमा होइन । यसले मृतक र पीडितलाई न्याय दिन मद्दत गर्छ ।

भाग २ : नेपालको मेडिको-लिगल सेवाको दयनीय अवस्था

प्रशिक्षित विशेषज्ञहरूको अभावले गर्दा नेपालमा फरेन्सिक मेडिसिन सेवा गम्भीर रूपमा प्रभावित छ, जसका कारण धेरै मुद्दामा न्यायको उपहास हुन्छ । हालसालैका तथ्याङ्कअनुसार, वार्षिक करिब १९,००० मेडिको-लिगल शव परीक्षणमध्ये लगभग ८०% फरेन्सिक प्याथोलोजीमा विशिष्ट प्रशिक्षण वा दक्षता नभएका मेडिकल अफिसरहरूद्वारा गरिएका छन् । उनीहरूले कठिन परिस्थितिमा प्रदान गरेको सेवा प्रशंसनीय छ, तर यस्ता शव परीक्षणले धेरैजसो तथ्य मासिन्छ र न्यायमा हानी पुऱ्याउँछ । चिकित्सकहरूले शव परीक्षणमा त शरीर काट्ने कार्य मात्र गर्छन्, सिफारिस गरिएका प्रोटोकल, फोटो, उपर्युक्त औजार र नमूना सङ्कलन विधि प्रयोग गरेर शरीरबाट सबै सम्भावित तथ्य व्यवस्थितरूपमा निकाल्ने काम गर्दैनन् । उदाहरणको लागि चोटपटक वा हमलाको कारण मृत्यु भएको खण्डमा बाह्य चोट नदेखिन पनि सक्छ र यस्ता घटनामा धेरैजसो महत्वपूर्ण तथ्य छुट्टिन्छन् र मृत्युको कारण सामान्य चोटपटक भनेर गलत व्याख्या गरियो वा प्राकृतिक रोग लागेको लेखियो वा विषाक्तता जाँच गर्नुपर्ने घटनामा नमूना संकलन गरिएन भने शव परीक्षण गरेको उपादेयता हुँदैन । यौन द्रुव्यवहारका घटनामा पनि गुप्ताङ्क परीक्षण र नमूना सङ्कलन ठीकसँग नगरिएमा तथ्य नष्ट हुन सक्छ । यसले अपराधलाई गलत व्याख्या गर्न र अपराधीहरूलाई न्यायबाट उन्मुक्त हुन सहयोग गर्छ ।

ग्रामीण जिल्ला अस्पतालका शवगृहहरूको अवस्थाले नेपालमा फरेन्सिक सेवाप्रतिको पूर्ण उपेक्षा देखाउँछ । घाम र हावा नछिर्ने र पानीको आपूर्ति वा निकास नभएको, अध्यारो कोठामा मधुरो बत्तीमा शव परीक्षण गरिन्छ । शवलाई रगत र अन्य दाग लागेका जीर्ण सिमेन्टको ल्याबमा राखेर काटिन्छ । शव परीक्षणमा चाहिने औजार जस्तै शव काट्ने चक्कु, अँग काट्ने चक्कु, आन्द्रा काट्ने चक्कु, फोर्सेप्स, कैंची, करड् काट्ने औजार, शिर खोल्न चाहिने विद्युतीय उपकरण, टाँका लगाउने उपकरण लगायत

केही हुँदैनन् । एक जना टेक्सिसियनले मात्र एउटा चक्कुले, शरीर काटेर अंगहरू खुला हातले निकाल्छन् । सबै मुद्दाका लागि एउटै स्कालपेल पुनः प्रयोग गरिन्छ । कुनै प्रकारको फरेन्सिक तथ्य सङ्कलन गर्ने प्रयास गरिँदैन ।

यो त शरीरलाई मेडिको-लिगल शव परीक्षणभन्दा पनि अशास्त्रीय ढंगले काट्नु जस्तै हुन्छ । टेक्सिसियनहरू अप्रशिक्षित छन् । टेक्सिसियन टिकाईराख्न अस्पताल प्रशासन र डाक्टर केही बोल्दैनन् किनकि अरू कसैले मृतकको शरीर काट्ने काम गर्दैन वा भनौं टेक्सिसियन पाँईदैन । मेडिको-लिगल शव परीक्षणको अनुभव नभएका मेडिकल अफिसरलाई टेक्सिसियन अनुभवी विशेषज्ञ सरह हुनपुग्छ जसले आफ्नै पुराना गलत अभ्यासलाई मात्र निरन्तरता दिँदैछ । कोल्डस्टोरेज नहुनु, भएपनि काम नगर्ने वा कार्य सञ्चालनमा नआएको अवस्थामा शव र त्यसमा रहेका महत्वपूर्ण तथ्य नष्ट हुन्छ । कोल्ड स्टोरेज नभएका कारण पनि शव छिटो नष्ट हुने हुँदा पनि टेक्सिसियन र मेडिकल अफिसरहरू अशास्त्रीय/अवैज्ञानिक ढङ्गले शव काट्न उद्देलित जस्तै हुन्छन् ।

सरकारी अस्पतालका धेरैजसो शवगृहमा शव परीक्षण सेट, तौलने यन्त्र, थर्मोमिटर, डिजिटल क्यामेरा, एक्स-रे सुविधा वा व्यक्तिगत सुरक्षा उपकरण जस्ता आधारभूत उपकरणहरू नै हुँदैनन् । शव परीक्षण गर्न आवश्यक सामग्रीहरू नहुँदा तथा अत्याधुनिक सुविधा नहुँदा मृतकको मर्यादामा अपमान हुन्छ र तथ्य सङ्कलनमा असर पर्छ ।

फरेन्सिक मेडिसिन जनशक्तिको अभावले विद्यमान चिकित्सकहरूलाई एकसाथ २० वटासम्म शव परीक्षण गर्नपर्ने बाध्यता पर्दछ जसले परीक्षण गुणस्तरमा गम्भीर असर पार्दछ । कतिपय अवस्थामा एकजना चिकित्सकले केस पन्छाउनका लागि ३/४ वटा शव एकैपटक परीक्षण गर्छन् जसले सबै मापदण्ड उल्लङ्घन गर्छ । यस्तो अव्यवस्थित तरीकाले शव परीक्षण गर्दा शव परीक्षणको उद्देश्य नै पुरा हुँदैन ।

न्यायिक मापदण्डको विपरीत यस्तो अवैज्ञानिक शव परीक्षण गर्नु भनेको शरीर बेकारमा क्षत-विक्षत पार्नमात्र

हो । यसबाट दोषीहरू छुट्न सक्छन् भने परिवार पनि मृत्युको ठीक कारणबारे अनिश्चित वा अनभिज्ञ हुन्छन् । यो अमानवीय कृत्य हो । यस्तो अस्वच्छ र गैर-वैज्ञानिक शव परीक्षणले मृतक र पीडित प्रति अपमान हुन्छ र तथ्य हराउन दिन्छ । शव परीक्षण गृहलाई पानी, बिजुली, औजार र टेक्सिसियनहरू उपलब्ध नगराउनु नै आश्चर्यजनक छ । मेडिको-लिगल तन्त्र सहज रूपमा सञ्चालन गर्न आवश्यक स्रोत, बजेट र क्षमताको व्यवस्था गर्न सकिएको छैन । न्यायका लागि मौन रूपमा आग्रह गरिरहेका मृतकहरूलाई अब कतिन्जेल बेवास्ता गर्ने?

उचित फरेन्सिक शव परीक्षण विधिमा व्यवस्थित शरीर काट्ने कार्य, आन्तरिक अङ्ग निकाल्ने कार्य र आन्तरिक अङ्गको विस्तृत, व्यवस्थित र वैज्ञानिक परीक्षण, फोटोग्राफी, तन्तुहरूको सूक्ष्मदर्शकीय यन्त्रबाट विश्लेषण र प्रयोगशाला परीक्षण समावेश हुन्छ । विशेषज्ञहरू वैज्ञानिक आधारमा स्थापित प्रोटोकल प्रयोग गरेर शरीरबाट अधिकतम तथ्य व्यवस्थित ढङ्गले निकाल्न प्रशिक्षित हुन्छन् । उनीहरूको शव परीक्षण निष्कर्ष र वैज्ञानिक विश्लेषणसहितको विस्तृत प्रतिवेदनले मृत्युको कारण निर्धारण र न्यायोचित मुद्दाका लागि प्रमाणिक तथ्य प्रदान गर्दछ ।

नेपालले न्याय वितरणमा फरेन्सिक मेडिसिनको महत्त्वलाई मान्यता दिएर विश्वस्तरीय मेडिको-लिगल सेवा विकास गर्न सक्छ । मेडिको-लिगल ढाँचा सुदृढ बनाउन फरेन्सिक जनशक्ति प्रशिक्षण, पूर्वाधार सुधार, प्रोटोकल कार्यान्वयन र मापदण्ड निगरानीमा गर्न आवश्यक छ । अब कानूनको शासन र मानवअधिकार कायम गर्ने बेला आएको छ ।

त्यस्तै क्लिनिकल फरेन्सिक परीक्षण धेरैजसो उपर्युक्त प्रोटोकल, सहमति प्रक्रिया, परीक्षण र तथ्य संकलन विधिबारे अनभिज्ञ चिकित्सकद्वारा गरिन्छ । उनीहरू कानूनी दस्तावेज तयार गर्न वा अदालतमा विश्वसनीय रूपमा गवाही दिन असमर्थ हुन्छन् । यसले शारीरिक आक्रमण, यौन अपराध र

कस्टोडियल यातनाका पीडितहरूलाई नैतिक, संवेदनशील व्यवहारको आवश्यकता पुरा गर्न असफल हुन्छ । अनुचित क्लिनिकल तथ्य सङ्कलनले प्रभावकारी अभियोजनलाई पनि कमजोर पार्दछ ।

नेपालका सरकारी अस्पतालमा कुशल फरेन्सिक विशेषज्ञताको अभावले फौजदारी न्याय प्रणाली र मानव अधिकार संरक्षणमा बाधा पुर्याउँछ । यसका कारण धेरै अपराधीहरू प्रमाणिक मेडिकल तथ्यको अभावमा सजायबाट उम्कन सफल हुन्छन् । त्यसैले, मेडिको-लिगल सेवामा विशेषज्ञहरूको तत्काल आवश्यकता छ जसले वैज्ञानिक रूपमा अपराध अनुसन्धान गरी न्याय पुऱ्याउन सक्नु ।

उत्साह र कुशलताका बावजुद नेपालका समर्पित फरेन्सिक मेडिसिन विशेषज्ञहरू स्वीकृति र अवसरका लागि संघर्ष गर्नु चिन्ताजनक छ । धेरै विशेषज्ञहरू रुचिका कारण यो विषय छनौट गर्दछन् तर सरकारी सेवा वा निजी अस्पतालमा अन्य क्लिनिकल क्षेत्रको तुलनामा सीमित अवसर पाउँछन् । जनशक्तिको चरम अभाव हुँदा पनि प्रणालीले उनीहरूलाई परिचालन गर्न सकेको छैन र बेवास्ता गर्दै आएको छ । सरकारले यो महत्त्वपूर्ण क्षेत्रका लागि स्पष्ट करियर मार्ग, स्थायी पद र प्रोत्साहन व्यवस्था गर्न असफल भयो । निजी मेडिकल कलेजले पनि आवश्यकता अनुसार ध्यान दिएनन् । यदि यी प्रतिभाशाली फरेन्सिक मेडिसिन विशेषज्ञहरूको मूल्याङ्कन, पोषण र सशक्तीकरणका लागि समयमै कदम चालिएन भने देशले उनीहरूलाई गुमाउने जोखिम छ । दूरदृष्टिको अभावले स्वदेशी प्रतिभाको दूलो क्षति र प्रणालीगत असफलता हुनेछ । देशको मेडिको-लिगल ढाँचा सुदृढ बनाउन फरेन्सिक मेडिसिन विशेषज्ञहरूको पहिचान, पोषण र सशक्तीकरण गर्न तत्काल कदम चाल्नु आवश्यक छ ।

भाग ३: सुधारका लागि सुझावहरू

नेपालको मेडिको-लिगल प्रणालीलाई सुदृढ बनाउन निम्न कदमहरू अपनाउनु पर्दछ:

१. सरकारी अस्पतालमा फरेन्सिक मेडिसिन विशेषज्ञ

भर्ना गर्ने

नेपालमा प्रशिक्षित फरेन्सिक प्याथोलोजिस्टको अत्यन्तै अभाव छ, जहाँ ३ करोड जनसंख्याका लागि करिब ५०जना मात्र छन्। सरकारले लोक सेवा आयोग मार्फत विशेषज्ञ भर्ना गर्नु पर्दछ। केन्द्रीय नीति अनुसार सरकारी अस्पताल र मेडिकल कलेजमा सङ्काय पदका लागि विशेषज्ञ भर्ना चाँडो गर्नु पर्दछ। हालसम्म लोक सेवा आयोगको लोकसेवा परीक्षामा फरेन्सिक मेडिसिनका लागि धेरै वर्षदेखि खुला पद घोषणा गरिएको छैन। यो भनाईलाई प्रदेश सरकारको अस्थायी नियुक्तिमा भर नपरी केन्द्रबाट प्राथमिकतामा राख्नुपर्छ।

त्यस्तै चिकित्सा शिक्षा आयोगले पर्याप्त स्थायी फरेन्सिक मेडिसिन सङ्काय, पूर्वाधार र क्लिनिकल सुविधा भएका कलेजहरूमा मात्र विद्यार्थी सीट आवश्यक संख्यामा मात्र निर्धारण गर्नुपर्छ। कतिपय मेडिकल कलेजका फरेन्सिक मेडिसिन विभाग कागजमा मात्र छन्, जहाँ वास्तविक संकाय, कामदार वा क्लिनिकल फरेन्सिक केस हुँदैनन्। यसले फरेन्सिक मेडिसिन शिक्षाको गुणस्तरमा असर गर्छ। सेवानिवृत्त विदेशी सङ्कायभन्दा पनि स्थानीय सन्दर्भ र कानूनबारे राम्ररी बुझ्ने नेपाली विशेषज्ञलाई प्रोत्साहन गर्नुपर्छ। उनीहरूको नेपाली विद्यार्थी पढाउने र राष्ट्रिय मेडिको-लिगल सेवामा सम्मिलन हुने उत्साह र लगाव बढी हुन्छ। फरेन्सिक जनशक्ति सुदृढ गर्न मेडिकल स्कुलहरूबीच सार्वजनिक-निजी साभेदारी र सहयोगात्मक शिक्षण मोडेलहरू पनि खोजिनुपर्छ। मेडिको-लिगल शव परीक्षण गर्ने सबै जिल्ला र अञ्चल अस्पतालहरूमा कम्तिमा २-३ जना विज्ञहरूको नेतृत्वमा फरेन्सिक मेडिसिन इकाइहरू स्थापना गरिनुपर्छ। यसले प्रोटोकलहरूको पालना गर्दै वैज्ञानिक शव परीक्षण सेवाहरूको उपलब्धता सुनिश्चित गर्नेछ।

लोकसेवा (निजामती सेवा) मार्फत पर्याप्त पदपूर्ति नभएसम्म मेडिकल कलेजका विज्ञहरूलाई उचित भत्ता सुविधा (अनरेरियम) दिएर सरकारी अस्पतालहरूलाई सहयोग गर्न थप जिम्मेवारी दिन सकिन्छ। अभावलाई सम्बोधन गर्न स्थानीय स्तरमा थप एमडी फरेन्सिक

मेडिसिन स्नातकहरू उत्पादन बढाउन सरकारले छात्रवृत्ति र छात्रभत्ता पनि उपलब्ध गराउन सक्छ।

२. शव परीक्षणका लागि सुविधा र उपकरणको व्यवस्था गर्ने

अधिकांश सरकारी शवगृहहरूमा शव परीक्षण सेट, तौल यन्त्र, फोटोग्राफी उपकरण, एक्स-रे, कोल्ड स्टोरेज र व्यक्तिगत सुरक्षा उपकरण जस्ता आधारभूत उपकरणहरू नै हुँदैनन्। फरेन्सिक विशेषज्ञहरूलाई वैज्ञानिक शव परीक्षण गर्न अनुमति दिन पूर्वाधारलाई विश्वव्यापी मापदण्डमा स्तरोन्नति गरिनुपर्छ। उचित शीत भण्डार, टूली, डिसेक्सन टेबल, भेन्टिलेटर निकास, चेन्जिङ रुम आदि अनिवार्य गर्नुपर्छ।

क्षेत्रगत आधारमा शव परीक्षणका लागि सहायक प्रयोगशाला सेवाहरू जस्तै: आधारभूत माइक्रोस्कोपी, विष विज्ञान, हिस्टोप्याथोलोजी, सेरोलोजी, माइक्रोबायोलोजी सेवाहरू उपलब्ध गराउनुपर्छ। शव वा शवबाट निकालिएको नमूना जोगाउन केमिकल, चिसो बाकस, बरफ वा फ्रिजमा ढुवानीलाई सुनिश्चित गरिनुपर्छ। उपकरणहरू मर्मत गर्न कम्पनीहरूसँग सेवा सम्भौतामा हस्ताक्षर गर्नुपर्छ। व्यवस्थित डाटा सङ्कलन सुनिश्चित गर्न मानक प्रोटोकल प्रयोग गर्नुपर्छ। प्रहरीले तथ्य सङ्कलनमा सहयोग गर्नुपर्दछ।

३. शव परीक्षण सेवाको निगरानी र गुणास्तर सुनिश्चित गर्ने

शवगृह सुविधाहरूको अनुगमन, पोस्टमार्टम रिपोर्टहरू प्रमाणित गर्न र गैर-विज्ञहरूले गरेको पोस्टमार्टमको अडिट गर्न स्वास्थ्य मन्त्रालय अन्तर्गत राष्ट्रिय फरेन्सिक मेडिसिन बोर्ड गठन गर्नुपर्छ। मानकीकृत रिपोर्टिङ ढाँचाहरू सिर्जना र कार्यान्वयन गर्नुपर्छ। अपेक्षित फरेन्सिक मापदण्ड पूरा नगर्ने प्रतिवेदनलाई न्यायको दुरुपयोग हुन नदिन विशेषज्ञ समितिले समीक्षा गर्नुपर्दछ।

भिडियो रेकर्डिङ्गले शव परीक्षण निष्कर्षहरू र प्रविधिहरू प्रमाणित गर्न मद्दत गर्न सक्छ। केही अवस्थामा विशेषज्ञद्वारा दोस्रो पटक शव परीक्षण आवश्यक पर्न सक्छ।

नमूना पुनः परीक्षणका लागि मानव अङ्गका नमूना संरक्षण र भण्डारण गर्ने व्यवस्था मिलाउनुपर्छ । विशेषज्ञहरूले मापदण्डहरू कायम राख्न नियमित रूपमा निरीक्षण र अन्य चिकित्सकहरूलाई तालिम दिएर प्रमाणित गर्नुपर्छ । बोर्डले उनीहरूको सीप वृद्धि गर्न निरन्तर चिकित्सा शिक्षालाई व्यवस्थित गर्न सक्छ ।

४. **मेडिकल कलेजका फरेन्सिक विशेषज्ञ परिचालन गर्ने**
स्वास्थ्य मन्त्रालयले सबै मेडिकल कलेजका फरेन्सिक मेडिसिन विभागलाई मेडिको-लिंगल सेवाका लागि आधिकारिक केन्द्रको रूपमा औपचारिक सूचीकृत गर्नुपर्दछ । उनीहरूको विशेषज्ञता राष्ट्रिय स्तरमा परिचालन गर्नुपर्दछ । कलेजहरूलाई आफ्ना जिल्ला र आसपासका जिल्लाबाट जटिल शव परीक्षण रेफर गर्न क्षेत्रीय केन्द्र तोक सकिन्छ । निजी कलेजले पनि सार्वजनिक अस्पताललाई समझदारी पत्रका आधारमा सहयोग गर्न सक्छन् । टेलिमेडिसिन सुविधाहरूले विशेषज्ञहरूलाई टाढाबाट कठिन शव परीक्षणहरू मार्गदर्शन गर्न सक्षम पार्न सक्छ ।

५. **मेडिकल कलेजमा फरेन्सिक मेडिसिन विशेषज्ञ भर्ना गर्ने**

केही मेडिकल कलेजका फरेन्सिक मेडिसिन विभागमा सङ्काय वा पूर्वाधार छैनन् । चिकित्सा शिक्षा आयोगले आवश्यक सङ्काय र सुविधा सुनिश्चित गर्नुपर्दछ र त्यसपछि मात्र सीट मान्यता वा वितरण गर्नुपर्दछ । प्रति ५०/१०० विद्यार्थी सीटका लागि कम्तीमा २/३ जना स्थायी फरेन्सिक विशेषज्ञ हुनुपर्दछ । एमडी फरेन्सिक मेडिसिनका लागि स्नातकोत्तर सीट निर्धारण पनि पर्याप्त संकाय र क्लिनिकल सामग्री भएका कलेजहरूमा मात्र गर्नुपर्दछ ।

६. **विशेषज्ञको निरन्तर व्यावसायिक विकास गर्ने**

फरेन्सिकप्याथोलोजी, एन्थ्रोपोलोजी, ओडोन्टोलोजी, हिस्टोप्याथोलोजी, फरेन्सिक नर्सिङ लगायतका अग्रगामी क्षेत्रमा विशेषज्ञहरूको क्षमता विकासका लागि अल्पकालीन तालिम, सम्मेलन र अन्तर्राष्ट्रिय फेलोशिपको अवसर प्रदान गर्नुपर्दछ। यसले फरेन्सिक अनुसन्धानको समग्र मापदण्डमा

सुधार ल्याउँछ । विशिष्ट प्रशिक्षण केन्द्र स्थापना गर्नुपर्दछ । समग्र ज्ञान प्रसारका लागि एउटा जर्नल सुरु गर्नुपर्दछ ।

७. **मेडिको-लिंगल सेवा सुदृढ बनाउने**

नेपालको राष्ट्रिय स्वास्थ्य बजेट मुख्यतः जीवित बिरामीहरूको उपचारतर्फ नै विनियोजन गरिन्छ । आफ्नो पक्षमा बोल्न नसक्ने मृतक र घाईते/पीडितलाई सहायता गर्ने मेडिको-लिंगल सेवाहरूलाई सुदृढ गर्नको लागि नगण्य बजेट छुट्ट्याइन्छ । मरेको मानिसले भोट (मत) दिन्न । फरेन्सिक पूर्वाधार स्थापना र विशेषज्ञ भर्नाले चुनावमा भोट (मत) प्राप्त नगर्ने भएर होला यसको उपेक्षा गरिएको मृतकप्रतिको यो उदासीनता चिन्ताजनक छ र विकृत प्राथमिकताहरू प्रदर्शन गर्दछ । सरकारले फरेन्सिक सेवाहरू स्वास्थ्य सेवाको अत्यावश्यक स्तम्भ हो भनी स्वीकार गर्नुपर्छ र व्यापक सुधारका लागि पर्याप्त बजेट विनियोजन गर्नुपर्छ । मृतकका लागि न्याय नै जीवितका लागि न्याय हो । मृतक र पीडितले मौन प्रमाणका आधारमा सुधारको आग्रह गरिरहेका छन् ।

राष्ट्रिय नीति तर्जुमा गर्न, कार्यविधिलाई मापदण्डका माध्यमबाट मानकीकरण गर्न र चिकित्सा क्षेत्रलाई नियमन गर्न स्वास्थ्य मन्त्रालय अन्तर्गतको कानूनी तथा फरेन्सिक मेडिसिनका लागि छुट्टै विभाग आवश्यक छ । प्रहरी, वकिल, न्यायाधीश र फरेन्सिक विज्ञ सम्मिलित फरेन्सिक सल्लाहकार निकाय गठन गरिनुपर्छ । मेडिको-लिंगल तन्त्र सहज र सुचारु सञ्चालनका लागि उपयुक्त बजेट विनियोजन आवश्यक छ । फरेन्सिक प्रमाणसहितका अपराधमा फास्ट-ट्र्याक अदालतले दोषी ठहर्ने दरमा सुधार ल्याउनेछ ।

संक्षेपमा भन्नुपर्दा, नेपालले न्याय वितरणमा फरेन्सिक मेडिसिनको महत्वलाई मान्यता दिएर विश्वस्तरीय मेडिको-लिंगल सेवा विकास गर्न सक्छ । मेडिको-लिंगल ढाँचा सुदृढ बनाउन फरेन्सिक जनशक्ति प्रशिक्षण, पूर्वाधार सुधार, प्रोटोकल कार्यान्वयन र मापदण्ड निगरानीमा गर्न आवश्यक छ । अब कानूनको शासन र मानवअधिकार कायम गर्ने बेला आएको छ ।

The Importance of Medico-legal Consultation: Safeguarding Healthcare Excellence

Dr. Samjhana Ghimire, MD

Assistant Professor, Department of Forensic Medicine
Patan Academy of Health Sciences, Lalitpur, Nepal.

INTRODUCTION

In the ever-evolving landscape of healthcare, it's imperative that physicians not only focus on providing top-notch medical care but also ensure that they navigate the complex web of legal and ethical considerations that accompany their practice. Medico-legal consultation by treating physicians is a cornerstone of this delicate balance, offering a multitude of benefits that extend beyond the clinic walls.



DEALING WITH MEDICO-LEGAL CASES IN MEDICAL PRACTICE

Accurate and thorough documentation of patients' medical histories, diagnoses, and treatment plans is vital. This meticulous record-keeping not only supports patient

care but also serves as a crucial reference in legal matters, such as malpractice claims or disability cases.

Treating physicians must adhere to a maze of legal standards and regulations, and medico-legal consultation ensures that their practices and decisions align with these mandates. This proactive approach minimizes the risk of legal challenges arising

from patient care.

The ethical principle of informed consent can be upheld through medico-legal consultation. Physicians can better explain potential risks and benefits of treatment, ensuring that patients are well-informed about their rights and choices.

Medico-legal consultation can provide guidance on handling medical records. Physicians need to follow specific protocols to protect patient privacy and comply with health information laws on these essential procedures.

In cases involving injury, negligence, or malpractice claims, treating physicians may be called upon to provide expert opinions or testify in court. Their insights help clarify the medical aspects of a case, aiding in fair and just legal resolutions.

BENEFITS OF MEDICO-LEGAL CONSULTATION

Consulting with medico-legal experts safeguards the interests and reputations of treating physicians. It ensures they act within legal boundaries and best practices, offering protection in case of legal disputes.

By identifying potential sources of risk in patient care, medico-legal consultation helps physicians implement strategies to minimize these risks. This, in turn, enhances patient safety and overall quality of care provided.

Medico-legal consultation plays a crucial role in determining the manner of incidents, especially in cases of injury or death. Here's how it helps fill the gap in understanding the

manner of an incident.

PROCEDURE OF MEDICOLEGAL CONSULTATION

We as medico-legal experts, conduct thorough examinations of the deceased or injured individuals. We can assess factors such as injuries, wounds, toxicology, and other physical evidence to establish the cause and manner of the incident.

We can collect and preserve physical evidence from the scene, the victim's body, and related materials. This evidence can be crucial in determining whether the incident was accidental, intentional (homicide or suicide), or undetermined.

In cases of suspicious deaths, autopsies are performed to examine internal injuries, organs, and tissues. This detailed examination can uncover hidden or internal factors contributing to the incident's manner.

Toxicology tests can be performed to detect the presence of drugs, alcohol, or other substances in the victim's system, which can shed light on the circumstances of the incident.

We often serve as expert witnesses in legal proceedings. We provide testimony based on our findings and expertise, helping the court understand the manner in which the incident occurred.

In complex cases, we may help by participating in crime scene reconstruction to recreate the events leading to the incident. This can provide valuable insights into the manner of the incident.

We as a medico legal consultant can

collaborate with law enforcement agencies to share our findings and collaborate on investigations. This helps ensure that all available information is considered when determining the manner of the incident as well as can generate detailed reports documenting our findings, which can serve as essential documentation in legal proceedings and investigations.

SUMMARY

Medico-legal consultation is a vital aspect of modern health care that enhances patient care and safeguards the integrity of the medical profession. It's a testament to physicians' dedication to excellence, both in medical expertise and ethical conduct, and it ultimately leads to better healthcare outcomes for all. It involves a multidisciplinary approach that combines medical expertise with legal principles to investigate and determine the manner of incidents. By meticulously examining evidence, conducting autopsies, and providing expert testimony, we can contribute significantly to the accurate and fair determination of how an incident occurred.

SERVICES IN OUR HOSPITAL AND RECOMMENDATION

Currently three forensic medicine physicians are working full time in the Department of Forensic Medicine of Patan Academy of health science. Since its establishment, this department has been providing in house medicolegal services and recently expanded this service in other hospitals as well, however, cases referring

for medicolegal consultation by practicing physician/surgeon remain meager over the years.

In present day, seeking medicolegal consultant has become essential in order to avoid costly mistakes and ensure accurate treatments and prescriptions. In days to come, we hope this service will be utilized to the fullest for the benefit of the patients and also in safeguarding yourself.

Current situation of LGBT in Nepal

Dr. Dhiraj Kumar Shah, MD

Lecturer, Department of Forensic Medicine
College of Medical Sciences, Bharatpur, Nepal.

Introduction

In recent years, lesbian, gay, bisexual, and transgender (LGBT) rights have advanced in our nation. The Blue Diamond Society, which was founded in 2001, assists the community with sexual health issues and advocates on behalf of LGBT persons in Nepal. There is a drop-in center in Kathmandu that offers free HIV testing, and there are more than 50 other offices of the organization throughout the nation. For LGBT Nepalese, there are more groups like Mitini Nepal, Parichaya Samaj, and Sahaayam.¹

LGBT rights are recognized as essential rights in our country's constitution.² The rights of LGBT Nepal are modified in the ways listed below.

Same-sex relationships are permitted

Private gay relationships between willing adults were permitted in Nepal in 2007. No matter what gender, 18 is the legal age of consent.

Gender recognition

In 2007, the Nepalese Supreme Court created the category of "other" gender.³ Citizenships are now granted with the option "other" (or "O") for transsexual persons. Bishnu Adhikari was the first Nepali national to formally register as a "third gender" in 2008. The option to register to vote as "third gender" is now available to

citizens.⁴ Bhumika Shrestha was the first transgender woman to go abroad with a passport designating her as "other" gender in 2015. Monica Shahi was the first individual to obtain a passport with the "other" gender category.⁵

Same-sex unions

On June 28, 2023, a decree was published requiring the government to put the appropriate plans in place to "temporarily register" the unions of "non-traditional couples and sexual minorities." on June 28, 2023, by Justice Til Prasad Shrestha's bench of one. It has received no response from the government. There isn't a national legislation prohibiting same-sex unions in our country.³

The new Nepali Civil Code defines marriage as being between spouses of the opposite sex and does not cover same-sex unions.^{6,7}

Military service

The Nepalese Army accepts openly serving gay, lesbian, and bisexual individuals.⁸ Military law of Nepal does not expressly prohibit serving.⁹

Clauses in the Constitution of 2015

Citizens have the right to get a citizenship ID that reflects their preferred gender, according to Article 12 of our constitution. The State will not "discriminate [against] any citizens

based on origin, religion, race, caste, tribe, gender, language, or ideological conviction or any other status,” according to Article 18 of our constitution. LGBTI individuals are acknowledged as disadvantaged groups and are listed there.

Gender-neutral language was used in place of the previous Constitution’s references to “male and female” and “son or daughter” in Article 18. According to the “principle of inclusion,” Article 42 lists “gender and sexual minorities” as having the right to participate in state procedures and public services.^{10,11}

In vitro fertilization and child adaption

In our nation, there is no option for same-sex couples to adopt children, and lesbian couples are not given access to in vitro fertilization.¹¹

MSMs who donate blood

In our nation, blood donation is not permitted for guys who have intercourse with other men.¹¹

LGBT education

Nepal is the second Asian nation, after Mongolia, to introduce lessons on gender and sexual diversity in grades 7-9 (13 to 15 years old).¹²

LGBT political participation

Asia’s first openly gay lawmaker was a man named Sunil Babu Pant. Pant served in the legislature between 2008 and 2012.¹³

Conclusion

The Constitution of Nepal’s inclusion of LGBT rights as fundamental rights and the adoption of new legislation have improved

the lives and circumstances of LGBT Nepalese. However, there are considerable gaps in the protection of rights to personal autonomy and physical integrity, as well as against discrimination.

References:

1. ANI News. Nepal's Supreme Court Issues an Interim Order to Temporarily Register Same-Sex Marriages. 2023 Jun 29.
2. Constitution of Nepal, 2015.
3. Chudy E. Nepal ordered to recognise same-sex marriage by Supreme Court. PinkNews. 2023 Jun 30.
4. Knight M, Bochenek K. Establishing a Third Gender Category in Nepal: Process and Prognosis. Emory University School of Law; 2016 Mar 1.
5. Bhumika is the first transgender person to use an "other" category passport to travel abroad. The Kathmandu Post. 2015 Oct 6.
6. Executive to introduce special laws to deal with the identical-sex marriage. 2017 Feb 25.
7. Marriage provision beneath new civil code of is unconstitutional. 2018 Aug 23.
8. Naples N. Associate to Sexuality Studied. John Wiley & Sons; 2020 Apr 29.
9. Nepal. Law Commission. Chapter-7 Offences, Military Zact, 2063.
10. Nepal lawmakers approve first LGBTI protections in new constitution. Pahichan.Com. 2015 Sep 15.
11. LGBT rights in Nepal. Wikipedia, the free encyclopedia.
12. UNDP, USAID. Being LGBT in Asia: Nepal country report. Bangkok; 2014.
13. United Nations Development Programme. Leave nobody behind: Advancing social, economic, cultural and political inclusion of LGBTI people in Asia and the Pacific - summary. 2015.

Victim Blaming- Are We Guilty too?

Dr. Eugene Dolma, MD

Department of Forensic Medicine

Institute of Medicine, Kathmandu, Nepal.

Two recent high-profile sexual assault cases in Nepal, followed by a barrage of negative comments across social media platforms rebuking and shaming the victims compelled me to delve deeper into the phenomenon of victim blaming and how we can improve and calibrate our approach in the medico-legal examination of such cases.

As the term suggests, Victim Blaming is a practice whereby a victim of a criminal act is directly or indirectly held responsible for the very crime that has been committed against him or her. This practice is more prevalent in cases of rape and sexual harassment as compared to other types of crimes. In the context of sexual assault, blaming the victim (BTV) involves instances where the victim is to have himself or herself provoked or instigated the criminal act.¹

When an act of sexual assault is committed, the criminal nature of the act sometimes gets diluted under the garb of morality by way of Victim blaming. Some section of the society are quick to draw up a conclusion that the attire or the character of the victim may have provoked the accused person or the victim should have been more careful and diligent in not crossing the path with the accused person. Such perceptions are usually expressed explicitly through various forms of social and mainstream media while sometimes they are limited to one's mind and conscience. It may be noted

that the latter also amounts to a passive form of Victim Blaming.

Victim blaming is not a universal phenomenon. However, this does not mean that the practice is restricted to developing countries where people have more conservative beliefs and where literacy rate is low. It is surprising that the practice is equally prevalent among societies with high literacy rate and socio-economic status. It may be noted that an individual's tendency to resort to victim blaming depends upon the society she lives in, her family background, their personal life experiences, their understanding of gender and sexuality and their cultural and religious beliefs.

Let us try to elucidate various researches based on Victim Blaming at present.

1) **Traditional gender role endorsement/benevolent sexism and rape myth endorsement (RME)**

While there is no consensus on the effect of gender on victim blaming,² research has established that endorsement of gender inequality and traditional gender role is associated with greater RME and victim blaming. This is more so in acquaintance rape where they have documented a positive relationship between victim blaming and endorsement of traditional gender roles.

Benevolent sexism is the totality of beliefs and attitudes that suggest that women are lower in status and in need of men's protection; and researchers have found a correlation between benevolent sexism and victim blaming.³

2) Victim

- a) Types: The type and form of rape also lends to the victim blaming. Victims of stranger rape are the least likely to be blamed for the assault while victims of marital rape are much more likely to be found culpable. The victim blame increases as the relationship between the victim and assailant become more familiar and closer.³ An overwhelming majority of sexual assaults, 80%, are found to have been perpetrated by an acquaintance. Another study has shown that there is an influence between the level of victim resistance and attribution of blame, with a lower resistance shown by the victim associated with greater blame.⁴
- b) Appearance: The appearance of the victim, when perceived as wearing revealing clothing, is more likely to be blamed for the assault. A common misconception is that the act of rape is based on sexual desire and therefore by dressing suggestively and acting to lure someone in, the victim is asking for it.
- c) Presence of drugs and alcohol: Studies that manipulated the intoxication level found that intoxicated victims were blamed more for an acquaintance rape than sober victims³ with a linear increase in victim blame with the level of victim intoxication.⁵ However, the opposite effect of intoxication was seen

when the perpetrators were evaluated: the more drunk the perpetrator, the more participants excused their behavior. Another study showed victims intoxicated by marijuana or alcohol were perceived to be more blameworthy while the reverse (less blameworthy) was seen when the perpetrators were intoxicated by the same substances.⁶

3. Role of Moral value, “Binding values vs individualizing value”

A series of experiments conducted by Niemi, L with her colleague Liane Young to try and better explain the tendency of victim blaming found that people who have higher levels of what are known as “binding values” – a set of moral principles endorsing in-group loyalty, authority and purity value which help the group cohere – are more likely to judge victims for being fully or at least partially responsible for their fates against those with “individualizing values” - caring and fairness values which have to do with treating everyone fairly.⁷

4. Media and sexual objectification

The sexualized representation of women in the media (sexual objectification of women, portrayal of sexual aggression as normative behavior and eroticizing sexual dominance) leads to a greater acceptance and legitimation of violence against women and contributes to victim blaming.

Media coverage of stranger and gang rape and celebrity involvement in assaults is wider in our country than the much more prevalent acquaintance-and-single-assailant sexual violence cases. This influences how perceivers determine what they believe constitutes a “real rape” and

results in increased victim blaming. In short, the media may exacerbate endorsement of rape myths, which in turn promotes greater victim blaming. The language used in the reporting and discussion of rape by the media also contributes to victim blaming. Glaring headlines and language used by both the for-and-against the rape allegation may have negative consequences. "... when participants read vignettes in which focus was shifted onto victims and off of perpetrators by placing victims in the sentence subject position in the majority of sentences, participants imbued victims with more responsibility, reported more ways that victims could have changed the outcome (counterfactual statements), and perceived victims as less forced"⁷. In short, when the language of the media coverage overwhelmingly focused on the perpetrator's actions, victim-blaming decreased.

5) Political attitude

People who endorse more politically conservative views are also more likely to blame victims of sexual assault.⁸

The psychology behind victim blaming

The psychology behind victim blaming is apparently a natural self-defense mechanism.

a. Just-world hypothesis: Postulated by Canadian psychologist Melvin J. Lerner, this idea is believed to be the biggest factor that promotes victim blaming. The Just-world hypothesis refers to the idea that the world is a fair and orderly place where what happens to people generally is what they deserve.⁹ In short, the moral standings of our actions will determine the outcomes. So, with this belief that

all is rosy and to protect this illusion, we psychologically distance/separate ourselves from the victims of the tragedy or crime. To comfort ourselves away from the harsh reality that we could have been the victim, we resort to the belief that maybe the victim deserved it as we wonder if he/she had done something to invite or provoke the tragedy or that maybe she was wearing or doing something that was provocative.

b. Fundamental attribution error: One of the psychological phenomena that contributes to this tendency to lay the blame on the victim is known as the fundamental attribution error. The fundamental attribution error refers to an individual's tendency to attribute others' actions to their character or personality, while attributing their own behavior to external situational factors outside of their control. For example, when a classmate fails an exam, you tend to believe that his/her failure was the result of their internal characteristics such as not being smart enough or being lazy and not having prepared adequately for the exams; but when you fail the same exam, you attribute this to external factors such as the suffocating exam room, others distracting you and the long questions that did not correspond to the required time allocated for answering them!

c) Hindsight bias: Colloquially known as the "I knew it all along phenomenon," it is a psychological phenomenon in which we become convinced we accurately predicted an event before it occurred. This allows people to overestimate one's ability to have foreseen the outcome.

In the context of sexual assault, victim blaming is used with the rationale that “they should have known better”. Part of the reason why hindsight bias arises is that we often look for the easiest explanations and predictions in order to quickly make sense of the world. It is easier to focus on individuals and their actions over more nuanced, systemic causes. It is also easy to form and support predictions for events that have already occurred. This hindsight makes it seem like the victims of a crime, accident, or another form of misfortune should have been able to predict and prevent whatever problem might have befallen them.

d) Invulnerability theory: The invulnerability theory claims that this is used to blame victims as a means to protect one’s own feelings of invulnerability.¹⁰ A common statement like: “*She was raped because she walked home alone in the dark. I would never do that, so I won’t be raped.*”

¹¹ By thinking and deciding that the victims brought on the attack themselves, they create a false sense of security. This reassures people that as long as they do not act as the victim did at the time of the attack, they will be fine and hence this creates the illusion of invulnerability for themselves.¹²

The impact of victim blaming

The consequences of rape and sexual violence go way beyond physical trauma. Survivors can have long-term devastating psychological impacts. When a victim is blamed for the crime that has been committed against her, it invalidates her traumatic experiences, enhancing her feelings of isolation and self-doubt. Another negative impact is that the victims experience greater distress, longer recovery time and are less

likely to report future abuse.¹³

The way forward

Though the tendency to blame and have some of the above-mentioned feelings and beliefs which have been peeled open for us by the science of human psychology, victim blaming is **not** inevitable, and we have a simple counteragent for this, within us. A bit of empathy goes a long way. According to a research conducted by David Aderman et. al.,¹⁴ practicing empathy, in particular, is a good first step to confront the psychological tendency we have to blame the victim.

References:

1. Eigenberg H, Garland R. Victim blaming. In: Moriarty LJ, editor. Controversies in victimology. Newark, NJ: Elsevier Press; 2008. p. 21–36.
2. Whatley MA. Victim’s characteristics influencing attributions of responsibility to rape victims: A meta-analysis. *Aggress Violent Behav.* 1996;1:91. doi:10.1016/1359-1789(95)00011-9.
3. Gravelin CR, Biernat M, Bucher CE. Blaming the victim of acquaintance rape: Individual, situational and sociocultural factors. *Front Psychol.* 2019 Jan 21; doi:10.3389/fpsyg.2018.02422.
4. De la Torre Laso J, Rodríguez-Díaz JM. The relationship between attribution of blame and the perception of resistance in relation to victims of sexual violence. *Front Psychol.* 2022 Aug 25;13:868793. doi:10.3389/fpsyg.2022.868793. PMID: 36092096; PMCID: PMC9455198.
5. Stormo KJ, Lang AR, Stritzke WGK. Attributions about acquaintance rape: The role of alcohol and individual difference. *J Appl Soc Psychol.*

- 1997;27:279-305. doi:10.1111/j1559-1816.1997.tb00633.x.
6. Qi SJ, Starfelt LC, White KM. Attribution of responsibility, blame and justifiability to a perpetrator and victim in an acquaintance rape scenario: Influence of Marijuana intoxication. *J Sex Aggress.* 2016;22:20-35. doi:10.1080/13552600.2015.1025868.
 7. Niemi L, Young L. When and why we see victims as responsible: The impact of ideology on attitudes toward victims. *Pers Soc Psychol Bull.* 2016 Sep;42(9):1227-42. doi:10.1177/0146167216653933. Epub 2016 Jun 23. PMID: 27340155.
 8. Anderson KB, Cooper H, Okamura L. Individual differences and attitude towards rape: A meta-analytic review. *Pers Soc Psycho Bull.* 1997;23:295-315. doi:10.1177/0146167297233008.
 9. Lerner MJ, Simmons CH. Observer's reaction to the «innocent victim»: Compassion or rejection? *J Pers Soc Psychol.* 1966;4(2):203–210. doi:10.1037/h0023562.
 10. Andrew B, Brewin CR, Rose S. Gender, social support, and PTSD in victims of violent crime. *J Traumatic Stress.* 2003;16(4):421-427.
 11. Blaming the Victim. 1998. [cited 2023 Sep 8]. Available from: http://www.feminist.com/resources/ourbodies/viol_blame.html.
 12. The Canadian Resource Centre for Victims of Crime. Victim Blaming. August 2009. [cited 2023 Sep 8]. Available from: https://crcvc.ca/docs/victim_blaming.pdf.
 13. Coates L, Richardson C, Wade A. Reshaping Responses to Victims of Violent Crime. Presented at Cowichan Bay, B.C., Canada; May 2006.
 14. Aderman D, Brehm SS, Katz LB. Empathic observation of an innocent victim: The just world revisited. *J Pers Soc Psychol.* 1974;29(3):342–347. doi:10.1037/h0036001.

Hymen and Justice

Dr. Sabnam Shrestha, MD

Department of Forensic Medicine
Bhaktapur Hospital, Bhaktapur, Nepal.

Hymen, a little tissue considered as fortress of honorable woman, who controls herself, is a fold of mucous membrane at vaginal outlet. Being a vestigial organ, it carries social function in many patriarchal cultures i.e. controlling the female sexuality by acting as a physical barrier to sexual assaults on women's honor.

Hymen is formed during fetal development from the remnants of the solid tube through which vagina develops. Many a times, it's considered to be a membranous tissue completely covering the vaginal orifice which can be cleared by having complete knowledge about anatomy, configuration and changes during various phases of life. It has relatively few blood vessels that may not bleed significantly until it's associated with injuries of other structures which may be responsible for blood stained bed sheets during first night of wedding than trauma to the hymen.

In some part of the world female's virginity is considered to be certificate of a female's moral character and social values for being eligible for marriage. For confirmation, the vaginal examination called virginity testing is done. Virginity testing is the examination of female genitalia to know if she is pure or impure i.e. has involved in sexual activity or not. This examination includes inspection of hymen size or tears

and two-finger vaginal insertion to measure size of the introitus or laxity of the vaginal wall. This idea of measuring virginity is the most harmful, damaging myth and also violates the human right. Thus discouraging the virginity test, the UN agencies have banned it.

Its anatomy is diverse and dynamic, changes during different phases of life under the influence of hormone. In newborn babies it is usually thick, pink and may have folds or projections, while they are under the influence of maternal hormone. It changes and becomes relatively thin with smooth edged membranes during pre-pubertal period. It thickens and elasticity increases during puberty. Decrease in estrogen during menopause leads to thinning and decrease in elasticity of tissue.

There are different configurations of hymen (Fig 1)

1. Fimbriated or denticular – the free edges of hymen show indentations but the indentations does not reach the peripheral margin/ hymen with finger like projections
2. Annular or circular– the hymen has almost circular opening
3. Semilunar- the hymen with a crescent shape
4. Imperforate - the hymen with no opening
5. Cribriform or fenestrated – the hymen

with multiple openings

6. Septate or hymen bifenestratus- hymen in which the opening is divided by the narrow septum
7. Hymen trifenestratus- three openings are seen
8. Subseptate- hymen with partially filled opening by a septum growing out of one wall, but not reaching other
9. Falciform- hymen with sickle shaped opening
10. Hymen labialis or vertical – the opening is almost vertical slit like
11. Irregular- no regular pattern can be made out
12. Hymen with tear
13. Hymen microperforatus- opening much smaller than normal
14. Carunculae mytriformes

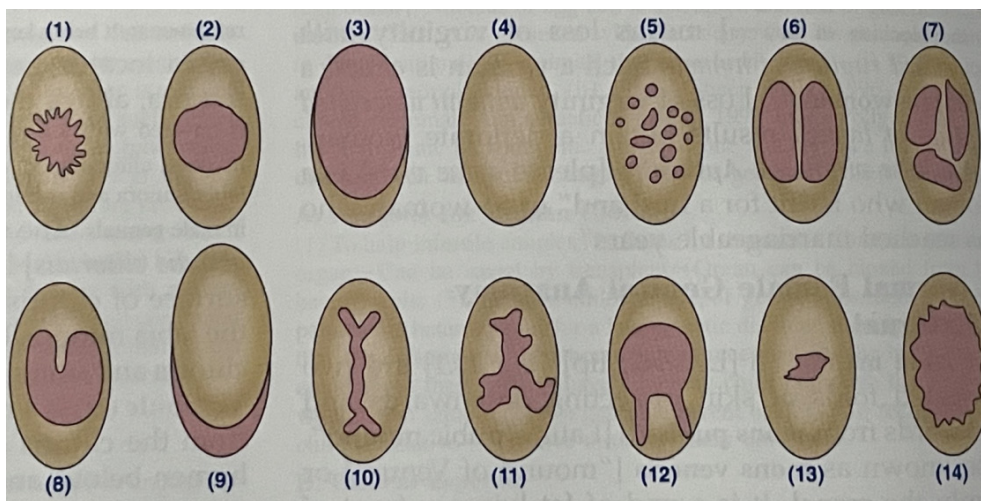
The misinterpretations regarding hymen in individuals also have been documented and prioritized as evidence amongst investigators, lawyers and judges associated with the cases of sexual assault. Some physicians with little knowledge have false belief that the sexual acts always result

in tear of the hymen or that an injury to the hymen is a solid proof of sexual assault.

Lesser elasticity of hymen and smaller vagina in pre-pubertal girls increases the likelihood of trauma after penetration, but studies have shown no physical evidence of penetration in most reported cases of consensual and non-consensual sexual intercourse even in pre-pubertal girls.[4] Vaginal penetration may lead to minimal or no injury in post-pubertal women due to elasticity of hymen. A study compared hymenal morphology in adolescent girls with or without a history of consensual sexual intercourse and showed 52% of cases had no injury although they admitted to have had sexual intercourse.[5]

There are various causes of rupture of hymen apart from sexual intercourse as

1. Accident –
 - a. Straddle injuries including fall on a projecting object, slipping on fence, furniture, pole etc
 - b. Accidental rupture associated with tearing of perineum, peri-urethral tissues, labia and mons usually



Source: Aggrawal, Anil. (2014). Textbook of Forensic Medicine and Toxicology. 10.13140/2.1.2458.0800.

involved and injuries on other parts of body are also seen consistent with the history of accident

- c. Separation of thighs forcibly in children too far with tear of perineum, hymen may simultaneously get ruptured.
2. Bad hygiene- leading to irritation, scratching and tear in the hymen
3. Foreign body- Sola pith -which is used mainly by prostitutes to dilate the vagina of very young girls to make them suitable for sexual intercourse and the hymen is torn in the process
4. Gynecological examination
5. Masturbation
6. Sanitary tampons
7. Surgical operation
8. Ulceration- diphtheria, fungus, other causes

Therefore, alteration in the appearance of hymen only, is non-specific finding until it's corroborated with history and other forms of evidence.

Distinguishing injuries and naturally occurring morphological changes is a challenge, even for experienced physicians. Non-specialized practitioners may assume normal variations to indicate sexual trauma. Normal variants commonly mistaken for sexual trauma are anal fissures, genital nevi, genital erythema, enlargement of vaginal orifice, failure of mid line fusion of hymen, narrowing of hymenal edge, partial hymenal notching, hymenal clefts, lichen sclerosis etc. Different medical examination reports of same case are produced in court by different doctors, confusing the juries. It's not surprising at all as medical students might not be well trained about hymen during

their courses. Therefore it's very important for such sensitive cases be examined by experienced or trained doctors.

Despite lack of specificity and sensitivity a full forensic medical examination of case of sexual assault and abuse is to be done as some signs may have significance as follows:

1. Laceration- acute or subacute tear through the full thickness of the tissue or skin. A laceration to the hymen may include tearing of full width or only partial width. Though laceration of hymen is the commonest injury found in case of vaginal penetration, studies have shown only 33% had reported laceration of hymen in confirmed history of vaginal penetration. A laceration of hymen of any depth is highly suggestive of child sexual abuse, although it's not common. [6]
2. Hymenal transections- defect in the posterior hymen rim that extends to or through the base of the hymen. It's considered to be a sign of healed injury and when it's present, previous or past penetrative injury should be strongly suspected.
3. Bumps and Munds- solid, localized, rounded, thickened area of tissue on the edge of the hymen which are the normal variants
4. Clefts and notches – indentation in the hymenal membrane. Deep clefts and notches in the posterior half of a non-fimbriated hymen have only been reported in pre-pubertal girls with a history of vaginal penetration.

Descriptions such as intact hymen or broken hymen in medical reports are to be avoided, instead should describe the specific findings using national standards. And also a finding in the hymen or its absence does not give certainty about sexual activity with or without consent should be cleared.

Information gained through forensic medical examination report can support a legal charge of various forms of sexual violence but various things are to be taken into consideration like patient's history, genital and non-genital injuries of the body, psychological evidence, laboratory evidence (Spermatozoa, DNA etc) or other forms of forensic evidence and investigations. The final justice to the case of sexual violence is given by the judge considering evidence, not by the status of hymen.

REFERENCES:

1. <https://healthify.nz/health-a-z/h/hymens-and-virginity/>
2. World Health Organization. Interagency statement calls for the elimination of “virginity testing”. October 18, 2018. Retrieved February 20, 2019. <https://www.who.int/reproductivehealth/virginity-testing-elimination/en/>.
3. Eich. T. A tiny membrane defending “us” against “them”: Arabic internet debate about hymenorrhaphy in Sunni Islamic law. *Cult Health Sex.* 2010; 12(7):755-69.
4. Mishori R, Ferdowsian H, Naimer K, Volpellier M, McHale T. The little tissue that couldn't - dispelling myths about the Hymen's role in determining sexual history and assault. *Reprod Health.* 2019 Jun 3;16(1):74. doi: 10.1186/s12978-019-0731-8. PMID: 31159818; PMCID: PMC6547601
5. Adams JA, Botash AS, Kellogg N. Differences in hymenal morphology between adolescent girls with and without a history of consensual sexual intercourse. *Arch Pediatr Adolesc Med.* 2004 Mar;158(3):280-5. doi: 10.1001/archpedi.158.3.280. PMID: 14993089.
6. Aggrawal, Anil. (2014). *Textbook of Forensic Medicine and Toxicology.* 10.13140/2.1.2458.0800.

Conducting Child Sexual Abuse Examination in Patan Hospital

Dr. Srijana Kunwar, MD

Department of Forensic Medicine

Patan Academy of Health Sciences, Lalitpur, Nepal.

“Maya” (name changed) is a 12 year old girl, currently studying in the sixth grade. She lives with her sister and her husband since her mother passed away a year ago. She came into the Emergency Room with abdominal pain and heavy per vaginal bleeding. Maya, at first, refused to get examined by the treating doctor and got agitated. She started crying and disclosed what her brother-in-law had been doing to her “मेरो सुसुमा बच्चा पारुने काम गर्नु हुन्छ”. On further inquiry, she said that he had been telling her that it was her duty to fulfill his wishes because he was letting her stay in his home, and providing her with shelter, education, and food. She had no idea whether whatever was happening was right or wrong, and whether or not she needed to tell anybody.

Children, one of the most vulnerable groups in the population, are clueless and powerless when it comes to protecting their own human rights. Their voices and interests are usually not taken seriously by the adult world. Therefore, they can easily get abused by various perpetrators without getting noticed. because of their vulnerability and their inability to defend themselves against the abuse. They are in no state to differentiate between what's good

and what's bad for them, including abusive behavior. Child sexual abuse is defined by the WHO as “the involvement of a child in sexual activity that he or she does not fully comprehend and is unable to give informed consent to, or for which the child is not developmentally prepared, or else that violate the laws or social taboos of society.” In Nepal's context- if the person is less than 18 years of age, even if consent is given, it is invalid and considered a violation of the law.

Globally, the prevalence of child sexual abuse is overwhelming and a matter of great concern. UNICEF approximates that 120 million children are or have been abused during their childhood. In 2002, WHO estimated that, worldwide- 150 million females and 73 million males under the age of 18 years have suffered from sexual abuse. However, the availability of data regarding such cases cannot be readily attained since most cases are under-reported or not reported at all, due to social stigma, and the innocence and lack of knowledge in the children - such as when the abusers are the children's own guardians. Hence, such incidences are far greater in number than what is reported. Also, since child sexual abuse isn't properly defined, the statistics on this matter are lacking and faulty.

In Nepal, data regarding child sexual abuse is not precise or systematically sorted. So, it is vital to remember that the available statistics are largely dependent on cases reported to the authorities like Nepal Police. Annual factsheet on Gender Based Violence published by Nepal Police Headquarter, year 2078/2079 -Shrawan to Asar, recorded the total reported cases of Gender Based Violence in Nepal to be 3,461. As per the annual factsheet, the total number of child sexual abuse cases that are registered comes up to 314. Similarly, 2254 cases of sexual violence against people under 18 years of age have been reported, including 34 cases with male victims. Most incidences of sexual violence was seen among children between 11 and 16 years of age.

In Patan Hospital, year 2078/2079 - Shrawan to Asar, a total of 148 cases of gender based violence were registered. There were 69 reported cases below the age of 18 where they were all women with a history of sexual assault. 43 of these cases were those of children between 11 and 16, one of the most violated age groups, corresponding to the data from the Nepal Police.

In Nepal, there is a notable absence of a distinct and comprehensive legal definition for child sexual abuse and abuse involving children under the age of 18 years. This absence of precise legal terminology creates challenges in addressing and prosecuting such cases effectively. The provision of awareness programs in schools for adolescents between 11 and 16 is of paramount importance, given that they are usually the most targeted, and are undergoing significant physical, emotional, and psychological effects, and

they may not always comprehend the implications of inappropriate behaviour or recognize the signs of abuse. Hence, a lot of effort is required which could contribute to improving the condition of child abuse in Nepal, and create a safer environment for our children, ensuring that their rights are protected.

सबै भुन्डिएका लासहरू हत्या होइनन्

प्रा.डा. हरिहर वस्ती

कानूनी चिकित्सा विज्ञ

पछिल्लो समयमा हाम्रो समाजमा आत्महत्या गर्ने व्यक्तिको संख्या निकै बढ्दै गएको पाईन्छ। हुनत विश्वव्यापी रूपमा नै यो क्रम बढिरहेको छ। विश्व स्वास्थ्य संगठनको तथ्याङ्क अनुसार करिब १० लाख मानिस बर्षेनी आत्महत्या गर्दछन्। एक लाखमा १६ जना अर्थात हरेक ४० सेकेण्डमा १ जनाले आत्महत्या गरिरहेका छन्। यो संख्या सन् २०३० मा दुई गुणाले बढ्ने आँकलन गरिएको छ। यो संख्या आत्महत्यामा सफल हुनेको संख्या हो भने विश्वमा हरेक बर्ष एकदेखि दुई करोड मानिस आफैँले आफूलाई सिध्याउन प्रयास गरिरहेका हुन्छन्। यो समूहका ५५ प्रतिशतको उमेर १५ देखि ४५ बर्ष भित्र पर्दछ। आत्महत्याका विविध कारणहरूको खोजी गरी तिनलाई रोक्ने प्रयास गर्ने हो भने पक्कै पनि केही मात्रामा यो संख्यालाई घटाउन सकिन्छ र सबैभन्दा उत्पादक उमेर समूहका मानिसलाई बचाउनु भनेको उसको परिवार, समुदाय तथा राज्यकै लागि पनि एउटा ठूलो सहयोग गर्नु हो।

आत्महत्या गर्ने विभिन्न तरिकाहरूमा संसारभरी एकरूपता नभए पनि कतिपय तरिका जहाँतहाँ अपनाउने गरेको पाईन्छ। यस्ता तरिका मध्ये भुन्डिएर मर्नु, विष सेवन गरी मर्ने प्रयास गर्नु, उचाईबाट हाम फाल्नु, पानीको ठूलो श्रोतमा पसी मर्ने प्रयास गर्नु, बन्दुक जन्तु हतियारहरू आफ्नै जीउमा ताकेर पड्काउनु, मर्नका लागि मट्टीतेल छर्की आगो लगाउनु र धारिलो हतियारले घाँटी वा शरीरका अन्य भागमा काट्नु केही मुख्य तरिकाहरू हुन्।

किन यति धेरै मानिसहरू आत्महत्या गर्दछन् भन्ने कुराको सुक्ष्म अध्ययन नगरी धेरैजसो आत्महत्याका कारण खुल्दैनन्। तरपनि सरसर्ती हेर्दा आत्महत्याको निर्णय

गर्नु अगाडि सो व्यक्ति कुनै न कुनै प्रकारको मानसिक तनावमा परेको हुन्छ। यदि लामो समयसम्म मानसिक तनाव कायम रहेमा व्यक्तिमा उदाशीनता वा Depression को विकास हुन्छ। घर, परिवार तथा समाजमा अरुसँग मिलेर जान सक्ने कलामा कमी आउने वा गडबडी हुन जान्छ। जसलाई Adjustment disorder भनिन्छ। निरन्तर बढी रहेको उदाशीनताले काम गर्ने जाँगर मात्र मर्दैन विस्तारै सबै चिजमा अनिच्छा पैदा हुन्छ। अनावश्यक सोच तथा शंका बढ्दै जान्छन्। यी सबै आफ्नै मनलाई नकारात्मक असर पार्ने लक्षणहरूको एउटा चक्र बन्दछ। जसमा एउटा लक्षणले अर्को लक्षणलाई अरु बढाउन मद्दत गरीरहेको हुन्छ। अन्तमा कुनै दिन यस्तो आउँछ जब व्यक्ति आफूलाई असहाय र वेकारको भएको महशुस गर्दछ र अब बाँचेर काम छैन भनी आफ्नै ज्यान लिने निर्णय गर्न पुग्दछ। यदि आफन्त वा परिवारबाट उसको अवस्थालाई समयमै बुझी उदाशीनतालाई केले बढाई रहेको हो पत्ता लगाई मनोसामाजिक विमर्शको (Psycho-social counselling) समयमै उपयोग गरेमा सो व्यक्तिले आत्महत्या नगर्न सक्दछ। यस्तै अर्को आत्महत्या गर्ने अवस्था हो आवेश वा आवेगको। जुन लामो समयको उदाशीनता नभएर तुरुन्त उत्पन्न भएको कारणबाट सोच्दै नसोची आत्महत्याको निर्णय लिन पुग्नु हो। यसमा नसोचेको अवस्था एक्कासी पर्न गएमा र त्यसलाई पचाउने वा खप्ने शक्ती कम भएर अत्याधिक मानसिक तनाव परेकै समयमा व्यक्ति आत्महत्या गर्न पुग्दछ। उदाहरणको लागि परीक्षाको नतिजा पछि असफल भएको केही विद्यार्थी आत्महत्या गर्दछन्। त्यस्तै असफल प्रेम, अनपेक्षित ठूलो आर्थिक घाटाको स्थिति, नजिकको आफूलाई धेरै माया

गर्ने व्यक्तिको अकस्मात् मृत्यु जस्ता परिस्थितिबाट तुरुन्त आवेगमा आएर व्यक्तिले आत्महत्या गर्न सक्दछन् । कडा मानसिक रोगीहरू पनि गलत विश्वास र अनावश्यक भय त्रासबाट पिडीत भई आत्महत्याको प्रयास गर्न पुग्दछन् ।

हालको समयमा नेपालका किन आत्महत्याको दरमा वृद्धि रहेको छ भन्ने विषय विज्ञहरूको खोजीको विषय हो । आम रूपमा हेर्दा अविकसित मुलुकहरूमा नै आत्महत्या धेरै भएको हुनाले सामाजिक तथा आर्थिक कारणले हुने मानिसक तनाव धेरै हदसम्म एउटा कारण हुने गर्दछ । द्वन्दको अवस्था र द्वन्द पछिको समाजको अवस्था हेर्दा भई रहेका विषम परिस्थिति बाहेक सोच्दै नसोचेका नकरात्मक परिस्थितिको विकास पनि आत्महत्याको संख्या बढाउन केही मात्रामा जिम्मेवार छ । जस्तो परिवारमा कमाउने व्यक्ति अचानक मारिदा वा हराउन पुग्दा उसमा भर परेको सबै सदस्य प्रभावित हुने नै भए । यो बाहेक सामाजिक अन्याय, शान्ति सुव्यवस्थाको ठाउँमा अशान्ति र वेथिति एक आपसको सहयोग तथा सद्भावको ठाउँमा शत्रुता तथा वैमानी जस्ता कुसँस्कारले व्यक्तिलाई अनावश्यक मानसिक तनावका साथ बाँच्न वाध्य बनाउदछन् ।

जव मानिसले मर्ने बाटो तय गरी पक्का गर्न पुग्दछ । तब उसले कसरी मर्ने भन्ने तरिकाको खोजी गर्दछ । उदासिनता वा दीर्घ प्रकारको मानिसक तनावग्रस्त व्यक्तिले तरिकासम्बन्धी पनि योजना बनाएर त्यस्को लागि आवश्यक सामग्री तथा समय मिलाएर आत्महत्या गर्न पुग्दछ भने अचानक आवेशमा गरेको निर्णयको कार्यान्वयनमा भने जुन अवस्थामा जे चिज बस्तु विद्यमान छ वा फेला परेको छ सोही प्रयोग गरी आफ्नो ज्यान लिने कोशिस गर्दछ । कुलत अर्थात् मादक पदार्थ तथा औषधीहरूको दुर्व्यसनका कारण पनि कति मानिस आत्महत्याको बाटो रोज्ने अवस्थामा पुग्दछन् ।

भुन्डिएर गरिने आत्महत्या

आफ्नो ज्यान लिनको लागि भुन्डिएर मर्ने तरिका मानव सभ्यताको सुरुका दिन देखिनै सुरु गरिएको पाईन्छ ।

यसमा मर्ने व्यक्तिले कुनै लचकदार केही लामो चिज बस्तु जस्ताई गाँठो पारी वा अन्य तरिकाले कुनै ठाउँमा बाँध्न वा अड्काउन सकिने र फेरो पार्न मिल्ने जस्तो कपडा, डोरी, पेटी, नाम्ला, दाम्ला आदीको प्रयोग गर्दछ । कहिलेकाँही जुत्ताको तुना, पकेट रुमाल, टाई र आफ्नै लामो कमालले समेत सफलतापूर्वक आत्महत्या गरिएका अवस्था फेला पर्दछन् । आत्महत्याका विभिन्न उपायमध्ये भुन्डिएर मर्ने तरिका संसारका सबै देशमा प्रमुख रूपमा अपनाईने तरिका हो । क्यानडामा यो सबैभन्दा बढी प्रयोग गरिएको तरिकामा पर्दछ भने अमेरिकामा बन्दुकजन्य हतियारको प्रयोग पछि दोश्रो प्रमुख तरिकामा पर्दछ । यस्तै संयुक्त अधिराज्यमा लोग्ने मानिसहरूमा पहिलो र स्वास्नी मानिसहरूमा विष सेवन पछिको दोश्रो प्रमुख तरिका अपनाई मानिस भुन्डिएर आत्महत्या गर्दछन् । नेपालमा पनि भुन्डिएर मर्ने तरिका आम रूपमा प्रयोग गरेको पाईन्छ । काठमाण्डौमा गरिने लास जाँच केन्द्रमा गरिएको एक अध्ययनबाट प्राप्त तथ्याङ्क अनुसार करिव २०% अप्राकृतिक मृत्युहरूको भारमा आत्महत्या पाईएका छन् भने ति मध्ये ५८% ले भुन्डिएर आत्महत्या गरेका छन् भने ४०% ले विष सेवन गरेका छन् । यसमा ७५% जति १५ देखि ४५ वर्षका पाईएका छन् हरेक ५ जना आत्महत्या गर्ने मध्ये ३ जना पुरुष र २ जना महिला पर्दछन् । पुरुष र महिला दुवैमा भुन्डिएर मर्ने तरिका नै सबैभन्दा बढी अपनाएको देखिन्छ । सन् २०२० को नेपाल प्रहरीको तथ्याङ्क हेर्दा नेपालमा आत्महत्या गर्ने मध्ये ७०% भन्दा बढीले भुन्डिएर र २६%ले विष सेवन गरी आत्महत्या गरेका छन् ।

संसारभरी नै भुन्डिएर गरिने आत्महत्या किन धेरैले रोजेको होला भन्ने प्रश्नको उत्तर सजिलो गरी मिल्ने गर्दछ । पासोको रूपमा प्रयोग गरिने बस्तु आफैँसँग सँधै भईरहेको हुन्छ । यसको लागि खोज्ने समय र पैसा केही चाँहिदैन । भुन्डिने स्थान आफ्नै कोठा, द्वाईलेट, रुखको लच्केको हाँगो आदी पर्याप्त हुन्छ । मर्नको लागि लामो पिडा नहुने र मानिस तुरुन्त थाहा नपाई मर्ने भएकोले यो तरिका धेरै लोकप्रिय भएको हो । घाँटीमा बाँधिने पासोलाई

आफ्नै जीउको पुरा वा आंशिक तौलले तलातिर तानिने गरी कुनै स्थानमा बाँधी वा अड्काई जीउ छाडी दिएमा घाँटीमा चाप पर्दछ । सो चापको कारण घाँटी भित्र भएका रगत तलमाथि जाने आउने नसाहरू, गिदीबाट जीउतिर जाने र स्नायु नसाहरू र स्वास नली समेत थिचिन वा चेप्टीन पुग्दछन् । यतिसम्म कि टाउकोको मात्र करिब ८/१० किलोको चापले धेरै नसाहरू पुरै बन्द हुन सक्दछन् ।

भुन्डिने प्रकृत्यामा पासो कही अड्काएर यसको दुवै टुप्पा घाँटीको छेउछाउ नबाधी माथि एकै ठाउँमा परेपनि च्यापुको हड्डीले घाँटीमा अड्किन सजिलै मिल्ने हुन्छ । अलिकति उँचो ठाउँबाट खुट्टा मात्र छाडीदिएमा घाँटीमा चाप पर्दछ र यसरी परेको चापबाट गिदीमा पर्ने असरले व्यक्ति तुरुन्त होस गुमाउन पुग्दछ । होस गुमी सकेपछि खुट्टाले वा घुँडाले नै टेके पनि हातले दिमागको निर्देशन नपाएका कारण केही काम गर्न वा सो पासोलाई हटाउने प्रयास गर्न सक्दैन । यो अवस्था केही मिनेट मात्र रहेमा व्यक्ति मरी सकेको हुन्छ । अरु कसैले देखे वा पाउने भनेको केही समय वितिसकेपछि मात्र हो त्यसैले तुरुन्त नै अस्पताल पुर्‍याईएता पनि पुनः बचाउन सकिने संभावना नै रहँदैन । भुण्डिने क्रममा व्यक्तिले केही उचाई भएको स्थानको उपयोग गरेको हुन्छ । जस्तो खाट, कुसी, टेवल, डोको, मुडा वा प्राकृतिक रुपमा नै केही उचो स्थानबाट होचो तर्फ घाँटीमा पासो सहित तलातिर हुत्तिनु वा खस्नु भुन्डिएर मर्ने पक्रियाको मुख्य आवश्यक परिस्थिति हो । सो गर्दा खुट्टाले सर्पोट लिएको वस्तु लड्ने कोल्टीने सम्म हुन सक्दछ र छोटो समयको लागि शरीर छटपटाउन सक्दछ जसले गर्दा सोही प्रकारका शरीरको कुनै भागमा सानातीना चोटपटक पनि देखिन सक्दछन् । यसरी केही सेकेण्डदेखि थोरै मिनेटको समयमा नै सबभन्दा पहिले दिमाग अचेतन भई वेहोस भएको व्यक्तिलाई आफूलाई बचाउने कोशिस गर्ने संभावित प्रयासहरू केही पनि भुन्डिएर मरेको लासमा गरिएका पाईडैनन र मृत शरीर आधा सुतेको, भित्तामा लत्रिइएको, ढाड घुँडा वा खुट्टाले जमिनमा टेकेकोदेखि लिएर पुरा भुण्डिएकै अवस्थामा पनि परिस्थिति अनुसार

पाईन्छन् । कहिले काँही सुरुमा तुर्लुङ्ग भुन्डिएको लास पनि समय विदै जाँदा खुट्टा टेकन पुग्दछ । यसको कारण पासोमा परेका विभिन्न स्थानका गाँठाहरू शरीरको तौलले गर्दा विस्तारै मस्कदै जान्छन् र लम्बाई बढ्दछ । पासो लचकदार भएमा यो प्रकृत्या अरु बढी हुन्छ । त्यसैगरी जमिनतिर तन्कदै जाने क्रममा घाँटी लगायत शरीरको तल्लो भागका जोर्नीहरू पनि तलातिर तन्कन पुग्दछन् । जस्ले गर्दा पनि थोरै भए पनि लम्बाई अरु बढ्न मद्दत पुग्दछ । पासोको प्रकृति अनुसार कहिलेकाँही तन्कने क्रममा पासो कुनै पनि ठाउँमा चुँडिन पुगेमा मृत शरीर जमिनमा खस्न पुग्दछ । यस्तो अवस्थामा शरीरको कुनैपनि भाग तल ठोकिँदा चोट समेत पर्न सक्दछ र घाँटीमा वेरिएको एउटा टुक्रा शरीरमा र माथि बाँधिएको ठाउँमा चुँडिएको पासोको अर्को बाँकी टुक्रा घटनास्थलमा भेटिन्छ ।

“अन्यथा प्रमाणित नभएमा सबै भुन्डिएको अवस्थामा पाईएका लासहरू आत्महत्या नै हुन्” All hanging deaths are considered as suicidal unless proved otherwise

यो एक कहावत नभएर भुन्डिएका अवस्थामा पाईएका लासहरूमा विस्वव्यापी रुपमा गरिएको अनुसन्धानहरूको निक्क्यौल हो । परिस्थिति अनुसार भुन्डिएर मर्ने कहिले काँही दुर्घटना पनि हुन सक्दछ । तर यसमा परिस्थितिजन्य प्रमाणहरू स्पष्ट हुन्छन् । जस्तो केटाकेटीहरू खेल्ने क्रममा यदाकदा र ठूलै मानिस पनि डोरीको सहाराले उचाईमा काम गर्ने क्रममा यस्ता अवस्था पाईन्छन् । त्यस्तै अहिले पनि धेरै देशहरूमा प्रचलित अदालती आदेशको "Hang to death" पालना गरिँदा अपनाईने Judicial hanging को अवस्था लाई आत्महत्या मानिने कुरा भएन किनकी यसमा परिस्थिति नै अन्यथाको अवस्थामा हुन्छन् । एकले अर्को व्यक्तिलाई भुण्डाएर मार्ने अर्थात Homicidal hanging पनि असम्भव भने छैन तर व्यवहारिक र वास्तविक रुपमा त्यसलाई कार्यान्वयन गर्न त्यती सजिलो नहुने हुँदा ज्यादै थोरै वा नगन्य संख्या मात्र यसभित्र पर्दछन् । खासगरी असहाय अर्थात प्रतिकार गर्न नसक्ने र थोरै शारीरिक तौल

भएका व्यक्तिलाई मात्र यसरी भुण्डयाउन सकिन्छ । एउटा चेतना भएको वयस्क व्यक्तिलाई अर्को व्यक्तिले भुण्डयाउन असम्भव नै हुन्छ । भुक्वानमा पारी विशेष तरिकाको पासो प्रयोग गरी त्यसलाई कही अड्काई तुरुन्त भुण्डिएको अवस्थामा पुऱ्याउन कोशिस गरिँदा मृतकको शरीरमा अन्य धेरै त्यस्ता प्रकारका चिन्हहरू उत्पन्न हुन्छन जसलाई अन्यथा भनी मान्ने पर्याप्त आधारहरू रहन्छन् । मानव शरीर कपास जस्तो हलुका नहुने र व्यक्तिले नचाहेमा निजलाई पकड्न मात्र पनि त्यति सजिलो र सहज हुँदैन । जिउँदै भुण्डयाउन गरिएको प्रयासबाट घमिने, लछारपछार हुने र पकड्नु पर्ने, तान्नु पर्ने जस्ता प्रकृयाले सोही कारणसँग मेल खाने चोटपटक शरीरमा देखा पर्दछन् र त्यसलाई अन्यथाका लक्षणमा लिनु पर्दछ । यसो गर्दा घटनास्थलमा एक दुई जना भन्दा बढीको उपस्थिति र तिनीहरूका कृयाकलापले गर्दा घटनास्थल पनि आफै भुण्डिएकोभन्दा धेरै फरक हुन जान्छ ।

भुण्डिएको लास जाँच गर्दा शरीरमा देखिएका सबै लक्षण तथा चिन्हहरूको अभिलेखीकरण गरी अन्त्यमा यदि लासमा अरु मर्न सक्ने लक्षणहरू छैनन भने मृत्युको कारण Hanging भनी दिने गरिन्छ । यदी कसैले भुण्डाएको अवस्था भए पनि मृत्युको कारण Hanging नै हो । करिव सबै भुण्डिएका पाइएका लासमा परिस्थिति आत्महत्या हुने गरेकोले चिकित्सकले आत्महत्या लेखि दियो भनी संकास्पद मृत्युका सन्दर्भमा त्यस्तो प्रतिवेदनको ठाडै आलोचना गर्ने गरिन्छ । तर चिकित्सकले हत्या वा आत्महत्या भन्न नमिल्ने कतिपय अवस्थामा नसक्ने पनि भएकोले लास जाँचमा पाइएका लक्षण परिस्थितिसँग मेल खान्छन्, खाँदैनन् भनी सुक्ष्म अध्ययन गर्नु अनुसन्धानकर्ताको प्रमुख दायित्व हो । कहिलेकाँही भुण्डिएको अवस्थाका लासमा अन्य बारदातका लक्षणहरू स्पस्ट देखिने र मरिसकेको मृत शरीरलाई भुण्डाएर राखिदिने गरेका पनि पाईन्छन् । राम्रोसँग पूर्णताका साथ गरिएको लास जाँचमा मृत्युको कारण अरु नै भेटिन्छन् जो भुण्डिनुसँग कुनै प्रकारले सम्बन्धित हुँदैनन । यस्तो अवस्थामा भुण्डिनुको मुख्य लक्षण घाँटीको

डाम (ligature mark) जिउँदो हुँदा परेकोभन्दा फरक पनि भेटिन्छ । यो पंक्तीकारले गरेका भण्डै ३ हजार भन्दा बढी भुण्डिएका लासमा ३ वटा मात्र त्यस्ता अवस्था भेटिएका छन् ।

भुण्डिएर मर्दाका लक्षणहरू

कुनै पनि अप्राकृतिक मृत्युको खास कारण र त्यसका सहायक कारणहरू पत्ता लगाउनु मृत्यु सम्बन्धी गरिने अनुसन्धानको प्रमुख उद्देश्य हो । यस्ता अवस्थामा परिस्थिति, मृत्यु भएको स्थान र मृत शरीरको सुक्ष्म अध्ययन आवश्यक पाटा हुन । भुण्डिएको लासमा प्रारम्भिक अनुसन्धानको समय देखिने मृत व्यक्तिको जिउँदो हुँदाको अवस्थाका कृयाकलापदेखि लिएर निजको अरुसँग भएको वा हुन सक्ने अर्न्तक्रिया जस्ता सम्पूर्ण व्यवहारको सूचना सङ्कलन गर्नुपर्दछ । सो व्यक्ति कुनै पनि मानसिक तनावमा रहेको अवस्था हुन सक्दछ जुन कुरा नजिकका नातेदार वा साथीहरूलाई थाहा भएको नहुन सक्दछ । कहिलेकाँही त्यस्तो कुरा व्यक्ति मरिसकेपछि मात्र खुल्न सक्दछ । यदि निजको मनोदिशा सम्बन्धी गडबढी फेला परेमा एउटा परिस्थितिजन्य प्रमाणमा लिनुपर्ने हुन्छ । कतिपय व्यक्तिले मर्नु पूर्व मृत्युकालिन सूचना Suicide note मार्फत समेत दिन गर्दछन् । यस्तो तथ्य मरिसके पछि कुनै कागजमा लेखिएको नोट, चिठी जस्ता प्रमाणबाट फेला पर्दछ । कहिलेकाँही त्यस्ता सूचना हात, पाखुरा वा तिघ्रामा समेत लेखेर आत्महत्या गरेको लासजाँचको समयमा खुल्दछ । यदाकदा विबाह नभएका तथा विधुवा महिलाहरूको भुण्डिएका लासहरूमा विकसित हुदै गरेको गर्भावस्था वा भर्खरै गर्भपतन गराएका लणहरू पनि लास जाँचका क्रममा भेटिन्छन जो भुण्डिनाको कारण बनेका हुन्छन ।

अर्को परिस्थितिजन्य प्रमाणको रूपमा घटनास्थललाई लिनुपर्दछ । घटनास्थलमा चिज वस्तुहरूको गडबडी कुन रूपमा भएको छ वा छैन, बन्द कोठा भित्र भए सो कोठामा जान, निस्कन सक्ने वैकल्पिक बाटो छन छैनन जस्ता तथ्यहरू बालिया परिस्थिति जन्य प्रमाण हुन सक्दछन ।

त्यस्तै भुन्डिनको लागि पासो बाँध्न तथा अड्काउने ठाउँ सोही व्यक्तिको पहुँच भित्र हुनै पर्ने तथ्य आफैले भुण्डेको अवस्थामा मात्र विद्यमान हुन्छ । लासको अवस्थाको बारेमा हाम्रो समाजमा धेरै मिथ्या तथा गलत अवैज्ञानिक तर्क तथा धारणहरू पाईन्छन् । माथि भनिए जस्तै घाँटीमा एउटा भटका तुरुन्त अचेतन हुनलाई पर्याप्त हुने भएकोले लासको खुट्टाले जमिन छोएको मात्र नभएर पुरै जिउ नै लत्रेकोसम्म हुन सक्दछ । लास कतै भित्ता वा पर्खालमा अडेस लागेको पनि हुन सक्दछ । हात खुल्ला वा मुट्ठी परेको जे पनि हुन सक्दछ । मृत शरीरको मेडिकल जाँच गर्दा भुन्डिएका लासहरूमा प्रायः देखिने घाँटीको डाम अर्थात् Ligature mark नै हो । उक्त डाम धेरैजसो अवस्थामा घाँटीको माथिल्लो भागमा अगाडिबाट पछाडि तिर गएको हुन्छ । जसलाई नागवेली परी माथि गएको भनिन्छ । छोटो पासो प्रयोग भएको अवस्था र खुट्टाले जमिनमा टेकेको अवस्थामा यदी गाँठोले घाँटीको छाला च्यापेको छ भने भट्ट हेर्दा वारपार पनि देख्न सकिन्छ । समयको अन्तरालसँगै उक्त डामको रङ्ग खैरो, गाडा खैरो वा कालो पनि देख्न सकिन्छ । त्यसलाई डाम नभएको भागसँग छामेर तुलना गरी हेर्दा केही कडापन भएको अर्को प्रमुख विशेषता हो । यदी अगाडि साईडतर्फ चिउँडो मुनी गाँठो परेमा पछाडी र दुवै साईडमा वारपार डाम पनि कतिपय भुन्डिएका अवस्थामा देखिने गर्दछन् । पुरा वारपार भए पनि वा आंशिक रूपमा भए पनि एउटा प्रमुख विशेषताको रूपमा तलबाट माथितिर गएकै डाम भुन्डिएको अवस्थामा हुनसक्ने डाम हो । यसको कारण जिउ तलतिर तन्कदा शरीरभन्दा माथि कतै बाँधिएको पासो घाँटीमा समेत लपेटिएको हुँदा उक्त लपेटिएको भाग माथि मात्र सर्न सक्नु हो । पासोको डाम कति गाढा हुने भन्ने कुरा मुख्यतया कस्तो प्रकृतीको पासो प्रयोग भएको हो र कति लामो समयसम्म सो अवस्थामा लास रहेको छ भन्ने दुई मुख्य कुराले निर्धारण गर्दछन ।

खस्रो खिरीलो डोरी प्रयोग भएमा एकै छिन पछि निकालिएमा पनि सो डोरीको छापको रूपमा स्पष्ट डाम देखा पर्दछ भने मोटो र नरम पटुका, साह्रै जस्तो पासो प्रयोग भएमा र चाँडै नै त्यसलाई हटाई लास निकालिएमा

कुनै डाम पनि नदेखिन सक्दछ ।

उक्त डाम बाहेक शरीरका अन्य भागमा खास गरी हात खुट्टाहरूमा केही छाला खोभिएका वा नील परेका जस्ता चोटहरू हुन सक्दछन् । यसको कारण भुन्डिने प्रकृयाको क्रममा र त्यसबाट मानिस मर्ने क्रममा छेउछाउमा शरीरसँग सम्पर्कमा आउन सक्ने कुनै चिज वस्तु भएमा एकै छिनको छटपटीको कारणबाट र माथिबाट तल जिउ छाड्दा हुन सक्ने सम्पर्कले त्यस्ता चोट पर्नु हो । पासो तन्कदै जाने क्रममा चुडीएर शरीर भुईमा खसेमा सोही अनुसारका बढी गम्भीर प्रकृतिका चोटपटक समेत पासोले बनाएका बाहेकका चोटका रूपमा शरीरमा भेटिन सक्दछन् ।

भुन्डिएर मरेको लासको भित्री जाँचका क्रममा घाँटीको भित्री नरम तन्तु तथा हड्डीहरूमा त्यस्ता कुनै रक्तश्राव वा चोटहरू पाईदैनन । घाँटीको भागको मेरुदण्डको हड्डी तथा तीनका जोर्नी भाँचिएको वा खुस्केको भनी कतिपय लासजाँच प्रतिवेदनमा दिएको पाईन्छ । तर, विश्वव्यापी तथ्याङ्कलाई हेर्ने हो भनी खाली मृत्युदण्डको रूपमा भुण्ड्याईएका लासमा मात्र यस्तो लक्षण पाईन्छ । यसको कारण घाँटीमा पर्ने चापको मात्रा पुरा शरीरको चाप भन्दा धेरै बढी हुने गरी विशेष अवस्था बनाएर भुण्डाउने प्रकृया पुरा गरिन्छ । यस पंतीकारले गरेका हज्जारौं भुन्डिएका लासमा एउटा पनि यस्तो लक्षण हालसम्म पाइएको छैन । जिब्रोको फेदमा रहेको हाइओइड भन्ने हड्डीको Fracture भने अली बुढेसकाल लागेको र पुर्णरूपमा भुण्डेका केही लासहरूमा घाँटीको मासु तन्कने क्रममा हुने गरेको पाईन्छ । यी देखिबाहेक भुन्डिएका लासहरूमा त्यस्ता बाहिरी तथा शरिर भित्र अन्य कुनै खास लक्षण पाईदैनन् ।

मिश्रित तरीकाको प्रयोगबाट आत्महत्या (Complex Suicide)

कहिलेकाँही भुन्डिएर मरेको भनिएका लासमा विष सेवन वा औषधीको सेवन, गरी, घाँटी आदी काट्न प्रयास गरिएका तर गहिरो गरी काट्न नसकिएका अवस्था र भुन्डिएका लासमा पाइनेसबै लक्षणहरू पाईन्छन् । यस्तो अवस्थालाई complex suicide भनिन्छ र यस्ता

लक्षणहरूको समिश्रण आफैमा आत्महत्याको अवस्थाको पक्का प्रमाण हो ।

भुन्डिएका लासहरू र सामाजिक तथा कानूनी परिवेश:

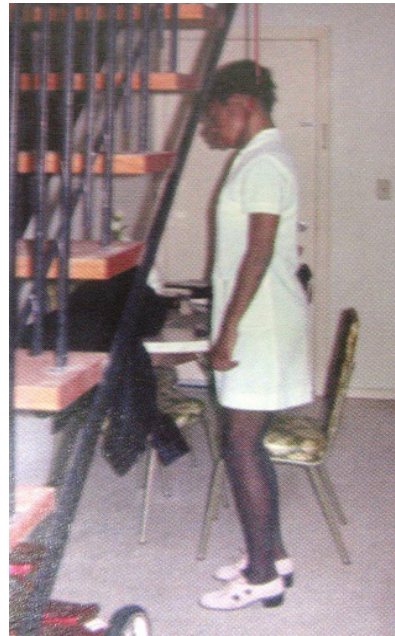
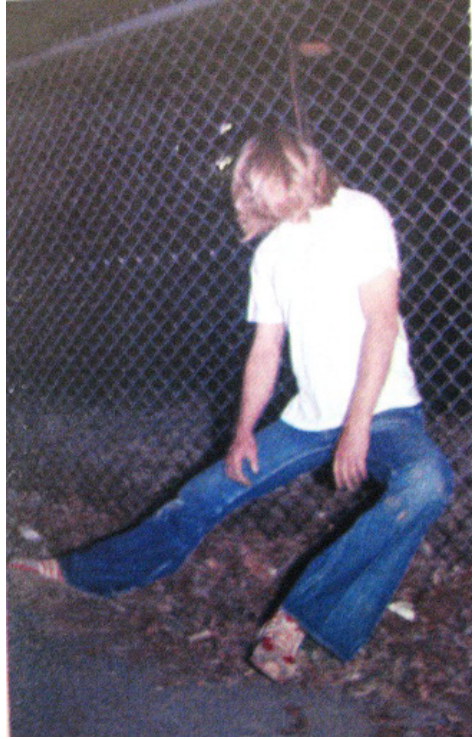
हाम्रो समाजमा घट्ने केही आत्महत्याका घटनाहरूमा घरेलु हिंसा जस्तो परिस्थिति जोडिएको पाईन्छ । खास गरेर दाइजो प्रथासँग गाँसिएका वा अन्य कारणले मन नपराईएका वा हेला गरिएका महिलाहरू लामो मानसिक तनावबाट ग्रसित भएका हुन्छन् । निश्चित समयसम्म खासगरी मानसिक र कतिपय अवस्थामा शारिरिक पिडा, कष्ट वा यातनाबाट सताइएका हुन्छन् । पचाउँदै वा खप्दै जाने क्रममा उनीहरू हार खाएर संसारबाटै विदा हुन भुन्डिएर मर्ने गर्दछन् । निजमा घटीरहेको परिवेश आफन्त तथा घर छिमेकमा थाहा भई सकेको हुँदा यस्तो व्यक्ति भुन्डिएर मर्दा सबैले एक मुखले भुण्डाएर मारेको वा मारेर भुण्डाइएको भनी अन्तिम निष्कर्ष निकाल्न पुग्दछन् । यसलाई सहयोग गर्न सामाजिक ज्ञानको रूपमा रहेका मिथ्या तथा गलत धारणाहरू काफी हुन्छन् । भुन्डिएर मानिस कसरी सजिलै मर्न सक्दछ ? अन्यथा प्रमाणित नभएमा भुन्डिएका लासहरू आत्महत्या हुन, अन्यथा भनेको के हो र कसरी देखिन्छ वा भेटिन्छ भन्ने विषयमा न्यूनतम ज्ञानको अभावले गर्दा सबै त्यस्ता मृत्युहरू कर्तव्यज्ञानको रूपमा अदालत समेत पुग्ने गर्दछन् । लासजाँच गर्ने चिकित्सकको प्रतिवेदनमा मृत्युको कारण Hanging भनी आएको हुन्छ । यस्तो प्रतिवेदनलाई शंका गरिन्छ र चिकित्सकहरू समेत सो व्यक्तिलाई मारेर भुण्ड्याईएको हो भन्ने अभियोगमा मतियार भएको निष्कर्ष निकाल्न थालिन्छ । यदि पूर्णताका साथ अनुसन्धानकर्ताले घटनास्थलको राम्रो अनुसन्धान गर्ने र लासजाँच गर्ने चिकित्सकले पनि शरीरमा भएका सबै लक्षणहरू राम्ररी अभिलेखीकरण गर्ने हो भने त्यस्ता शंकाका घेरामा परेका भुन्डिएका लासहरूमा “तथ्य आफै बोल्छ” भन्नेभै गरी वास्तविकता उजागर गर्न कति पनि अप्ठ्यारो पर्दैन । जस्तो भौतिक तथा शारीरिक हिंसाका सिकार भएका त्यस्ता लासहरूमा पुराना वा नयाँ विभिन्न समयमा भएका घाउ खत र त्यस्ता घाउखतका संभावित कारणहरूको विश्लेषण गरिनु पर्दछ जुन भुन्डिनुको कारण हुन सक्दछन् । मानसिक

यातना सम्बन्धी लक्षण भने मुर्दा मात्र जाँच गरेर कहिले पनि प्राप्त हुँदैनन् ।

नेपालको परिवेशमा देशभरीका सबै अस्पतालहरूमा मेडिको-लिगल क्षेत्रमा योग्यता प्राप्त वा तालिम प्राप्त चिकित्सकहरूको धेरै ठूलो अभाव भएका कारण प्रायजसो प्रतिवेदनहरू अपूर्ण, अस्पष्ट तथा लेखिएका तथ्यहरूको गलत व्याख्या गरिएको अवस्थामा पाईन्छन् । यदि अन्यथा भएको भुन्डिएको लासको चिकित्सकीय अनुसन्धान गर्नु परेमा यो एउटा डरलाग्दो मात्र नभएर कहालीलाग्दो वास्तविक अवस्था हो ।

भुन्डिएका लासहरूको सन्दर्भमा भ्रम सृजना गर्ने केही हदसम्म नेपालमा प्रचलित फौजदारी कानून समेत जिम्मेवार देखिन्छन् । उदाहरणको लागि मुलुकी ऐन ज्यान सम्बन्धी महललले दिशा निर्देश गरेको भुन्डिएको लास भएमा के-के हेर्नु पर्दछ भन्ने विषयमा चर्चा गर्न उपयुक्त हुन्छ । भुन्डिएको मृत्यु भएमा आँखाको नानी ठूलो भएको छ छैन, ओठ फुम्पो छ छैन, आँखा अगाडि निकलेको छ छैन, दिशा तथा बिर्य निस्कको छ छैन, जिब्रो टोकेको छ छैन, खुट्टाले भुईँ छोएको छ छैन जस्ता तथ्यहरू धेरै पहिले नै चिकित्सा विज्ञानले विश्लेषण गरिसकेको छ । कुनै पनि कारणले मर्दा आँखाको नानी ठूलो हुन्छ । यो मृत्यु घोषणा गर्ने एउटा चिन्ह र दिमाग मरेको लक्षण हो । मल निस्कने प्रकृया पनि यदि मर्ने समयमा मलद्वारको नजिक दिसा जम्मा भएमा कुनै पनि कारणले मरेमा निस्कन सक्दछ र छैन भने जे सुकै कारण भए पनि निस्कने कुरै भएन । आँखा केही बाहिर निस्कनु र धेरै रातो हुनु भुन्डिनुको नभएर Strangulation मा हुन सक्ने एक लक्षण हो । जिब्रो जो कोहीले जुनसुकै कारणले मर्दा टोकन पनि सक्छ र नटोकन पनि सक्दछ । हाम्रा पुर्वजहरूले मर्नु र जिब्रो टोकनु पर्यायवाचीको रूपमा प्रयोग गर्थे जुन कुरा भुन्डिनुलाई मात्र लागु हुँदैन । मर्ने वित्तिकै बिर्य निस्कदैन । केही समय वितेपछि लास दह्रो हुने अवस्थामा जुनसुकै कारणले मरेमा बिर्य निस्कन्छ । त्यस्तै खुट्टाले भुईँ छुने जस्ता कुरा माथि धेरै विवेचना भई सकेको छ । यसरी मुल कानूनले नै गलत र अवैज्ञानिक धारण लाई कानूनी तथ्य मानी दिँदा समाजका कुनै सदस्यमा पनि सही

तल देखाइएका सबै तस्बिरहरूका मृतकहरू भुन्डिएर आत्महत्या गरेका हुन्



समान्य ज्ञानको विकास हुन नसकेका कारण पनि भुन्डिएका लासहरूको अनुसन्धाननै प्रभावित भएको छ भन्दा अत्युक्ति हुँदैन । भर्खरै कार्यान्वयनमा आएको घरेलु हिंसा सम्बन्धी ऐनले पनि कतिपय वास्तविकता समेट्दा समेट्दै यदि घरेलु हिंसाका कारण मानिस आत्महत्या नै गर्नुपर्ने विकल्प भएमा के कसो गर्नु पर्ने हो भनी भनेको देखिँदैन । भुन्डिएका लासहरू जो शारीरिक तथा मानसिक यातनाबाट नतिजा बन्न पुगेको अवस्थाका लागि कुनै कानूनी दफा आकर्षित नभएकोले पनि कर्तव्य ज्यानको माग दावी गर्दै किटानी जाहेरी पर्ने अवस्था आएको हुन सक्दछ । यस्तो परिस्थितिमा सुरुका अदालतहरूले विभिन्न संगठित समूहको दवावका कारण सवुद नहुँदा पनि पुर्पक्षको लागि थुनामा राख्ने देखि लिएर हत्या भएकै हो भनी निर्णय दिन्छन् । अन्तमा सर्वोच्च अदालतबाट कानून तथा सबुद सबै केलाउँदै सफाई दिने निर्णय हुन पुग्दछ । तर यो क्रममा व्यतित भएको ८-१० वर्षको कसै माथि गरिएको गलत सजायको जवाफदेहिता कसैले लिनै नपर्ने कानूनी तथा व्यवहारिक प्रचलनले गर्दा सबै निकायले गरेका काम कारवाहीहरू ठीकठाक देखिने तर गहिरी हेर्दा भने हास्यास्पद अवस्थाको निरन्तरता हाम्रो मुलुकमा चलिरहेकै छ ।

उपसंहार

भुन्डिएर मरेको पाईएका लासहरूमा कतै अन्यथाका लक्षण त छैनन् भनी घटनास्थलदेखि नै सुक्ष्म अनुसन्धान गरिनु पर्दछ । अनुसन्धानकर्ताले एउटा रेडिमेड फर्मिट भरी फारा टार्ने तरिकाको रिपोर्ट बनाएर मात्र पुग्दैन । यसमा स्थानको विस्तृत विवरणका साथै डोरी बाँधेकोदेखि लिएर विभिन्न स्थानमा भएका गाँठाहरूको समेत विवरण खुलाईएको हुनुपर्दछ । घटनास्थलमा लास उठाउनु पूर्व नै सरोकारवाला व्यक्तिहरूलाई अवलोकन गराउनु पर्दछ । भुन्डिएका भनिएका लासहरूको लासजाँच गर्दा घटनास्थल तथा लासजाँच प्रकृतिको अध्ययन चिकित्सकबाट पनि गरिनु पर्दछ । प्रयोग गरिएको पासोको गाँठो जस्ताको तस्तै राखी लाससँग पठाउनु पर्दछ । भुन्डिएको स्थानमा पासो बाँधिएको ठाउँको छेउछाउमा समेत सम्भाव्य औँठाछापको खोजी गर्ने प्रक्रियाको उपयोग गरेमा धेरै संकास्पद अवस्थाको निवारण गर्न सजिलो हुन्छ । लासजाँच कार्य तालिम प्राप्त

चिकित्सकबाट मात्र गराईनु पर्दछ । लासको बाहिरी तथा भित्री जाँचबाट पाईएका कुनै लक्षण तथा घाँटीको भित्री भागको अवलोकनबाट प्राप्त सकरात्मक तथा नकरात्मक अर्थात नभएका अवस्थाको समेत प्रतिवेदनमा उल्लेख गरिनु पर्दछ । जसबाट अन्यथा भएका अवस्थाहरू खुल्न सक्दछन् ।

१९.९ प्रतिशतभन्दा बढी संख्याका भुन्डिएका लासहरू आत्महत्या हुन भन्ने जान्दा जान्दै पनि ०.१ प्रतिशतको संभावना अन्यथा हुन सक्ने तथ्यलाई थोरै पनि नकार्न मिल्दैन । शरीरमा भएका विभिन्न चोटपटकको राम्रोसँग अभिलेखीकरण गरी तिनका कारण र समय सम्बन्धी विश्लेषण गरिनुका साथै त्यस्ता चोटपटक कति गम्भीर हुन र मृत्युको कारण बन्न सक्छन वा सक्दैनन भन्ने कुराको व्याख्या समेत भएमा प्रतिवेदन बढी पारदर्शी हुन जान्छ । चिकित्सकले मृत्युको कारण भुन्डिएको वा Hanging लेख्दैमा अनुसन्धान अधिकृतले यो त आत्महत्या रहेछ भनी अन्य पाटोमा आँखा चिम्लिन मिल्दैन । भुन्डिएर मात्र नभएर अन्य प्रकारका मृत्युमा समेत मर्ने प्रकृत्या तथा समय र सम्बन्धित लक्षणहरूको बारेमा सामान्य ज्ञानसँग सम्बन्धित जानकारी अनुसन्धानकर्ता, कानून व्यवसायीहरू र न्यायमुर्ती सबैमा भएमा मात्र कुनै लक्षणको गलत व्याख्यामा लगाम लाग्न सक्दछ ।

प्रचलित कानूनमा भएका त्रुटीपूर्ण निर्देशनहरूलाई समय सापेक्ष सुधार नगर्ने र कसैको गैर कानूनी क्रियाकलपाबाट वाध्य भई आत्महत्यासम्म गर्नु पर्ने अवस्था सृजना गर्ने परिस्थितिलाई यथोचित सम्बोधन नगर्ने हो भने निरन्तर भई रहेका घरेलु हिंसाका सिकार भएका आत्महत्याहरू आत्महत्या नै रहन्छन् । यस्तो अवस्थालाई आफन्त तथा समुदाय वा समाजले जतिसुकै व्याख्या गरे पनि मान्ने छैनन । त्यसैगरी सामान्य खटपट पछि श्रीमती भुन्डिएर मरेको अवस्थामा लोग्ने, सासु, ससुरा लगायत दर्जनौ परिवारका सदस्यहरू अनाहक जेल बस्नु पर्ने र दशकौ पछि सर्वोच्च अदालतबाट हुन सक्ने फैसला कुर्नु पर्ने अवस्थाको अन्त्य पनि चुस्त अनुसन्धान प्रक्रिया र उचीत कानूनी उपचारका माध्यमबाटै खोजिनु पर्दछ ।

Medico-Legal Services at Jumla

Dr. Apurba Acharya, MD

Asst. Professor & Head, Dept. of Forensic Medicine
Karnali Academy of Health Sciences, Jumla, Nepal.

Jumla district is located at an altitude of 7815 feet from the sea level in Karnali Province, Nepal. Roadway from major parts of the country was not possible well into the 21st century with airway transportation being the only mode for all the basic necessities as well as during the emergencies. As such, the overall situation of health services was in a dire state with limited availability of medical professionals working in this part of the country.

The situation improved slightly in the early 2010s with the establishment of Karnali Academy of Health Sciences (KAHS) and the region getting an upgrade in the health services with steady arrival of specialist doctors. However, medico-legal services was still lacking in the absence of a specialist in forensic medicine, not just in Jumla but also in Nepal as a whole. During that time period, medico-legal services were provided mostly by medical officers, many of whom being totally unaware about the minimum standard required. Also, it was during this time period when medical officers from all over the country started getting a complete medico-legal training after which the standard of services improved slightly. However a training of a couple of weeks would not meet the requirements as the medical officers, even though trained, would be devoid of the logistical resources required, especially in the peripheral parts of the country. This was also true for Jumla as some of the

medical officers then, though trained, were not able to implement their knowledge and skills in part because of the rigorous work schedule and further due to the lack of basic logistical resources for these medico-legal duties. This led to plethora of errors, more so while documenting and dispatching these medicolegal reports.

Medico-legal services in Nepal also took a stride forward during the mid 2010s and formed a society that included all the specialists in Forensic Medicine, registered under Nepal Medical Council. These experts were commonly referred to as medico-legal experts. With its formation, it developed standard operating procedures for all the medico-legal duties including autopsy examination, injury examination, sexual assault victim as well as perpetrator examination. This led to a direction for all those trained as well as untrained medical officers performing medico-legal duties with a standard guideline that would help them perform their duties.

With regards to Jumla, it was still dependent upon medical officers until 2019 when the region got its first Forensic Medicine Specialist and with it, the journey of an ideal medicolegal services started. The errors such as handwritten, incomplete reports, unavailability of reports at the hospital, improper registration and recording of the cases etc. were very much prevalent. The change was gradual and with a room

allocated for the Department of Forensic Medicine, all the medico-legal documents were then kept and recorded in the same room and these documents could still be traced. It was not however easy for a sole expert to take all the responsibilities as the institution was then preparing itself for the arrival of first batch of MBBS and the added responsibility of academic duties were taking its toll.

Jumla was again devoid of a medico-legal expert in early 2021 all the work that had kickstarted crumbled and it was again dependent upon medical officers. It was not an ideal scenario for an institution which was taking big stride in the academics with commencement of bachelors as well as masters level education of different domain of health sciences and was grooming for the arrival of first batch of MBBS in a few months' time.

From July to September 2021, medico-legal service in Jumla took a huge step ahead with the arrival of two medico-legal experts. This led to the opening of Pandora's box in context of medico-legal services that was and still is being provided to the people of Jumla. With two experts, the services improved and all the medicolegal cases started getting its due attention.

The requirement of a standard mortuary with all the facilities as stated in the Guidelines for Medico-legal Duties, 2075, by Ministry of Health and Population was put forward. The necessity of a separate examination room with proper light and basic facilities were earmarked to the higher authorities. Formation of hospital based committees of One-stop Crisis Management Center (OCMC) took place for the very first time in the history of Jumla and it is still functioning. For the very first time in ten year history of KAHS, a medico-legal training on

Gender Based Violence was conducted for medical officers and nursing staffs in late 2021.

By mid 2022, the number of experts in the region was again reduced to one. However, a solid base had been set up with continuous and rigorous effort of two experts for nearly a year. This led to the shifting of mortuary with an accommodation of two autopsy tables and a separate changing room within. The building blocks for the formation of a rehabilitation center for the survivors of sexual assault victims had also started. With high percentage of medico-legal cases being of sexual offences and physical assaults, a separate room has been allocated for performing medicolegal examination with provision of examination bed and all the basic resources. From the later part of 2023, the academic responsibility will commence along with the medico-legal cases. As such, the requirements for successful conduction of academic sessions will depend upon proper coordination and availability of resources including a forensic medicine museum. The institution so far, even though with delays due to geographical constrains, have been coordinating well and have been attempting on its behalf to provide all the medico-legal services and facilities. However, a lot needs to be improved in order to attain and provide proper quality medico-legal service to the people of Jumla and as it says, Rome was not built in a single day, it will take time for the improvement of medico-legal services, but the building blocks for the same have already been established.

Carbon Monoxide Poisoning: Preventable Death

Dr. Salmalee Yadav, MD

Lecturer, Department of Forensic Medicine
Patan Academy of Health Sciences, Lalitpur, Nepal.

INTRODUCTION

Carbon monoxide (CO) is a major and omnipresent component of fire atmospheres. It is colorless, tasteless, non-irritative, in odorous gas, which is lighter than air. CO is a highly poisonous gas, which is absorbed through the lungs and avidly combines with hemoglobin to form a stable compound, known as carboxy-hemoglobin (COHb) thus producing 'anemic hypoxia'. CO toxicity occurs by competitive binding of CO to the hemoglobin heme groups with a resulting increase in the remaining affinity for oxygen, shifting the oxygen-hemoglobin dissociation curve to the left.

Its high affinity for Hb (about 250 times that of oxygen) is primarily instrumental for its toxic effects. It inhibits electron transport by blocking cytochrome A3 oxidase and cytochrome P450, and therefore intracellular respiration.

The various sources are inefficient combustion of coal, the exhaust gas of automobiles, fuel gas, explosion gas, heating systems, wood and house fire. Industrial workers at steel foundries and formaldehyde produced in plants or soft drinks like coke are at risk for exposure to carbon monoxide gases.

CO is one of the common pollutants found in the atmosphere that has a toxic effect on the health of the individual when

exposed. On average, exposure of more than 100 ppm (i.e., for every 999,900 molecules of air, 100 molecules of CO) is hazardous to human health.

The signs and symptoms of CO poisoning are present according to the percentage of COHb in blood:

COHb (%)	Signs and Symptoms
0-10	No symptoms.
10-20	Breathlessness, mild headache, abdominal pain.
20-30	Throbbing headache, irritability, emotional instability, buzzing in the ears.
30-40	Severe headache, nausea, vomiting, dizziness, dimness of vision, confusion, and ataxia.
40-50	Increasing confusion, hallucinations, rapid respiration, staggering and in-coordination is mistaken for drunkenness

Similarly, the severity of carbon monoxide poisoning is classified as a percentage of COHb as 10%-30% mild, 30%-40% moderate to severe and >40% very severe.

CASE REPORT 1

One of the cases was in Konjyosom Ward-4, Nallu, Lalitpur, where four members of a family never woke up after having their last meal inside their under-construction house during Falgun 2078. The postpartum mother

had burned coal inside the room to warm her two-day-old infant with the door and windows closed and no proper ventilation (Fig 1). The cause of death was CO poisoning which was confirmed following serologic reports.



Fig 1. Charcoal burning inside the room.

CASE REPORT 2

During mid-winter, a couple from Lalitpur went to a health club for Sauna bath where they were found unconscious. The door was broken from outside of the bathroom where their bodies were found. There were two gas geysers on the wall and one exhaust fan (Fig 2). The autopsy was done which showed features of CO poisoning and the blood sample was collected and sent to laboratory testing detected high levels of COHb.

CASE REPORT 3

Eight foreigners were found dead in a hotel room reportedly due to Carbon monoxide poisoning caused by an outdoor heater kept inside their room.

An extended family with seven members



Fig 2. Gas geyser used in bathroom.

along with two children one of 3 years and the other of 3 months in Nepalgunj, happened to sleep in the same room with doors and windows closed during the winter months of December 2021 with burning briquettes to keep the room warm. They were diagnosed with CO poisoning leading to cardiogenic shock and respiratory insufficiency and admitted to Bheri Hospital.

DISCUSSION

Every year in Nepal, dozens of people die from gas geysers, furnaces, burning coal or briquettes in an enclosed space which raises the concentration of carbon monoxide especially in winter months. In the context

of Kathmandu Valley, where there are houses with small bathrooms, inadequate ventilation and absent CO detectors, even a small percentage of CO liberated from the gas water heater can be extremely dangerous.

According to data provided by Nepal Police from December 2021 to March 2022, a total of 16 deaths caused by suffocation (CO poisoning) were reported across the country and still, the incidence of CO poisoning in Nepal is unknown since many non-lethal exposures go unnoticed and hundreds of deaths are suspected due to CO poisoning in remote areas.

In remote areas, CO poisoning is mainly due to the use of traditional firewood stoves to cook and burn coal or briquettes by post-partum mother to warm their newborns during winter in unventilated rooms, as the coal is readily available and easily heated the room. Recently, gas water geysers are becoming popular among people taking showers in urban areas in Nepal and have become a threat to CO poisoning. These gas geysers are cost-effective, efficient methods which are easily available.

According to the Centers for Disease Control (CDC), symptoms of carbon monoxide poisoning are described as "flu-like" without having the actual flu.

Preventive measures

- Though the cases of carbon monoxide poisoning are increasing day by day still the government of Nepal has failed to raise awareness among the public about the risk of lighting a fire inside a room

without proper ventilation.

- The geyser should not be switched on after locking the door from the inside, ventilation should be kept open, and a gap between two people while taking a bath to avoid an increase in CO density.
- The coal ignited should not be kept in the room while sleeping, and before going to sleep it should be kept outside.
- While using heaters, coal and geyser the ventilation should be good.
- The gas geyser should be serviced by a qualified technician every year.

Hangman's Fracture in a Case of Long Drop Suicidal Hanging

Dr. Kashev Shrestha, MD

Lecturer, Department of Forensic Medicine
College of Medical Sciences, Bharatpur, Nepal.

ABSTRACT

Background: Fracture of the cervical vertebrae in hanging is generally a phenomenon seen in Judicial Hanging and is a very rare entity in the context of Nepal, as there is no provision of capital punishment in Nepal. In a judicial type of hanging, the individual is dropped from a calculated height with a submental or subaural position of the ligature knot. A rare case of long drop suicidal hanging is presented where the knot of ligature was at the nape with associated fracture of the cervical and thoracic vertebrae. Furthermore, the probable mechanism involved in the causation of such internal injuries is also discussed.

Case presentation: An obese-built woman jumped out of the window with a broadcloth material tied to her neck, used as a ligature. The force created by the weight of the person and the length of the drop was sufficient to cause a fracture-dislocation of the C2-C3 vertebrae and C7-T1 vertebrae with the transaction of the spinal cord.

Conclusions: Similar features in a case of hanging are not commonly encountered in autopsy practice in Nepal, the report hence is an attempt to discuss and highlight possibilities associated with long-drop hanging.

INTRODUCTION

Hanging is among the most frequent suicide methods worldwide.¹ Due to the easy accessibility and availability of ligatures, it is also one of the most common suicide methods in Asia.² Although comprehensive epidemiological data on hanging is lacking in Nepal, it remains one of the predominant suicide methods.

Hanging is a form of asphyxia death by a ligature around the neck where the force applied to the neck is derived from the total or partial weight of the body. Hanging is mostly suicidal in nature unless proven otherwise

but nature can be homicidal, accidental, and sometimes autoerotic in nature.³

It has long been held that judicial hanging results in death due to the spinal cord and brain stem trauma after fracture-dislocation of the cervical spine. Accepted medical teaching is that judicial execution by hanging results in death attributed to 'hangman's fracture of the second cervical spine.'⁴ Profound injuries like complete or partial decapitation can occur if the length of the drop is several meters.¹ Thus, in judicial hanging, the length of the drop is calculated according to the body weight. The cause

of death in the majority of the cases of suicidal hanging is due to compression of the vasculatures and airways.⁵

In judicial hanging that results in fracture of cervical vertebrae, knot placement is done in submental or subaural position.⁶ Whereas in the present case, we are discussing long drop hanging with a knot typically placed at the nape of the neck, but with findings usually found in cases of judicial hanging.

CASE PRESENTATION

According to the police requisition letter, the deceased was found hanging from the terrace on the exterior of her house with a shawl that was used as a ligature. Her family quickly slid her down from the hanging position and rushed to a nearby private hospital for treatment. However, she died en route to the hospital and was declared dead on arrival.

External Examination

The body was that of an adult female with an obese build. Her height was 61 inches and she weighed 84 kg. Rigor mortis was complete and well marked in her body. Livor mortis was present in the posterior aspect of her body, was purplish in color, and was fixed on pressure. The ligature material was brought with the body, which was an uncut shawl with a length of 80 inches and a width of 25 inches.

Reddish brown irregularly parchmented ligature mark, with an average width of 1.5 cm, present over the thyroid cartilage going upward and backward on both sides was present. The ligature



Fig 1. Irregularly parchmented ligature mark.



Fig 2. Internal neck dissection with hemorrhage over the sternocleidomastoid muscle.

mark was incomplete on the posterior aspect of her neck, making an inverted V shape.

Internal Examination

Modified Y incision was given and neck dissection was undertaken after evisceration of the other body organs, following the protocol of Prinsloo and Gordon. On neck dissection, there were contusions present in the lower 1/3rd of the sternocleidomastoid muscles on both sides (Fig 2). There are multiple transverse lacerations of the intimal layer of both carotid arteries. On



Fig 3. Internal neck dissection showing cervical vertebrae fracture.

examination of the cervical spine, a spinal fracture was observed at the vertebral level C2-C3, along with a dislocation of C2 over the vertebra C3. The underlying spinal cord was completely transected, with hemorrhage in the surrounding area. There is also fracture-dislocation of C7 - T1 with laceration of the spinal cord with contusion over the surrounding area.

DISCUSSION

Cervical spine fractures are common in judicial hangings, where the knot is placed under the chin or behind the ears.⁷ Specifically, fracture between the C2 and C3 vertebrae are known as “hangman’s fracture”, often caused by anterior subluxation or dislocation of body of C2 as a result of hyperextension from the long drops.⁸ Some authors propose that anteflexion can also lead to these fracture-dislocations. In contrast, suicidal hangings usually involve short drops and knots placed at the nape of the neck, making cervical fractures quite rare.⁸ The more typical autopsy findings in suicidal hangings are local injuries to soft tissues and vasculature from axial traction and radial shearing forces, rather than spinal cord injuries. Thus, when spinal fractures are seen in suicidal hangings, as in this

unusual case, they tend to be described by comparison to judicial hangings involving suspension after a calculated long fall.⁶

In the present case, the deceased was an obese female weighing 84 kg who was found hanging from the terrace after jumping out of a window. She was taken to the hospital but was declared dead on arrival. In long drop hangings, there is chance of partial or complete decapitation due to the traction force. However, this victim had a reddish brown irregularly parchmentized ligature mark averaging 1.5 cm wide. This can be explained by the height of the fall and the thick broadcloth used as a ligature. The suboccipital knot placement is atypical for suicidal hangings that result in cervical fractures.⁹ These fracture-dislocations usually occur from sudden neck movement, often hyperextension but sometimes anteflexion. The knot position and drop height help explain the injuries. Ideal knot placement for a classic hangman’s fracture is submental or subaural. However, in this case the location of the suboccipital knot led to a rarer cause of anteflexion. The atypical findings are better explained by the long height of the drop that creates sudden traction forces on the neck, regardless of knot placement. Perhaps the fall from the high terrace led to neck twisting before suspension, along with gravitational forces due to body positioning. This movement could have caused the fracture-dislocation.

CONCLUSIONS

Fracture-dislocation between the cervical vertebrae C2 and C3, known as a “hangman’s fracture”, is common in judicial hangings

when the knot is placed under the chin or behind the ears. However, in this rare case of suicidal hanging with a long drop, we found cervical spine fractures despite the ligature knot being in the suboccipital position typical for suicidal hangings. This can possibly be explained by the weight of the body and the long drop height that creates sudden traction forces that lead to anteflexion of the neck. More studies are needed to outline the exact pathophysiology involved in such unusual cases of suicidal hangings of long drop resulting in cervical spine injuries atypical of conventional self-suspension.

REFERENCES

1. Rothschild MA, Schneider V. Decapitation as a result of suicidal hanging. *Forensic Sci Int.* 1999 Nov 22;106(1):55-62. doi: 10.1016/s0379-0738(99)00140-1. PMID: 10629968.
2. Wu KC, Chen YY, Yip PS. Suicide methods in Asia: implications in suicide prevention. *Int J Environ Res Public Health.* 2012 Apr;9(4):1135-58. doi: 10.3390/ijerph9041135. PMID: 22690187; PMCID: PMC3366604.
3. Knight B, Saukko P. Fatal pressure on neck. *Knight's Forensic Pathology.* 3rd ed. London, UK: Arnold; 2004: 368-394.
4. Duckworth T. *Orthopaedics and Fractures.* London, Blackwell Publishing; 1995.
5. Dolinac D, Matshes EW. *Asphyxia-forensic pathology principles and practice,* 4th edn. Elsevier Academic Press, London; 2005: 149–176.
6. Ghormade PS, Sarma B, Gajbhiye S. Suboccipital ligature knot in a case of long drop suicidal hanging with rare autopsy finding of cervical spine fracture. *Egypt J Forensic Sci.* 2018;8:31. doi: 10.1186/s41935-018-0062-x
7. Thierauf A, Pollak S *Strangulation.* In: *Forensic Pathology.* Academic press-Elsevier; 2017:143.
8. Hellier C, Connolly R. Cause of death in judicial hanging: a review and case study. *Med Sci Law.* 2009 Jan;49(1):18-26. doi: 10.1258/rsmmsl.49.1.18. PMID: 19306616.
9. Dolinac D, Matshes EW. *Asphyxia-forensic pathology principles and practice,* 4th edn. Elsevier Academic Press, London; 2005: 149–176.

The role of histopathology in forensic autopsy: Unveiling the truth beyond the surface

Dr. Nuwadatta Subedi, MD

Associate Professor, Department of Forensic Medicine
Gandaki Medical College, Pokhara, Nepal.



Introduction

Forensic autopsies, often depicted in crime dramas and true crime documentaries, serve as a pivotal tool in unraveling the mysteries surrounding suspicious deaths.¹ However, the portrayal of forensic autopsies in media often simplifies a complex process. Beyond the dramatic scenes lies a meticulous and multi-faceted investigation, with histopathology emerging as an indispensable component. Histopathology, the study of tissue changes at a microscopic level, plays a vital role in forensic autopsies, enabling pathologists to unearth crucial information that might not be visible to the naked eye.² In this article, we delve into the imperative need for histopathology in forensic autopsies and how it contributes to the pursuit of justice and truth.

Beyond the external examination: Exploring tissues

A forensic autopsy typically begins with an external examination of the body, documenting visible injuries, wounds, and other external evidence. However, the external examination can only reveal so much. Many significant findings lie beneath the surface, hidden within the tissues.³ This is where histopathology steps in. By examining tissue samples under a microscope, pathologists can identify microscopic changes that provide insights into the cause of death, the nature of injuries, and the presence of diseases.

Distinguishing between trauma and natural causes

In cases of suspicious deaths, it's imperative to determine whether the injuries and tissue changes are the result of trauma, such as blunt force or sharp force injuries, or if they are indicative of natural diseases or conditions. Histopathology aids in distinguishing between these possibilities. For instance, the microscopic examination of tissues can reveal the presence of fractures, hemorrhages, and contusions that might not be immediately apparent during the external examination. This differentiation is critical in establishing whether foul play was involved.

Unveiling the story: Timelines of injury

Histopathology also plays a crucial role in establishing the timeline of events leading up to the individual's death. The process of tissue healing, inflammation, and repair can provide insights into the progression of injuries. By assessing the cellular changes and the formation of granulation tissue, pathologists can estimate when injuries occurred and whether they align with witness accounts or other evidence.⁴ This aspect is particularly significant in cases involving potential abuse or assault.

Identifying underlying medical conditions

Forensic autopsies are not limited to

cases of suspected foul play. Natural deaths that occur suddenly and unexpectedly also fall under forensic investigation. In such instances, histopathology can reveal hidden medical conditions that might have contributed to the death. Identifying conditions like heart disease, infections, or neurological disorders can help explain the cause of death and provide closure to the deceased's family. Histopathological examination can identify infections that might not be evident through gross examination. This is particularly crucial in cases where infectious diseases could have been a contributing factor to death, such as in cases of sepsis.

The use of histopathological investigation can identify diseases and conditions that are not only important to establish the cause of death but also to provide important information to the family members. In a project to utilize minimally invasive tissue sampling to determine causes of death, disseminated cryptococcosis as a complication of HIV was diagnosed in a 36-year-old female only during the autopsy. Had ancillary investigations and histopathology not been performed in this case, this would have obviously gone undiagnosed. Because of this finding, counselling was done to her husband to perform the investigation for HIV, and he was also diagnosed positive.⁵ Likewise, the use of histopathology from the samples obtained by MITS in a pilot study of 100 cases diagnosed several conditions and diseases which would have been left undiagnosed had gross examination only been performed.⁶

Uncovering poisoning and toxic effects

Histopathology is invaluable in detecting the effects of toxins, drugs, and chemicals at

the cellular level. It can reveal the specific organs affected and the extent of damage caused, aiding in determining whether poisoning played a role in the individual's demise.

Legal and medical documentation

Histopathology provides documented evidence that can be used in legal proceedings, should the need arise. Moreover, it aids medical research by contributing to databases that advance the collective knowledge of medical conditions and their manifestations.

Challenges and advancements in histopathology

While histopathology is a powerful tool, it is not without challenges. Tissue degradation, post-mortem changes, and limited sample availability can pose difficulties in accurate analysis. Additionally, the interpretation of microscopic findings requires expertise and experience. However, advancements in techniques such as immunohistochemistry, molecular pathology⁷, and digital imaging⁸ have enhanced the accuracy and scope of histopathological examinations.

Practice of histopathology in autopsy in Nepal: Current situation, and possibilities

Though histopathological examination is important for the accurate reporting of the cause of death and other circumstances, it is not routinely practiced in Nepal. There are no clear guidelines on the indications and the types of tissues to be collected for the histopathological examination. The forensic experts performing autopsies are not well-trained to collect samples and perform histopathology. Therefore, they need to rely on the hospital histopathologists to get the service. In order to streamline the process

of the procedure, a clear protocol has to be developed in terms of the indications and the tissue samples to be taken for the analysis. Forensic experts and prospective experts should be trained in the protocol. As far as possible, forensic experts should be trained in the procedure of histopathological examination and the diagnosis of the common pathologies. This can begin with increasing the duration and rigor of the histopathology posting of postgraduate residents and introducing continuous capacity-building training packages to the practicing experts. Until this happens, the existing autopsy services should collaborate to get the facilities of the hospitals and the hospital histopathologists. It may be crucial to increase funding to the autopsies necessitating histopathological examinations to facilitate this vital investigation.

Conclusion

Histopathology stands as a cornerstone of forensic autopsies, unveiling the truth that lies beneath the surface. Through meticulous examination of tissues, pathologists can provide insights into the cause of death, the nature of injuries, and the presence of underlying medical conditions. In cases ranging from homicides to sudden natural deaths, histopathology plays a pivotal role in uncovering vital information that might otherwise remain hidden. As technology and expertise continue to evolve, histopathology's role in forensic investigations becomes even more crucial, ensuring that justice is served, and the truth prevails.

References:

1. Houck MM. Forensic science modern methods of solving crime. 2007.
2. Madadin M, Bhatt AS, Atreya A, Rai S, Rastogi P, Menezes RG. Forensic Histopathology. In: Forensic Microscopy. CRC Press. 2022. p.24.
3. Saukko P, Knight B. Knight's Forensic Pathology. 4th ed. CRC Press. 2015.
4. Dettmeyer RB. The role of histopathology in forensic practice: an overview. Forensic science, medicine, and pathology. 2014 Sep;10:401-12.
5. Subedi N, Bhattarai S, Ranabhat S, Sharma BK, Baral MP, Upadhyaya TL. Disseminated cryptococcosis in a deceased with HIV-1 diagnosed by minimally invasive tissue sampling technique. Clin Case Rep. 2021 Feb 2;9(3):1667-1671.
6. Subedi N, Bhattarai S, Ranabhat S, Sharma BK, Baral MP. Determination of causes of adult deaths using minimally invasive tissue sampling in Gandaki province of Nepal: a multicenter hospital-based study. Eur J Med Res. 2023 Oct 7;28(1):407.
7. Madea B. Sudden death, especially in infancy--improvement of diagnoses by biochemistry, immunohistochemistry and molecular pathology. Leg Med (Tokyo). 2009 Apr;11 Suppl 1:S36-42.
8. Thali MJ, Yen K, Schweitzer W, Vock P, Boesch C, Ozdoba C, Schroth G, Ith M, Sonnenschein M, Doernhoefer T, Scheurer E, Plattner T, Dirnhofer R. Virtopsy, a new imaging horizon in forensic pathology: virtual autopsy by postmortem multislice computed tomography (MSCT) and magnetic resonance imaging (MRI)--a feasibility study. J Forensic Sci. 2003 Mar;48(2):386-403.

Lightning

Dr. Sushila Gurung, MD

Assistant Professor, Department of Forensic Medicine
Pokhara Academy of Health Sciences, Pokhara, Nepal.

Lightning literally means the act of illumination. A lightning strike is an event in which the electric discharge takes place between the atmosphere and the ground. It is one of the meteorological hazards. It has been reported that 103 lightning death occurred on 2021 in Nepal. Here, the climate is mostly dominated by the monsoon originated from the Indian Ocean and controlled by the geographic barrier of the Himalayas. Thus, lightning is common in Nepal than the other regions.

How exactly the lightning struck a person is not always possible to know however, the following are few of the methods which explain how lightning struck and any of the strike of lightning can be deadly.

1. **Direct strike:** When the lightning directly strikes the victim. It mostly occurs when the person is in open areas.
2. **Side flash:** It occurs when lightning strikes a taller object near the victim and a portion of the current jumps from taller object to the victim.
3. **Ground current:** When lightning strikes a tree or other object, much of the energy travels outward from the strike in and along the ground surface. This is known as the ground current. Anyone outside

near a lightning strike is potentially a victim of ground current.

4. **Conduction:** Lightning can travel long distances in wires or other metal surfaces. Metal does not attract lightning, but it provides a path for the lightning to pass. Most indoor lightning casualties and some outdoor casualties are due to conduction. Whether inside or outside, anyone in contact with anything connected to metal wires, plumbing, or metal surfaces that extend outside is at risk. This includes anything that plugs into an electrical outlet, water faucets and showers, corded phones, and windows and doors.
5. **Streamer:** People caught in “streamers” are at risk of being killed or injured by lightning.

When lightning strikes, there is passage of very high potential electricity which liberates tremendous energy in the form of heat for a short duration and causes various degree of burn to the victim. The blast effect of rapidly expanding of the air may tear clothes and shoes of the victim. Nylon clothing may melt and the metallic objects may become magnetized. It may also scorch the vegetation at the scene.

Types of burn produced by lightning are:

- a) **Surface burn:** Here the tissue is burnt. It usually occurs through the metallic object worn or carried by the victim.
- b) **Linear burn:** These are seen over the areas of the skin which offer lesser resistance like folds of the skin and moist creases.
- c) **Filigree burn:** Also called Arborescent, which occurs due to rupture of smaller blood vessels and giving ecchymosis that appears like the branches of the tree.

because of torn clothes and distribution of injuries. Thus, history of thunderstorm, scene of death should be examined and ruled out.

- The death occurring in lightning is accidental.

PREVENTIVE MEASURES

- Standing next to a high object such as a tree or near metal objects like poles and fences should be avoided.
- Do not take shelter in trees, tents, sheds or greenhouses.
- Shelter to be taken in a building or a vehicle. But avoid using electronic equipment inside the vehicle and avoid touching anything metal.
- If inside a building, avoid using electrical equipment and plumbing including taking a shower.
- Do not be inside the water like swimming pool, river.

MEDICO-LEGAL ASPECTS:

- In cases of acute comatose victim, its recognition may be life saving, as resuscitation can be successful in victim of lightning.
- The doubts of foul play may arise

World Conferences on Research Integrity

Dr. Sharmila Gurung, MD

Assistant Professor, Department of Forensic Medicine
Devdaha Medical College & Research Institute, Nepal.

Research is a systematic study which comprises proper planning, conduct and dissemination of knowledge, facts and latest information regarding a particular topic. Its value and benefits completely rely on its integrity. Integrity is a crucial element and fundamental to every research which refers to a set of quality of standard. It ensures accurate, replicable and unbiased results which are reported responsibly to all the relevant stakeholders. Any kind of breach in its integrity such as dishonesty, loosing research data, omission of authorship will lead to research misconduct. Research Misconduct is “fabrication, falsification or plagiarism in proposing, performing or reviewing research, or in reporting research result”. It not only endangers the scientific work but also affects the researchers’ name, affiliation even the publication. Such misconducts are emerging and increasing, hence, urge an incipient need to address and bring awareness towards conducting ethically sound research around the world. Since, studies are often done in collaboration across various discipline, institution and nation; ethical issues arising out of transcending boundaries might come as misconduct due to the social, political and cultural differences that influence ethical norms. The good thing is there are some common standard grounds

for research ethics that many scientist or researchers are still unknown to. There are still global needs to improve research integrity by developing research integrity policies, strategies, tools and educational programs which helps researchers to reflect on their work. Few of such efforts on responsible conduct of research are the World Conferences on Research Integrity (WCRI) and World Conference on Research Integrity Foundation (WCRIF), Office of Research Integrity.

WCRI & WCRIF have been established to bring scholars together and provide a forum for exchange of information all while forming a solid foundation for discussion and promotion of research integrity. They intend “to foster integrity in research through research, discussion, the harmonization of policies, and joint action”. WCRI has held seven conferences till date since 2007 while WCRIF was established in July, 2017 in Amsterdam as a non-profit organization. They have also provided guidance document on statements agreed after each conferences which can be accessed at <https://www.wcrif.org/>. According to WCRI, three groups of behaviors are noted which are grouped as 1) fabrication, falsification and plagiarism (FFP), 2) detrimental research practices (DRP), 3) responsible research practices

(RRPs). It is important for us to keep updated with such principles so as to align our work with moral values and prevent and protect studies from such allegation.

The following are the list of conferences on research integrity and their respective theme/ statement/ agenda/ principles-

1. The 1st World Conference on Research Integrity: Fostering Responsible Research. Portugal 2007. It focuses on misconduct issues.
2. The 2nd World Conference on Research Integrity: The Singapore Statement on Research Integrity to promote global research integrity. Singapore 2010. It encourages the development of unified policies, guidelines and codes of conduct.
3. The 3rd World Conference on Research Integrity: The Montreal Statement on Research Integrity in Cross-Boundary Research Collaborations. Montreal 2013. It outlines principles as a global guide to the responsible conduct of research and trustworthy successful research collaborations
4. The 4th World Conference on Research Integrity: Improving Systems to Promote Responsible Research. Brazil 2015. It focuses on to foster trustworthiness and reliability of research and encourages researchers worldwide to be accountable for their findings.
5. The 5th World Conference on Research Integrity: Research Integrity and Rewards: Amsterdam 2017. It seeks to promote research integrity on a global scale through Registry for Research on the Responsible conduct of Research
6. The 6th World Conference on Research Integrity: The Hong Kong Principles for Assessing Researchers: Fostering Research Integrity. Hong Kong 2019. Hong Kong Principles focus on the explicit recognition and rewarding the researchers to strengthen research integrity and improving researches.
7. The 7th World Conference on Research Integrity: The Cape Town Statement on Fostering Research Integrity through Fairness, Equity and Diversity. Cape Town 2022. It advocates for fairness and equity as a vital requirement for integrity in all research context and right from conception to a study to its implementation, thus providing 20 recommendations or values to the involved stakeholders.
8. The 8th WCRI World Conference World Conference on Research Integrity (WCRI), June 2024 Athens, Greece. The theme is “Catalyzing the translation of research into trustworthy policy and innovation”.

The 8th WCRI World Conference World Conference on Research Integrity (WCRI) is aimed to be the largest and most significant going to be held in June 2024 Athens, Greece. Attending the conference gives us an opportunity to be a part of the group which most likely produces an influential policy statement.

How the Department of Health Services of Nepal acknowledges the Medico-legal Services in Nepal on Recent years?

Annual Report 2078/2079 (2021/22)

Department of Health Services

8.8 MEDICO-LEGAL

Field of Forensic Medicine or medico-legal service sector is not yet completely known and understood in Nepal. Forensic Medicine service to needy people in Nepal is still waiting for its proper identity. This field has a great wish to grow up in normal way to address and to provide help for Nepali people as there is high degree of suffering in society because of improper and inadequate justice related with the cases of medico-legal evidences. This service sector which is supposed to be developed by state is not yet addressed adequately and remains as one of the unrecognized sectors. As a result of improper, incomplete and nonscientific application of forensic evidences the justice system is suffering directly and “Rule of law” or “Law and order” are suffering indirectly. There are more than enough examples of several year imprisonment for an innocent person and release as reward for a criminal by courts cases because of inaccurate collection, documentation and interpretation of evidences related with the crime against human body because of weaknesses in medico-legal works. Mainly unnatural deaths, suspicious deaths and criminal death cases are poorly investigated which could reveal exact truth if medico-legal evidences are collected and interpreted accurately.

Constitution of Nepal 2072 in its article 35 guarantees Right to Health for all Nepali citizen and in articles 20, 21 and 22 Right to justice, Right of victim of crime and Right against Torture. In violation of such fundamental rights there are provisions of proper remedy or compensation. There are other articles like article 42- Right to social justice, article 44 Right of consumers which are partially or completely related with medico-legal field for their proper implementation in real life of people. For effective application of above constitutional rights, medico-legal sector in Nepal must be addressed adequately with priority. Nepal has been developing and implementing various programs to achieve SDG 2030 as one of the major global objectives for all countries. **The 16th goal “Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all level”** cannot be achieved without proper address to medico-legal service sector at all health institutions and hospitals of Nepal.

Time has compelled to recognize medico-legal field and it is shown by other way with spontaneous appearance of more than five dozen of Nepali doctors specialized in the field of forensic medicine. Now it is high time for Nepal Government to facilitate

the environment to utilize those experts in medico-legal field for providing their specialist service to Nepali people.

Few events related with forensic field have coming up with the support and advocacy by MELESON (Medico-legal Society of Nepal), a registered professional society of practicing Nepali Forensic Medicine specialists in the country. Some of the positive outcomes during previous years can be listed as follow:

1. Ministry of Health and population has appointed few Forensic Medicine specialists in some hospitals in contract service for two years.
2. A historical first National Medico-legal Workshop was held on this year at Kathmandu which was organized by Ministry of Health.
3. Six types of medico-legal examination and reporting formats are prepared and prescribed by Nepal Government with initiation of Ministry of Law and Justice on 2073 and now annexed in relevant laws.
4. National Health Training Center from Department of Health requested to MELESON to prepare six various types of Standard Operating Procedures (SOP), Reference Manuals and Training Manuals for standard medico-legal examination and reporting procedures on 2018. On 2020, the SOPs were amended with consideration of concurrent changes in laws and more practical approaches of their application.

Revision of following SOPs and manuals was done on 2020:

- a) SOP and manuals for autopsy work
- b) SOP and manuals for injury examination
- c) SOP and manuals for sexual offence

cases examination

- d) SOP and manuals for age estimation
- e) SOP and manuals for examination of victims of torture

But till date the revised version of SOPs could not be implemented because of unknown reasons in Department of Health and National Health Training Center.

5. During fiscal year 075/076, Cabinet of Ministries of Nepal has passed a Medico-legal Services Operation Guideline 2075 and two private Medical Colleges were permitted to conduct medico-legal autopsy and clinical medico-legal examination at Dhulikhel by KUSMS and at Bhaktapur by Kathmandu Medical College.
6. GBV Protocol was amended as per requirements in new context with incorporation of more than 5 years' experience from the work in the particular field.
7. A road map has been passed to develop medico-legal sector in the country by Central Medico-legal Operation Committee at Ministry of Health and Population on fiscal year 2077/78 as novel activity to address the field which include:
 - a. Establishment of a focal desk in MoHP with a forensic specialist to find out the ways for updating medico-legal service sector in the country.
 - b. To suggest Province Social Development Ministries or Ministries of Health at Provinces to establish Medico-legal Coordination Committee as mentioned in Medico-Legal Service Operation Guideline 2075.
 - c. To establish a Medico-legal Unit in all hospitals with beds more than 100 with

appointing a focal person with a trained doctor in medico-legal field or Specialist if available there

- d. To monitor the situation of medico-legal services in Provinces either by Central Medico-legal Service Operation Committee or Provincial Medico-legal Coordination Committee at least twice within a year and report to Ministry of Health and Population.
- e. To prepare and update the autopsy unit at all hospitals where medico-legal services are provided as per Medico-legal Services Operation Guideline 2075.
- f. To update the Clinical Medico-legal Service physical facilities in concerned hospitals where service is provided and to handover the clinical medico-legal service to OCMC in hospitals where OCMC are functioning.
- g. To request all Province level and higher hospitals for creation of post of Forensic Medical Officer through O & M survey and immediate request to MoHP to appoint Forensic Medical Officer in following 13 hospitals: Mechi Hospital Bhadrapur, Koshi Hospital Biratnagar, Gajendra Narayan Hospital Rajbiraj, Janakpur Hospital, Narayani Hospital Birgunj, Hetauda Hospital, Bharatpur Hospital Chitwan, Maternity Hospital Thapathali, Lumbini Province Hospital Butwal, Veri Hospital Nepalgunj, Surkhet Province Hospital, Seti Province Hospital Dhangadhi and Dadeldhura Hosital.
- h. To start medico-legal services from all Medical Colleges in the country through their Forensic Medicine Departments.
- i. To provide special training for all mortuary helpers through structurally

designed training package.

- j. To make assessment on physical facilities and human resources at all hospitals in the country
- k. To make a systematic data collection of all medico-legal cases in Health Information Management System (HIMS)
- l. To review the remuneration on autopsy work and to allocate remuneration on all types of clinical medico-legal examination and reporting

Activities at Policy level for the development of forensic field in Nepal on 2078/079

Though with great difficulties some of the above listed plans and activities are identified, the follow up process to implement the plans is still on dark. The main actor through guideline is Central Medico-legal Services Operation Committee headed by Quality Standard and Regulation Division of MoHP. Hardly two meetings were held within the period of 2078/079 which is insufficient for something to be realized and moving forward. Only one Karnali Province could form Provincial Medico-legal Coordination Committee out of seven Provinces.

A desk for Forensic Medicine Expert was established under the Quality Standard and Regulation Division at MoHP and an expert was appointed in contract basis for the activities guided by the Central Medico-legal Service Operation Committee as per the road map to develop Forensic field in the country. But the desirable outputs till date are not visible due to lacking backup support.

Printing and dissemination of the revised version of SOPs by NHTC for six types of medico-legal works remains pending on this fiscal year also with unknown reason.

Some of the regular training activities in the fiscal year 2078/79

During the last fiscal year, number of activities related with medico-legal services could be conducted by MoHP, NHTC Department of Health and Ministry of Social Service Karnali Province. Around 200 doctors working at periphery were benefited by these orientation and skill enhancing training.

- a) Clinical Medico-legal Training (7 days) organized by GESI Section of MoHP for:
 - 19 MOs and other doctors working at different hospitals of Province 1 in Biratnagar
 - 22 doctors at Dhangadhi of Sudur Paschim Province,
 - 25 doctors at Butwal of Lumbini Province,
 - 26 doctors at Pokhara of Gandaki Province,
 - 23 doctors at Birgunj of Madhesh Province
- b) National Health Training Center (NHTC) DoH organized the 17 days complete Medico-legal Training for three groups of MOs from different hospitals throughout the country and 30 Medical Officers are trained at Department of Forensic Medicine MMC Maharajgunj.
- c) A complete medico-legal training including medico-legal autopsy and clinical medico-legal works for 16 doctors was organized by Ministry of Social Development, Karnali Province at Surkhet.
- d) Bagmati and Lumbini Provinces organized three trainings for 30 MOs from the concerned provinces which were conducted at Department of Forensic Medicine MMC Maharajgunj.

Though there are many problems in health care service delivery system in the country, the medico-legal service sector which is in pathetic condition must be addressed to keep minimum standard. There are suggestions provided from the National Medico-legal Workshops 2074 and 2075 for very basic and minimum care in forensic medicine sector. Now the proposed activities are modified in to a road map can be considered as one step forward to address the issues. Proper implementation of the provisions given by new legal provisions, guideline and standards must be implemented to keep this sector for elimination of existing malpractice and sub standards in medico-legal service sector of the country. If those provisions are implemented step by step, it may take no longer to achieve minimum standard in this field of sensitive and important service. A separate Section or Division or Unit through O & M at Ministry and similar structures at all Provinces seems to be necessary establishment to take responsibility for the proper implementation of newly emerged and planned thoughts and idea for the minimum development in standard medico-legal service for the people. Central Medico-legal Services Coordination Committee must take responsibility to move forward with the proposed activities related with the forensic field in the country.

This report is copied from the Annual Report of Department of Health Services 2078/2079 (2021/22) pg. 362-364.

Dispelling Myths and Educating Legal Professionals on the role of Forensic Odontology

Dr. Anjali Sehrawat
Dr. Riyaz Ahmed

ABSTRACT

Forensic odontology is an important discipline within forensic science, yet many legal professionals hold misconceptions about its capabilities and limitations. This article aims to dispel some of these myths and educate lawyers, judges, and investigators on the relevance and importance of forensic odontology. We discuss three common myths about forensic odontology, including that it is only used for identifying bodies, that bite mark analysis is inaccurate, and that forensic odontologists only work with teeth. We then discuss the role of forensic odontology in the legal system and the value it provides in criminal investigations. Finally, we highlight some recent advancements in forensic odontology, including the use of 3D imaging technology and DNA analysis, that have further improved its capabilities and potential for providing valuable evidence in criminal investigations. By dispelling these myths and educating legal professionals on the importance of forensic odontology, we hope to improve the understanding and use of this discipline in the criminal justice system.

Keywords: Forensic odontology, misconceptions, legal professionals, relevance, importance, criminal investigations, advancements, 3D imaging, DNA analysis.

INTRODUCTION

Forensic science is a multi-disciplinary field that plays a crucial role in criminal investigations and is relied upon to establish the guilt or innocence of suspects. One important sub-discipline of forensic science is forensic odontology, which utilizes the unique features of teeth, jawbones, and other dental structures to identify human remains, investigate bite marks, and provide valuable evidence in cases of abuse, assault, and other crimes.

Despite its significance in criminal investigations, there are still many

misconceptions and myths surrounding forensic odontology among legal professionals. In this paper, we aim to dispel these myths and educate lawyers, judges, and investigators on the relevance and importance of forensic odontology in the legal system.

Myth #1: Forensic Odontology is Only Used for Identifying Bodies

One of the most common myths about forensic odontology is that it is only used for identifying human remains. While this is one important application of forensic odontology, the discipline has a much broader range of uses. Forensic odontology

can also be used in bite mark analysis, dental trauma investigations, and cases of abuse and assault.

Forensic odontologists can examine the unique characteristics of a bite mark or dental evidence in a case, and provide important evidence to help identify the perpetrator or disprove false allegations. For example, in cases of child abuse, forensic odontologists can help determine the age of bite marks on a child's body and match them to the teeth of the suspected abuser.

Myth #2: Bite Mark Analysis is an Inaccurate Science

Another common myth about forensic odontology is that bite mark analysis is an inaccurate and unreliable science. While there have been cases of wrongful convictions based on flawed bite mark analysis, this was due to poor methodology or a lack of standards in the field.

In recent years, there has been a concerted effort to establish standardized protocols for bite mark analysis and to develop objective criteria for determining the uniqueness of a bite mark. With these improvements, bite mark analysis can be a valuable tool in forensic investigations, and can help identify the perpetrator or exonerate the innocent.

Myth #3: Forensic Odontologists Only Work with Teeth

A third myth about forensic odontology is that forensic odontologists only work with teeth. While teeth are the primary focus of their work, forensic odontologists also examine the mouth's soft tissue, including the lips, tongue, and cheeks. They may also be called upon to examine other areas of the body where bite marks have been found.

Myth #4: Dental Records are Always

Available and Accurate

A common assumption among legal professionals is that dental records are always available and accurate. However, this is not always the case. In some instances, a person may not have had dental work done, or their dental records may have been lost or destroyed. Additionally, dental records may not always provide an accurate match due to changes in a person's teeth over time or discrepancies in the recording process. It is important for legal professionals to understand that dental records are not infallible and that other methods of identification may need to be used in some cases.

Myth #5: Forensic Odontology is a Stand-Alone Discipline

Another misconception about forensic odontology is that it operates as a stand-alone discipline, separate from other forensic specialties. In reality, forensic odontology works in conjunction with other disciplines, such as forensic anthropology, DNA analysis, and forensic pathology. Collaboration between different forensic experts is crucial in ensuring that all aspects of a case are properly analyzed and understood. By working together, forensic specialists can provide a more comprehensive picture of the evidence and contribute to a more accurate and reliable analysis.

Myth #6: Bite Marks are Always Indicative of a Criminal Act

There is a common belief that all bite marks are indicative of criminal behavior, but this is not always the case. Bite marks can also occur accidentally or during consensual sexual activity. It is important for legal professionals to understand the context in which a bite mark occurred, as well as the

characteristics of the bite mark itself, in order to properly interpret the evidence. By ruling out innocent explanations for a bite mark, forensic odontologists can provide important evidence that supports the prosecution or the defense.

Myth #7: Forensic Odontology is Only Useful in Rare Cases

Another myth about forensic odontology is that it is only useful in rare and exceptional cases, and is not a commonly used forensic tool. However, the truth is that forensic odontology plays a significant role in many criminal investigations. For example, dental evidence can be used to identify suspects in cases of burglary or theft or to corroborate witness testimony in cases of assault. In addition, forensic odontologists may be called upon to analyze bite marks in cases of domestic violence, child abuse, or sexual assault. By dispelling this myth, legal professionals can better understand the value that forensic odontology provides in a wide range of criminal investigations.

Myth #8: Forensic Odontology is Inaccurate and Unreliable

A common myth about forensic odontology is that it is an inaccurate and unreliable science. This myth is often perpetuated by the media and popular culture, which can present a distorted and unrealistic view of forensic science. In reality, forensic odontology is a scientifically sound discipline that is based on rigorous research and empirical evidence. Forensic odontologists undergo extensive training and adhere to strict standards to ensure the accuracy and reliability of their work. While no science is 100% infallible, forensic odontology has proven to be a valuable tool in many criminal investigations.

The Role of Forensic Odontology in the Legal System

Forensic odontology plays a crucial role in the legal system by providing valuable evidence in criminal investigations. The use of forensic odontology can help identify the perpetrator, provide evidence of abuse or assault, and even exonerate the innocent.

Forensic odontology can be used to identify perpetrators in cases where the victim has been bitten, by comparing the bite marks to the dental records of suspects. In cases where a suspect has bitten the victim but denies their involvement, forensic odontology can provide crucial evidence to link the suspect to the crime.

In cases of abuse or assault, forensic odontology can be used to identify the perpetrator by examining bite marks, as well as other types of injuries to the mouth and teeth. Additionally, forensic odontologists may be called upon to examine dental records to help determine the age and identity of victims, particularly in cases involving child abuse.

Forensic odontology can also be used to exonerate the innocent. In cases where a suspect is accused of a crime based on bite mark evidence, forensic odontology can provide important evidence that supports the defense. For example, if the characteristics of the bite mark do not match the dental records of the suspect, it can be used to demonstrate that they were not involved in the crime.

Furthermore, forensic odontology has its limitations. For example, dental records may not always be available or accurate, and dental evidence can be destroyed or altered due to various factors such as decomposition or trauma. The interpretation of bite marks can also be subjective, as bite

marks can change in appearance over time and the interpretation of the bite mark can be influenced by the forensic odontologist's own biases and experiences. Therefore, it is crucial for legal professionals to work with forensic odontologists who have extensive training and experience in the field, and to consider the limitations and potential errors associated with dental evidence.

Moreover, forensic odontologists must adhere to ethical standards and guidelines when conducting their work. They must be impartial and unbiased in their analysis of the evidence, and must not use their expertise to influence legal outcomes or make assumptions beyond their area of expertise. Additionally, forensic odontologists must communicate their findings and conclusions clearly and accurately to legal professionals and must be prepared to defend their analysis in court if necessary.

In summary, forensic odontology plays a critical role in the legal system by providing important evidence that can help solve crimes and bring justice to victims. However, it is important for legal professionals to understand the capabilities and limitations of forensic odontology, and to use the evidence in conjunction with other forensic disciplines and types of evidence. By working together and using all available resources, legal professionals can ensure that justice is served and innocent people are not wrongfully convicted.

RESULT

The results of this research indicate that forensic odontology is a valuable field in the forensic sciences that can aid in the identification of victims and provide valuable

evidence in criminal investigations. Dental records have proven to be a reliable source of evidence for identification purposes for decades. However, there are still many myths and misconceptions surrounding the use of forensic odontology in legal proceedings.

One of the most common myths is that dental records are always available for comparison. This is not always the case, as some people may not have a dentist or may have dental work done outside of their regular dentist. Additionally, in cases where the victim's body has been badly burned or disfigured, dental records may not be available or usable for comparison.

Another myth is that forensic odontology can determine the cause of death. While dental evidence can be used to identify a victim, it cannot determine the cause of death. Instead, forensic odontologists can only provide information on the victim's age, gender, dental history, and any unique dental features that may aid in identification. Despite these misconceptions, the legal aspect of forensic odontology remains significant. Dental records are considered to be legal documents and can be used as evidence in a court of law. Forensic odontologists may also be called upon to testify in court and provide expert testimony on dental evidence.

Legal professionals need to understand the limitations and capabilities of forensic odontology to effectively utilize it in criminal investigations. Forensic odontologists must also be properly trained and certified to ensure their work meets legal standards.

Overall, this research highlights the importance of forensic odontology in the forensic sciences and emphasizes the need to

dispel myths and educate legal professionals on the proper use and limitations of dental evidence in criminal investigations. Through increased understanding and collaboration between forensic odontologists and legal professionals, the potential of dental evidence as a valuable tool in criminal investigations can be fully realized.

DISCUSSION

Forensic odontology is a specialized field within forensic science that involves the identification of human remains through the analysis of dental evidence. It is a valuable tool in criminal investigations, as it can provide important information to help solve cases.

One of the primary uses of forensic odontology is in the identification of human remains. Dental records can provide a unique identifier that can be used to positively identify a victim, even in cases where other identifying features may be lost or destroyed. Dental records can also provide important information about the victim's age, gender, and dental history, which can help investigators in their search for potential suspects.

Despite its usefulness, there are still many myths and misconceptions surrounding the use of forensic odontology in legal proceedings. One common myth is that dental records are always available for comparison. In reality, not all individuals have dental records, and even those who do may not have complete records that are usable for comparison. Additionally, dental work may be done outside of a patient's regular dentist, making it more difficult to obtain records.

Another myth is that forensic

odontology can determine the cause of death. While dental evidence can be used to identify a victim, it cannot provide information about the cause of death. However, it can provide evidence of trauma that may be useful in determining the circumstances of death.

Legal professionals must understand the limitations and capabilities of forensic odontology in order to use it effectively in criminal investigations. Forensic odontologists must also be properly trained and certified to ensure their work meets legal standards. They must follow established protocols and procedures to ensure that their findings are reliable and admissible in court. In addition to identification and evidence collection, forensic odontology can also be used in bite mark analysis. Bite mark analysis involves the comparison of bite marks found on a victim or crime scene to the dental records of potential suspects. However, the reliability of bite mark analysis has been called into question in recent years, with some experts arguing that it is an unreliable form of evidence.

Overall, forensic odontology remains an important tool in the forensic sciences. It can provide valuable information to help solve criminal investigations, but it is important to understand its limitations and use it appropriately. Legal professionals and forensic odontologists must work together to ensure that dental evidence is properly collected, analyzed, and presented in court to ensure justice is served.

CONCLUSION

In conclusion, forensic odontology plays a crucial role in the field of forensic sciences, providing a valuable source of evidence in criminal investigations. Despite

some common myths and misconceptions surrounding the use of dental records in legal proceedings, the legal aspect of forensic odontology remains significant. Dental records are considered legal documents and can be used as evidence in a court of law, while forensic odontologists can be called upon to provide expert testimony.

Furthermore, the use of forensic odontology in identifying victims of mass disasters, such as plane crashes and natural disasters, has proven to be invaluable. In such cases, dental records can provide a means of identification when other forms of identification, such as DNA testing, may not be possible.

However, there are limitations to the use of forensic odontology, such as the availability of dental records and the inability to determine the cause of death. Therefore, it is important for legal professionals to have a thorough understanding of the capabilities and limitations of forensic odontology in order to effectively utilize it in criminal investigations.

In addition, forensic odontologists must undergo extensive training and certification to ensure their work meets legal standards. This highlights the importance of continuing education and ongoing professional development in the field of forensic odontology.

Overall, the role of forensic odontology in the justice system is a critical one that should not be underestimated. Its continued use and development will undoubtedly contribute to the advancement of forensic sciences and the pursuit of justice.

FUTURE PROSPECTS

The prospects of forensic odontology are promising, with the continued development of new techniques and technologies. One area of potential growth is in the use of digital technology, such as 3D imaging, for the analysis and comparison of dental records. This technology could potentially enhance the accuracy and efficiency of forensic odontology in criminal investigations.

Furthermore, there is a growing interest in the use of DNA analysis in forensic odontology. By combining dental evidence with DNA analysis, forensic odontologists may be able to provide even more valuable information in criminal investigations.

In addition, there is a need for further research and collaboration between forensic odontologists and other forensic specialists, such as forensic anthropologists and pathologists, to improve the accuracy and reliability of forensic evidence.

Overall, the future of forensic odontology looks promising, with potential advancements in technology and techniques, as well as increased collaboration between forensic specialists.

[Correspondence details: Dr. Anjali Sehwat: anjalishwrt@gmail.com Dr. Riyaz Ahmed: rizinepal@gmail.com]

Editor note: This manuscript is not peer-reviewed.

Congratulations



MeLeSoN extends heartfelt congratulations to **Prof. Dr. Raj Kumar Karki** on his appointment as Associate Controller of Examinations at Kathmandu University. This is a significant achievement and brings great pride to our medicolegal community.

As the first M.D. Forensic Medicine graduate from Kathmandu University, Dr. Karki has been a pioneer in establishing medicolegal services in the private sector. His instrumental work in setting up a medicolegal center at his institution and providing critical post-mortem services exemplifies his commitment to advancing forensic medicine in Nepal.

Dr. Karki's vision and dedication have paved the way for growth in medicolegal education and services. As Associate Controller of Examinations, we are confident he will continue to make valuable contributions with his expertise and experience.

MeLeSoN celebrates professionals like Dr. Karki who are expanding the boundaries of our field. We wish him the very best in his new role and look forward to his ongoing impactful work for medicolegal services and education in Nepal. Congratulations!

Congratulations



The MeLeSoN community is proud to congratulate **Dr. Alok Atreya** on being named one of the world's top 2% of scientists by Stanford University. This incredible achievement affirms Dr. Atreya's dedication to impactful research and his standing as a leader in the field of forensic medicine.

As an Associate Professor of Forensic Medicine at Lumbini Medical College, Palpa, Nepal, Dr. Atreya has published over 170 scientific articles to date. His prolific research contributions have also included authoring chapters in reference volumes such as the Encyclopedia of Forensic Medicine and Forensic and Legal Medicine: Clinical and Pathological Aspects.

Dr. Atreya's listing among the global scientific elite is a tremendous source of pride for researchers in Nepal. It demonstrates that significant advancements are being driven by scientists from our country.

We applaud Dr. Atreya for earning this well-deserved recognition through his academic excellence and commitment to forensic medicine. Congratulations once again on this outstanding accomplishment!

Congratulations



MeLeSoN congratulates **Dr. Jenash Acharya** on his appointment as the first Doctor in Forensic Medicine from Nepal to join the International Committee of the Red Cross (ICRC). serving humanity on a global scale.

The ICRC's noble mission is founded on the Geneva Conventions and aims to ensure humanitarian protection and assistance for victims of armed conflict and violence. Dr. Acharya's expertise will significantly contribute to these efforts. His appointment is a great source of pride for our medicolegal community and a testament to his distinguished capabilities.

He is one of the founding members of MeLeSoN and has served a successful tenure as a General Secretary. He had a notable achievement of establishing a medicolegal unit providing medicolegal services at Kathmandu Medical College Teaching Hospital, Basic Science Block, Bhaktapur, where he served as an Associate Professor and Head of the Department, Vice-principal and also a PG preceptor before joining ICRC.

We wish him the very best as he represents Nepal and our profession internationally. His compassion and dedication exemplify MeLeSoN's spirit. We are confident Dr. Acharya will make valuable contributions to the ICRC's mission and continue to uplift medicolegal services in Nepal. Congratulations on this remarkable achievement!

Congratulations



MeLeSoN extends warmest congratulations to **Dr. Nitin Kumar Agrawal** on being appointed the first forensic odontology expert from Nepal to join the International Committee of the Red Cross (ICRC).

This is a truly outstanding accomplishment that brings great pride to our medicolegal community. Dr. Agrawal's expertise in forensic odontology will serve the ICRC's noble humanitarian mission founded on the Geneva Conventions. His contributions will be invaluable as the organization provides assistance and protection to victims of conflict and violence globally.

Dr. Agrawal exemplifies the spirit of compassion and service that is central to our work. We are honored that one of our distinguished experts will represent Nepal and our profession on the international stage. This recognition of Dr. Agrawal's capabilities and commitment to making a difference is well-deserved.

We are confident he will make significant contributions to the ICRC's efforts and continue to advance forensic odontology services in Nepal. Our medicolegal community celebrates this wonderful achievement. Congratulations!



MeLeSON Activities

Executive Committee(2020-2022)

Chairperson

Dr. Eugen Dolma

Vice-Chairperson

Dr. Abhishek Karn

Treasurer

Dr. Mani Raj Maharjan

Secretary

Dr. Srijana Kunwar

Executive Member

Dr. Alok Atreya

Executive Member

Dr. Arbin Shakya

Executive Member

Dr. Kashev Shrestha

Executive Member

Dr. Bibhuti Sharma

Immediate Past Chair

Dr. Rijen Shrestha

1st national Inter Medical College Forensic Medicine Quiz Contest-Mele-Quiz



Medico-Legal Society of Nepal organized the 1st national Inter medical college forensic medicine quiz contest-MeleQuiz in collaboration with the department of Forensic medicine and H-AIMS (Health awareness Initiative by medical students) in the basic science building of Maharajgunj Medical campus, IOM on 25th Bhadra 2079.

The event started with an opening ceremony chaired by Dr. Eugen Dolma Walung, President – MeLeSoN, Prof. Dr. Pramod Kumar Shrestha, Prof. Dr. Harihar Wasti, Prof. Dr. Raj Kumar Karki and Dr. Gopal Kumar Chaudhary.

The participants included medical students from 11 different medical colleges

in Nepal with a total of 18 teams. The participating medical colleges included:

1. B. P. Koirala Institute of Health Sciences, Dharan
2. Gandaki Medical College Teaching Hospital, Pokhara
3. Janaki Medical College, Janakpur
4. Kathmandu Medical College Teaching Hospital, Kathmandu
5. KIST medical College and Teaching Hospital, Kathmandu
6. Lumbini Medical College and Teaching Hospital, Palpa
7. Maharajgunj Medical Campus, Institute of Medicime, Kathmandu
8. Manipal College of Medical Science, Pokhara
9. Nepalese Army Institute of Health



Figure: Winning team Nobel Medical College being felicitated by Prof. Pramod Kumar Shrestha.

Sciences, Kathmandu

10. Nobel medical College, Biratnagar
11. Patan Academy of Health Science, Lalitpur

It was an entertaining and informative competition for the participants along with the audience. The participants of each and every college showcased their brilliance by rapidly answering the questions. However, the winner of the first mele-quiz was awarded to Nobel Medical College, Biratnagar, with BPKIHS and Gandaki medical college winning the second and third place respectively.

A plate championship organized for the fourth place was won by Lumbini

Medical College. The first quiz was indeed a great contribution to the advocacy of Forensic medicine among young undergraduates. It was an overall entertaining program with the idea to disseminate and enhance knowledge while keeping the competitive spirit alive.

A plate championship organized for the fourth place was won by Lumbini Medical College. The first quiz was indeed a great contribution to the advocacy of Forensic medicine among young undergraduates. It was an overall entertaining program with the idea to disseminate and enhance knowledge while keeping the competitive spirit alive.

Medicos against Gender Based Violence (GBV)

MELESON PRESENTS

MEDICOS AGAINST GENDER BASED VIOLENCE

Rs. 50,000 Cash Prize Other Exciting Gift Hampers

Categories:
 Literary: Poetry, Drama, Story
 Visual: Painting, Drawing, Sculpture
 Performance: Dance, Song

Event Details:
 - Online Event
 - Submission via Audio Visual (Max 3 minutes clip)

Submission Deadline:
 30th August, 2021

Submission at:
 medicosagainstgbv@gmail.com

MAIN SPONSOR **Laxmi Bank**

HEALTH PARTNER **AROGYA ASHRAM**

BUILDING PARTNER **PRESTIGE CONSTRUCTION PVT LTD & BUNK STUDIOS**

SNACKS PARTNER **2pm**

DESSERT PARTNER **BEN NEVIS**

Due to the COVID-19 pandemic at the time of event the awards and the winnings were sent via mail or post.



Picture: Grand Prize Winner-Team Sanopariwar from College of Medical Sciences, being presented award by the Additional Director of CoMS

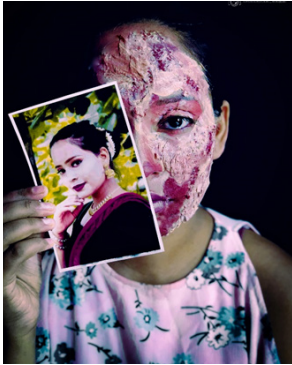
MeLeSoN had hosted an online event for raising awareness in against gender-based violence, which was hugely successful in raising awareness and having now reached more than 6 lakhs views and more than 5000 views every month since the event

The Event included performances in different categories. The winners of the event were:

<p>Team Sanopariwar (CoMS) CMC (9th Batch) RN Sandhya Sharma RN Jasmine Mahat</p>	<p>Grand Prize Winner Performance category winner Literature Category Winner Visual Category Winner</p>
---	--



Picture: Visual Category Winners Art Presentation by RN Jasmin Mahat, Novel Academy, Pokhara.



Picture: Photographic representation of GBV submitted by Vaidarbh Yadav. Devdaha Medical College.



"In Nepal, Khabar Garaun Helpline 1145 serves as a lifeline for survivors of Gender Based Violence, especially during this Covid19 pandemic."

Picture: Still from a drama in Performance Category by Chitwan Medical College team.

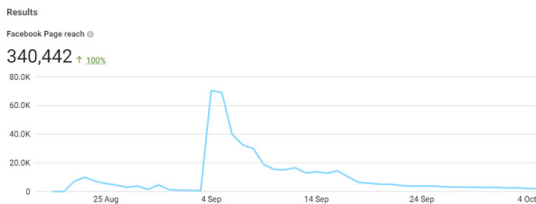


Plan

MeLeSoN will conduct another Medicos Against Gender Based Violence II in which medical students from different institutes will perform a one act play and raise awareness against Gender Based Violence.

Facebook Metrics and Data

Total page and post views



Total Interactions

1,51,000

MeLeSoN 7th Annual General Meeting

The 7th general annual meeting of Medico-legal Society of Nepal was held on 2079-05-31 (September 16, 2022) at Smart Banquet Dhumbarahi Kathmandu. The meeting was chaired by Dr. Eugene Dolma the Chair parson of the Society.

The agenda of the meeting were as follow:

1. Presentation of annual report by Chair Person
2. Presentation of Auditor's Report of MELESON of the FY 2078/079
3. Discussion on Chair person's report and auditor's report
4. Election for new Executive Committee of the society
5. Hand over the authority from existing committee to new executive committee.
6. Address by new Chairperson to general meeting
7. Appointment of New Auditor for current fiscal year
8. Closure



During the address by Chairperson the following points were highlighted:

- The total members of the society have reached to 66
- Successful conduction of an online competition in the topic “Medicos against Gender Based Violence” among medical, dental and paramedical undergraduate students from different medical and dental colleges of Nepal. The program was supported by Laxmi Bank and Asian Thai Foods (P) Ltd.
- Active involvement of MELESON in the mission of “Search for the Missing”, with the main function of Commission for the Investigation of Enforced Disappearance of Persons (CIEDP) for providing the support for ante-mortem data analysis, Orientation Workshop for ante-mortem data collection, Refresher Workshop on Exhumation and deployment of Society members for field work for ante-mortem data collection and verification. Four teams of forensic experts were deployed in the field work at different Districts of Nepal; Rolpa, Kailali, Siraha and Gorkha.
- First MeLeQuiz 2079 (Quiz contest in Medico-Legal Subject) was successfully organized by MELESON with the objective of sharing knowledge in the field of forensic medicine among medical students and raising awareness

about importance of the subject in the development of medico-legal awareness. A total of 18 teams from 11 different Medical Colleges and Health Science Academies participated the contest which is historical event in the country.

- The Society needs collective work for the development of this ignored field

Auditor's report was discussed in general meeting and passed by all members and thanked for timely audit and report providing. Kul Chandra Sharma and Associates was proposed for auditing the financial activities of the Society for current year 2079/080 which was also passed anonymously.

Opened discussion was held and most of the members raised following issues which should be addressed through activities of new executive committee with proposals and follow-up in concerned authorities. The main concerns of the members were:

- Request to Ministry of Health and population on revision of autopsy allowances which was not revised since 23 years and remuneration on clinical medico-legal works
- To request for creation of posts of Forensic Medicine Officer in all province and similar or larger level hospitals of the country. Request to MoHP.
- To run all existing OCMCs of many hospitals of the country by Forensic Medical Officers as far as possible.

Request to MoHP.

- Permission to run PG study in forensic medicine at only for those Health Sciences Academy or Colleges where medico legal service including autopsy service is provided. Request to Medical Education Commission.
- At least two weeks of compulsory rotatory internship after completion of MBBS course in all Medical Colleges and Health Science Academies. Request to MEC, HSAs and Universities.
- To draw attention of concerned authority for upliftment of physical facilities in all hospitals of the country. Request to MoHP.
- To draw attention of the MoHP for the management of the data of medico-legal service work at all hospitals. Request to MoHP and Department of Health.
- To draw attention in the uniformities in travelling and daily allowances for expert witness testimony in courts of Nepal. Request to Nepal Police and Attorney General's Offices

Report by Convener of election committee:

The executive committee had formed a three-member election committee with Prof. Dr. Pramod Shrestha's convenorship. The committee followed the procedures as per Bidhan of the Society and declared result of new executive committee for the two-year tenure 2079-2081. There was election process for the position of Chairperson and



four members on the same day of annual meeting. Voting was conducted by both physical and online process within specified time. Out of 66 total members of the Society, 57 participated for voting. The result of election was as follow:

1. Prof. Dr. Harihar Wasti - Chairperson
2. Dr. Arbin Shakya - Vice chairperson
3. Dr. Kashev Shrestha - Secretary
4. Dr. Samjhana Ghimire - Treasurer
5. Dr. Madan Prasad Baral - Member
6. Dr. Salmalee Yadav - Member
7. Dr. Sabnam Shrestha - Member
8. Dr. Dhiraj Kumar Shah - Member
9. Dr. Eugene Dolma - Immediate Past Chair

Finally, The Chairperson of the Society, Dr. Eugene Dolma handed over the authority of executive committee to newly elected Chairperson Prof. Dr. Harihar Wasti and the team with wish of successful tenure.

Prof. Dr. Harihar Wasti addressed the meeting with thanks for believing on new team to run the activities of the Society for upcoming years on behalf of newly elected executive committee and made commitments to try the best for development of the medico-legal field with the help of all members of the society. The annual meeting was concluded and closed by the Chairperson of the meeting.



MeLeSON Activities Executive Comittee (2022)

Chairperson	Prof. Dr. Harihar Wasti
Vice-Chairperson	Dr. Arbin Shakya
Treasurer	Dr. Samjhana Ghimire
Secretary	Dr. Kashev Shrestha
Executive Member	Dr. Dhiraj Shah
Executive Member	Dr. Madan Prasad Baral
Executive Member	Dr. Sabnam Shrestha
Executive Member	Dr. Salmalee Yadav
Immediate Past Chair	Dr. Eugen Dolma

International Conference of Indo-Pacific Academy of Forensic Odontology



The Indo-Pacific Academy of Forensic Odontology (INPAFO) was founded in 2007 with an objectives of advancing the cause of forensic odontology and also developing and perpetuating the highest standards of practice. INPAFO is a society member of the International Organization for Forensic Odonto- Stomatology (IOFOS). Presently, INPAFO is presided over by Prof. Harish Dasari and has its general secretary as Prof. Aman Chowdhry.

Every year, it organizes its conference to promote its objective of supporting the subject of forensic odontology. This year's "9th International Conference of INPAFO-2023" was organized in Kathmandu (Nepal) from 9th to 11th June 2023. Collaborating institutes and societies

were IOFOS, the Nepalese Association of Oral and Maxillofacial Pathology, the International Committee of the Red Cross, and the Medico-Legal Society of Nepal. This event was organized by the Department





of Oral Pathology & Forensic Dentistry, Maharajgunj Medical Campus, Institute, of Medicine, Nepal, under the able leadership of Prof. Dr. Harihar Wasti (Organizing Chairperson) and Dr. Samarika Dahal (Organizing Secretary). Dr. Nitin K. Agrawal contributed to the success of the conference as conference coordinator.

On the first day, two pre-conference courses were organized at Maharajganj Medical Campus, Kathmandu, Nepal, on oral autopsy and forensic facial approximation.

The main conference was held on the 10th and 11th June 2023, at the Hotel Godavari Village Resort, Kathmandu, Nepal. A fantastic stage was prepared for scientific presentations, award distribution, speeches, and cultural functions. Many international leaders and dignitaries were present on and off the stage during the inauguration function. The patron of the event was the Dean of the Institute of Medicine, Prof. Dibya Singh Shah, and the guest of honor was Her Excellency, the

Australian Ambassador to Nepal, Felicity Volk. Prof. Hrvoje Brkic, President of IOFOS, also graced the occasion. More than 95 delegates participated in this 3-day scientific extravaganza, with delegates from India, Nepal, Bhutan, the Maldives, Croatia, and Canada.

The INPAFO lifetime achievement award was given to Prof. OP Jasuja. In competitive scientific presentations, Late Sh. B.K. Malik Memorial Best Paper Award (faculty) was bagged by Dr. Ahana Shrestha and Late Sh. R.L. Gorea Memorial best paper (faculty) award bagged by Dr. Dilasha Dhungel. Best poster was won by Dr Harneet Kaur (faculty) and the team of Dr. Krisha Suwal, Sabina Suwal, and Suraksha Yogi for Paper Presentation (UG Category).

INPAFO's General Body Meeting and Executive Committee meeting were held at the conference venue.

This news is published in the Newsletter of the IOFOS Volume 45, Issue 1, June 2023 | www.iofos.eu

Lumbini Medical College Hosts Innovative Forensic Medicine Quiz for Budding Doctors



On December 7th, Lumbini Medical College Teaching Hospital organized an innovative Second MeLeSoN Inter-College Forensic Medicine Quiz for medical students across Nepal seeking to spur interest and build capacity in this critical field. With the gracious presence of esteemed guests, participation from 10 leading medical schools, and an engaging quiz full of practical challenges, the event marked an important step toward advancing forensic medicine education and services in the country. The Medico-Legal Society of Nepal (MeLeSoN) is an umbrella organization for forensic medicine specialists and scientists established in 2015. MeLeSoN aims to advance knowledge and training in this critical field through a range of academic activities. These include organizing hands-on trainings for doctors on forensic examinations and procedures, building skills to handle

sensitive medicolegal cases, and conducting seminars, conferences, and quizzes. After hosting its first national quiz in Kathmandu, MeLeSoN partnered with Lumbini Medical College to organize this second installment, seeking to spur interest in forensics among the next generation of physicians. By convening leading experts and students nationwide, the quiz offered an engaging platform to highlight promising initiatives for strengthening forensic medicine education and services across Nepal.

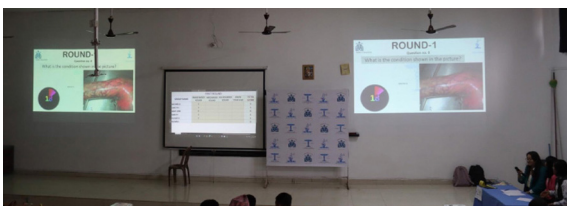
The highly anticipated quiz event launched with an energetic morning trivia session fueled by the 12 participating medical college teams' zealous quest for forensic glory. Following organizing president Professor Dr. Harihar Wasti's rousing call-to-action speech emphasizing the critical need to advance forensic medicine education, the



teams keenly awaited the quiz master's first intense challenge.

What ensued over the next 4 hours tested the mettle of Nepal's brightest future physicians through 8 grueling, high-stakes rounds. Riveting questions explored intricacies from crime scene analysis and post-mortem examinations to identifying obscure toxins and obscure wounds. The rapt quiz-goers witnessed combating champions leverage technical skills from Nepal Medical Council and Kathmandu University's cutting-edge curriculum to correctly deduce complex homicides and sexual assault cases that stumped less seasoned contenders.

As determined 6-member teams were steadily eliminated between nail-biting turns, the local Lumbini squad remained locked in a down-to-the-wire battle with seasoned guests from Kathmandu Medical College Teaching Hospital, Universal College of Medical Sciences, Patan Academy of Health Sciences, Kathmandu University School of Medical Sciences and Gandaki



Medical College. Following a pivotal wager regarding specifics of asphyxiation, the home team's decisive final buzz to correctly identify salient infanticide autopsy features cinched their gritty comeback victory - triggering an eruption of elation from the forensic medicine experts, doctors from various departments, students and staffs in attendance!

Later during the second session of prize distribution and closing ceremony, Lumbini Medical College leadership including the Principal, Vice Principal, Company Secretary, and Hospital Chief convened alongside Professors, doctors, and students. The ceremony featured excellent cultural performances by students as well as the awarding of trophies, medals and certificates to the top three quiz teams.

Following a close scoreboard all morning, the home team from Lumbini Medical College clinched the 10,000 rupee top prize, showcasing strong mastery honed under their department's tutelage. Kathmandu Medical College Teaching Hospital came second and received Rs 7,500 cash while Kathmandu University School of Medical Sciences secured third prize of Rs 5,000 cash. All the winning teams were awarded trophies, medals and certificates.

In his opening welcome speech during the second session, Dr. Alok Atreya, Associate Professor of Forensic Medicine and organizing secretary, emphasized the

need for strengthened training for new generations of forensic pathologists and medical examiners. He highlighted promising initiatives by The Department of Forensic Medicine of Lumbini Medical College to expand hands-on learning in forensics through partnerships, technology, and global best practices. Through events like the forensic quiz, the college aims to generate excitement for these cutting-edge careers essential to justice. In his welcome speech, Dr. Alok Atreya also underscored promising research being conducted in the department with medical student involvement. For his contributions, Dr. Atreya was recently recognized of ranking among the top 2% of global researchers based on citation impact scores from Stanford University.

Echoing this vision, Head of Forensic Medicine Prof. Dr. Satish Babu highlighted the extensive medicolegal consultations provided by the department for all pertinent cases arriving at the hospital. He emphasized their critical role advising on abuse, assault, and criminal investigation matters.

Lumbini Medical College Chairman Mr. Gopal Bahadur Pokharel announced an exciting plan underway to establish an autopsy facility at the college through regulatory approval. This would vastly expand practical training capabilities in forensic pathology.

Presiding quiz guest Police Superintendent Heramba Sharma reiterated forensic evidence allows law enforcement to establish facts accurately amidst complicated investigations. Beyond rewarding excellence, the event convened experts who offered a wealth of perspectives on improving forensics locally. Chief guest

and District Court Justice Honorable Kamal Raj Bista emphasized that judges currently face limitations without access to high-quality forensic findings. He noted this hinders evidence-based rulings in criminal cases countrywide.

In his closing speech, Dr. Wasti, President of the Medico-Legal Society of Nepal (MeLeSoN), noted the Quiz represents a unified step toward their mission of enhancing medicolegal services. He thanked organizing teams and partners for enabling this platform for collective action.

As Lumbini Medical College consolidates takeaways from this successful convening, they aim to scale up similar academic events based on leading forensic medicine curricula. They plan to expand their medicolegal services by establishing Medicolegal Unit and also plan to establish a One Stop Crisis Management Centre (OCMC) by training their doctors and staffs to handle and examine sensitive medicolegal case of sexual offences. By spearheading such initiatives, they hope to kindle a passion for justice among budding physicians nationwide.



Brief news with the same title is published in Medicosnext magazine, 2024 January, issue 42, page 63.