MANAGEMENT OF COMMON ORAL AND DENTAL CONDITIONS

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MANAGEMENT OF COMMON ORAL AND DENTAL CONDITIONS

1. IMPORTANCE OF ORAL HEALTH

The World Health Organization (WHO) has defined oral health as ' a state of being free from chronic mouth and facial pain, oral and throat cancer, oral sores, birth defects such as cleft lip and palate, periodontal (gum) disease, tooth decay and tooth loss, and other diseases and disorders that affect the oral cavity'.

Oral health is a key indicator of overall health and its linkage with general health is both systemic and reciprocal. The mouth, comprising the teeth, masticatory muscles, tongue, mucosal soft tissues and salivary glands, is the body's main portal for nutritional intake. The mouth also provides easy ingress for bacteria, viruses, fungi and other vectors of disease. The mouth is also the first wall of the body's defense system and immunity. When oral health is compromised by disease or injury, it is seen that general health also suffers. **It is for this reason that the World Health Assembly recognized the 'intrinsic link between oral health, general health and quality of life'** (resolution WHA60.17). Risk factors for oral diseases include unhealthy diet, tobacco use, harmful use of alcohol and poor oral hygiene. These are also risk factors for other non-communicable diseases, which are the scourge of mankind today. Hence it is evident that at the primary level, diseases and conditions affecting the mouth and face can disrupt vital functions such as chewing, swallowing, speaking and sleeping. Disruption in any of these can have adverse effects on one's quality of life, social relations, ability to communicate and can lower one's self-esteem. The pain and discomfort associated with these diseases compromises routine schedules, makes concentrating difficult, and is known to lead to absenteeism in school and work. For working individuals, it can thus lead to social isolation and reduced income.

1.1 General Medical Practitioners and Oral health

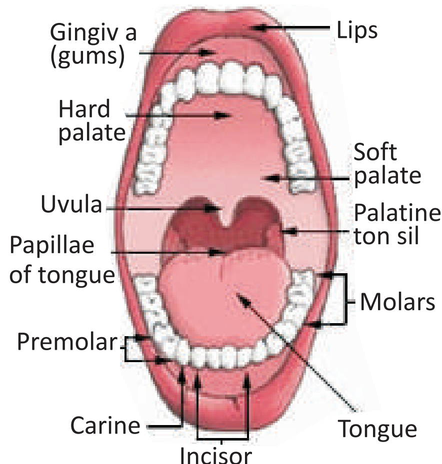
Patients with oral or dental complaints often present to medical practitioners and since there are relatively few trained oral health professionals in the remote, rural and sub-urban areas of Karnataka, it is unrealistic to rely on workforce models that require oral health professionals to deliver treatment at all levels, including in primary health

care facilities. Medical practitioners who are often the first sought health professionals for most dental and orofacial complaints need to be aware and adept at even identifying, diagnosing and more importantly ensuring pain relief before ultimately referral to an oral health professional. Fortunately, the majority of simple pain-relief and immediate attention needed to address most routine oral health needs are proven, affordable, and feasible in the places where the common man lives and many of them can be carried out at the primary health care level quite comfortably.

2. THE NORMAL ANATOMY AND SIGNIFICANCE OF THE MOUTH AND TEETH

The oral cavity represents the first part of the digestive tract. Its primary function is to serve as the entrance of the alimentary tract and to initiate the digestive process by salivation and propulsion of the alimentary bolus into the pharynx. It also serves as a secondary respiratory conduit, a site of sound modification for the production of speech, and a chemosensory organ. The mobility of the lips is also critical to speech production, whistling, singing, the playing of wind and brass musical instruments, expectoration, and human behavioral communication (eg., kissing, smiling, pouting, baring of teeth). Even minor disruptions in the function of the oral cavity can seriously jeopardize an individual's quality of life.

2.1 Anatomy of the mouth



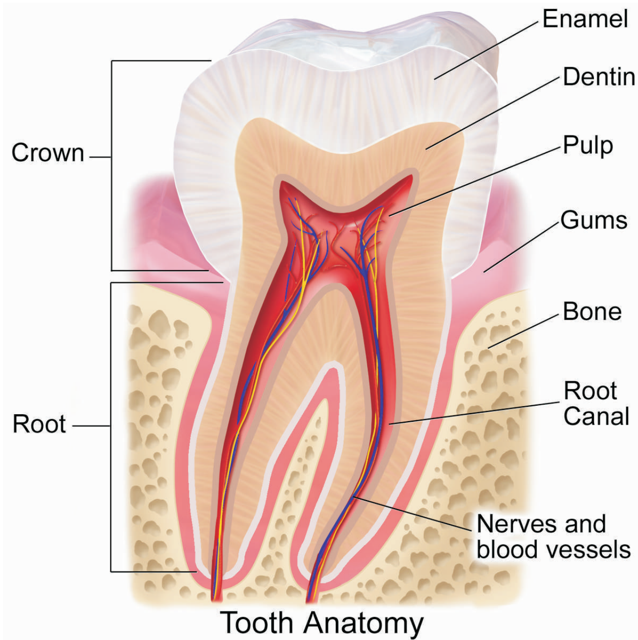
(Source: http://medicalterms.info/img/uploads/anatomy/mouth-anatomy.jpg)

The oral cavity is oval shaped and is separated into the oral vestibule and the oral cavity proper. It is bound by the lips anteriorly, the cheeks laterally, the floor of the mouth inferiorly, the oropharynx posteriorly, and the palate superiorly. The oropharynx begins superiorly at the junction between the hard palate and the soft palate, and inferiorly behind the circumvallate papillae of the tongue. The bony base of the oral cavity is represented by the maxillary and mandibular bones. The oral cavity includes the lips, gingivae, retromolar pad, teeth, hard palate, cheek mucosa, mobile tongue, and floor of the mouth. The major salivary glands are in close relation with oral cavity structures, although they are not part of the oral cavity. The palatine tonsils, soft palate, tongue base, and posterior pharyngeal walls are part of the oropharynx; the oropharynx is not part of the oral cavity.

2.2 Anatomy of a tooth

The teeth are the hardest substances in the human body. Besides being essential for chewing, the teeth play an important role in speech. Parts of the teeth include:

- **Enamel:** The hardest, white outer part of the tooth. Enamel is mostly made of calcium phosphate, a rock-hard mineral.
- **Dentin:** A layer underlying the enamel. Dentin is made of living cells, which secrete a hard mineral substance.
- **Pulp:** The softer, living inner structure of teeth. Blood vessels and nerves run through the pulp of the teeth.
- **Cementum:** A layer of connective tissue that binds the roots of the teeth firmly to the gums and jawbone.
- **Periodontal ligament:** Tissue that helps hold the teeth tightly against the jaw.



Source: https://upload.wikimedia.org/wikipedia/commons/thumb/9/99/Blausen_0863_ToothAnatomy_02.png/1200px-Blausen_0863_ToothAnatomy_02.png)

A normal adult mouth has 32 teeth, which (except for wisdom teeth) have erupted by about age 13:

- Incisors (total 8): The middlemost four teeth on the upper and lower jaws.
- Canines (total 4): The pointed teeth just outside the incisors.
- Premolars (total 8): Teeth between the canines and molars.
- Molars (total 8): Flat teeth in the rear of the mouth, best at grinding food.
- Wisdom teeth or third molars (total 4): These teeth erupt at around age 18, but are often surgically removed to prevent displacement or crowding of other teeth.

The crown of each tooth projects into the mouth. The root of each tooth descends below the gum line, into the jaw.

3. COMMONLY ENCOUNTERED ORAL AND DENTAL DISEASES

The mouth consists of teeth, gums, mucous membranes, salivary glands, and bone. The mouth is the entrance to the body for nutrients, bacteria, viruses, and fungi. It is a part of the body's immune system and plays an important role in primary health. Taking care of the mouth and maintaining good oral hygiene is a part of being healthy. Poor oral health affects your ability to eat, speak, and be happy. When general health is impaired, oral health will also be affected. For example, signs of diabetes, HIV/AIDS, hepatitis, and arthritis can be first seen in the mouth and when oral health suffers, there is an increased risk for poor general health, including cardiovascular disease.. Tobacco use and poor diet/nutrition, especially, are both risk factors for diabetes, cardiovascular disease, respiratory disease, dental decay (caries), cancer including oral cancer, and periodontal disease (gum disease). Eliminating these common risk factors will improve general and oral health.

4. IDENTIFICATION AND PRIMARY MANAGEMENT OF COMMON ORO-DENTAL DISEASES, DISORDERS AND CONDITIONS

Oral health is an integral part of general health and it includes the health of the mouth (the oral cavity), the jaws, the teeth, and all the contiguous structures. Therefore, diseases, disorders and conditions that may be diagnosed in this area of the body can be particularly diverse. Since the mouth constitutes the main gateway into the entire body, disease processes and disorders elsewhere in the entire body may also be reflected and diagnosed here. Some of the common bacterial infections, dental bone disorders, fractures of the teeth, avulsion of teeth, tumours and cysts and neoplasms found in the mouth are discussed here.

4.1 Bacterial infections

The mouth is the favourite habitat of a wide range of diseases causing and commensal micro-organisms. These include nearly the entire range of aerobes and anaerobes, as well as Gram-positive and Gram-negative microbes. Commonly, sites and sources of bacterial infection in the orofacial area include:

1. Carious (decayed) teeth
2. Root remnants in the jaws
3. Periodontal infection (periodontal - tissues surrounding the root of a tooth)
4. Pericoronal infection (pericoronal - tissues surrounding the crown of a tooth)
5. Pre-existing pathological conditions such as bone cysts, bone dysplasia and neoplasms
6. Trauma to oral and dental tissues

Interestingly, bacterial infections in the oral cavity may take diverse clinical courses and presentations as outlined in the subsequent sections.

4.1.1. Dental caries and pulpitis

Dental caries if a bacterial infection characterized by the demineralization of the inorganic component and destruction of the organic component of the teeth. It involves progressive damage of the enamel, dentin and cementum initiated by microbial activity on any tooth surface in the oral cavity. It is also the most common cause of pulpal disease, which results from bacterial invasion of dentin and eventually the pulp. The entry of microbial toxins into the tooth pulp through the caries lesion precipitates pulpitis (inflammation of the pulp).

4.1.2 Dental caries without pulpitis

Clinical Features

Clinically the tooth presents with a cavity and the patient complains of mild pain on either chewing or extremes of temperature

Management

i. Immediate symptomatic management using analgesics. Referral to dental surgeon for Intra Oral Peri-Apical (OPA) X -ray and further treatment.
ii. Radiologic investigations – IOPA radiograph
iii. Oral hygiene instructions
iv. Diet counselling

v. Fluoride therapy, especially for high caries risk

vi. Analgesics: Paracetamol1 gm orally 8 hourly or ibuprofen 400 mg orally 8 hourly. Adjust dosage according to age.

vii. Restorative procedures for carious teeth – either composite resin restoration, silver amalgam, glass ionomer cement or compomer restoration.

4.1.3 Dental caries with pulpitis

Clinical Features

i. Sharp severe pain especially at night

ii. Extreme tenderness of the affected tooth, which may imply impending pus formation

iii. The tooth may be tender to percussion

Management

In the absence of allergy, amoxicillin 500 mg orally 8 hourly and metronidazole 400 mg orally 8 hourly remain the most useful drugs

i. Immediate symptomatic management using analgesics. Referral to dental surgeon for intra-oral examination, IOPA X-ray and further treatment.

ii. Depending on the severity, direct or indirect pulp capping with CaOH2 may be considered for permanent teeth. Primary teeth (deciduous teeth) would often require pulpotomy (procedure to remove the pulp) and stainless steel crowns.

iii. Endodontic treatment with restoration of the tooth with irreversible pulpitis. Thereafter, crown prosthesis. For deciduous teeth, pulpectomy followed by restoration and stainless steel crown.

iv. Incision and drainage is done in case of dentoalveolar abscess.

v. Tooth extraction for grossly carious teeth.

vi. Provision of dental prosthesis wherever necessary.

4.1.4 Periapical and dentoalveolar abscess

This abscess develops secondary to an infective process in the pulp.

Clinical Features

Clinically presents with pain and localized swelling adjacent to the carious tooth. This swelling can be purulent and can spread to the adjacent mucosa depending on severity.

Treatment

i. Initiate analgesics treatment: Ibuprofen 400 mg orally 8 hourly

ii. In the presence of an abscess: Give amoxicillin 500 mg 8 hourly orally and metronidazole 400 mg 8 hourly.

iii. Referral to dental surgeon for intra-oral examination, IOPA x-ray and further treatment.

iv. Incise and drain the abscess; swab for culture and sensitivity

v. Institute root canal treatment for the offending tooth

vi. Wait 3 days to extract the tooth if it is grossly carious to allow the abscess to subside. Provide dental prosthesis thereafter.

4.1.5 Bacterial sialadenitis

Bacterial infection can lead to the inflammation of the salivary glands. This commonly affects the parotid gland, while the submandibular glands are rarely affected.

4.1.5.1 Acute bacterial sialadenitis

Clinical features

This is characterized by sudden onset of unilateral pain at the angle of the mandible. The affected gland is enlarged, tender, and very painful. There is purulent discharge from the Stensen's duct. Patient may be febrile with other signs of inflammation. The condition is common in debilitated and dehydrated patients predisposed to xerostomia.

Management

i. Give amoxicillin 500mg 8 hourly orally.

ii. Initiate analgesics treatment: Ibuprofen 400mg orally 8 hourly.

iii. Referral to dental surgeon for intra-oral examination and further treatment.

iv. Improve oral hygiene of the patient by debridement and irrigation.

v. Carry out surgical drainage if indicated using needle aspiration.

4.1.5.2 Chronic bacterial sialadenitis

This is chronic and recurrent and may be idiopathic or associated with factors that cause ductal obstruction. The condition starts as a unilateral swelling at the angle of mandible and the recurrent type shows periods of remission.

Management

i. Give amoxicillin 500 mg 8 hourly orally.

ii. Immediate symptomatic management using analgesics: Ibuprofen 400mg orally 8 hourly.

iii. Referral to dental surgeon for intra-oral examination, radiographic investigations and further treatment.

iv. Excise the sialolith.

v. In intractable cases, excision of the salivary gland is considered.

4.1.6 Cellulitis and abscess formation

Orofacial cellulitis may emanate from any of the sources and sites mentioned earlier.The principal micro-organisms that precipitate cellulitis produce diverse toxins, enzymes, and cytokines that destroy tissue to facilitate infection, which spreads through the contiguous fascial planes. In this way, there is always the danger of the spillage of the infection into the bloodstream (septicaemia) and any adjacent vital organs and structures. When an acute infection has its origin in the mandibular structures or the floor of the mouth and rapidly spreads to involve the bilateral fascial planes, it often culminates in a deadly condition referred to as Ludwig's Angina.

All clinicians must endeavour to recognize these conditions most promptly, since death can occur in a matter of hours

Clinical Features

There is massive bilateral upper neck swelling with board-like feeling on palpation. Tongue is raised towards the roof of the mouth and the floor is heavily indurated, the tissues having a cauterized-like surface. The patient

is severely distressed because of respiratory embarrassment, and onset of stridor is ominous because it implies impending death.

Management and Referral

The following management should be carried out:

i. Admit the patient and institute specialist consultation promptly.

ii. Referral to a multi-speciality centre which houses medical as well as dental surgeons for a multi-disciplinary approach.

iii. Institute potential antimicrobial administration immediately as below.

- Ensure secure airway during referral and provide competent escort.
- If Ludwig's Angina is diagnosed, then clinicians consulted may consider surgical intervention including surgical decompression, and/or tracheostomy.
- Where an abscess is diagnosed, incision and drainage must be performed promptly and antibiotics commenced after culture and sensitivity report.

For most acute bacterial infections in the orofacial area, the following should be done

i. Give amoxicillin 500mg orally 8 hourly for adults and amoxicillin suspension 125-250mg for children remain the most useful for empirical management. In case of allergy, erythromycin 500mg orally 8 hourly.

ii. Consider metronidazole 400mg orally 8 hourly(for children metronidazole suspension 100mg orally 8 hourly)for 5-7 days, in addition to amoxicillin where anaerobic micro-organisms are suspected to play a major role.

- In cases of severe infections, benzyl penicillin 2.4g IV 6hourly + metronidazole 500mg IV 8 hourly +gentamycin 80 mg IV 8 hourly.
- Analgesics: Ibuprofen 400mg orally 8 hourly. For severe pain diclofenac 75mg IM 12 hourly.

- Rehydrate the patient with 5%dextrose alternating with normal saline.

Clinicians must note that massive antimicrobial administration does not eliminate pus from tissues. Incision and drainage of the established pus is mandatory.

4.1.7 Cervicofacial necrotizing fasciitis

This is a bacterial infection that often requires special attention since it is associated with extreme morbidity. It is a mixed bacterial infection whose pathogenesis principally involves extensive and rapid destruction of fascia, almost exclusively around the neck and craniofacial area. The exact pathophysiology of the exclusive fascial damage remains unknown, however. Paradoxically, no specific micro-organisms have been implicated in the pathology of this condition. However, the condition may not be as uncommon as medical literature may imply, clinicians are hence prompted to recognize it. The hallmark of the condition is that it may present with little suppuration and yet there will be extensive fascial necrosis with consequent skin breakdown.

Management and Referral

i. Admit the patient for rehydration.

ii. Initiate antibiotics: Amoxicillin+clavulinic acid 1.2g IV 12 hourly + metronidazole 500mg IV 8 hourly +gentamycin 80mg IV 8 hourly and i diclofenac 75mg IM 12 hourly.

iii. Referral to multi-disciplinary team; send swab for culture and sensitivity.

iv. Conduct surgical consultation for appropriate intervention: Mop out necrotic tissue meticulously with copious antiseptic irrigation(hydrogen peroxide/ povidone iodine)

v. Dress exposed tissues appropriately and allow for adequate healing before plastic surgery intervention.

4.1.8 Periodontal infections

The periodontium (tissues surrounding the root of teeth) is a functional unit whose main roles include the support of the teeth within the jawbones and the provision of sensory information relating to the

function of chewing. The components of the periodontium, therefore, include the alveolar bone, cementum, the periodontal ligament and the gingiva(gum).Acute and chronic periodontal disease is one of the most common ailments affecting mankind. Some evidence of deterioration of the periodontal tissues can be demonstrated in almost all dentate adults. The periodontal tissues, like other tissues, are subject to inflammatory, degenerative, dysplastic, and neoplastic pathological changes.

4.1.9 Gingivitis

Gingivitis is an inflammatory process that usually originates at the dento-gingival (tooth-gum)interface and affects the functional gingival component of the periodontium.It is primarily a disease of the gingiva but may spread secondarily to the alveolar or oral mucosa. It presents with uneven red colour of the gums, thickened blunted margins, and swollen papillae. The gingiva is soft and boggy and may bleed on palpation. The commonest presentation of gingivitis is bad odour from the mouth, called halitosis, and this can be additionally caused by the consumption of certain foods, poor oral hygiene, alcohol or tobacco use, dry mouth or from the presence of certain chronic medical conditions.

Management and Referral

i. Oral hygiene instructions

ii. Chlorhexidine mouthwash 0.2% rinses or normal saline rinses.

iii. Referral to dental surgeon for intra-oral examination and institution of appropriate measures

iv. Dental prophylaxis.

v. In severe gingival hypertrophy, gingivoplasty (surgical correction of the gums) can be recommended.

4.1.10 Periodontis

Periodontitis is inflammation of the supporting structures of the teeth associated with the loss of attachment and alveolar bone. Periodontitis is characterized by gingivitis, periodontal pocket, gingival recession,tooth mobility.

Management and Referral

i. Oral hygiene instructions.

ii. Chlorhexidine mouthwash 0.2% rinses or normal saline rinses.

iii. Full mouth scaling.

iv. In severe cases root planning is required, periodontal splinting.

v. In severe tooth mobility (>3) tooth extraction may be indicated.

vi. Comprehensive periodontal management is required for aggressive forms of periodontitis.

4.1.11 Pericoronitis

Pericoronitis is the inflammation of the gingiva covering a partially erupted or impacted tooth. This presents with deep pain, gingival swelling, pus production and gingivitis of the overlying gums.

Management and Referral

i. Oral hygiene instructions.

ii. Chlorhexidine mouthwash 0.2% rinses or normal saline rinses.

iii. In presence of an abscess initiate antibiotic therapy: Amoxicillin 500mg orally 8 hourly + metronidazole 400 mg orally 8 hourly.

iv. Referral to dental surgeon for intra-oral examination, radiographic investigations and further treatment including surgical options.

v. Surgical operculectomy (removal of the pericoronal tissue) is the modality of treatment. In the presence of an impacted tooth, surgical dis-impaction is indicated.

4.1.12 Acute ulcerative gingivitis

Nutritional deficiencies arising from the prevalent poor socio-economic status of many of our populations may predispose to the occurrence of the most cases that present with the acute ulcerative gingival conditions. Poor oral hygiene may be prevalent where economic empowerment is low.

Management and Referral

i. Oral hygiene with antibiotics and mouth wash with povidone iodine 1% 8 hourly.

ii. Benzyl penicillin 1.2g IV 6 hourly + metronidazole 500mg IV 8 hourly +gentamycin80 mg IV 8 hourly.

iii. Try to address the primary cause.

iv. Referral to dental surgeon for intra-oral examination and institution of appropriate treatment.

v. Definitive management – periodontal cleaning.

4.1.13 Gangrenous stomatitis (Cancrum oris, Noma)

This is an infective condition of the orofacial tissues that may cause extensive tissue destruction with severe morbidity. The condition may initially manifest as an acute ulcerative necrotizing gingival infection that rapidly involves a block of the contiguous tissues culminating in their breakdown. Unfortunately, the clinical picture and changes associated with this condition may often be so rapid that even the keenest clinician may not notice the progression of the pathological events.

Management and Referral

i. Admit the patient for empirical parenteral antimicrobial therapy (benzyl penicillin 1,2g IV 6 hourly and metronidazole 500mg IV 8 hourly).

ii. Give diclofenac 75 mg IM 12 hourly.

iii. Institute parenteral nutritional support.

iv. Improve oral hygiene accordingly.

v. Initiate prompt specialist consultation where feasible. This will probably require a multidisciplinary approach.

4.2 Bone Infections

Infections in the jawbones may be localized or generalized. Generally, the localized forms of infection are the most common, with the focal osteitis/alveolitis (dry socket) occurring 1 to 7 days following a dental extraction. Patients will complain of much more severe pain than a tooth-ache. The pain is usually throbbing and deep-seated. Analgesics often offer little help.

Clinical Features

Examination reveals a denuded, open tooth- socket with a scanty necrotic clot while the bone often appears literally dry hence the term, dry socket. On the other hand, infection may involve large part of jawbone, most often the mandible. An infective source may be anywhere within the oral cavity,

Such infection would then be rightly designated as osteomyelitis. In the acute form, severe pain and fever are significant presentations and may eventually develop suppurative osteomyelitis that may lead to sequestration. In other situations the acute phase may progress into the chronic sclerosing type of osteomyelitis that is not associated with sequestration. Fortunately, osteomyelitis of the jawbone has remained relatively uncommon with the improvement of oral health facilities and the availability of antimicrobial therapy in general.

Management and Referral of Focal Osteitis/Alveolitis

i. Initial pain management.

ii. Referral to dental surgeon for intra-oral examination, radiographic investigations and institution of appropriate treatment.

iii. Investigate using radiographs. Bite wing radiograph /IOPA (Intra-oral periapical radiograph).

iv. Under local anaesthesia, perform measures to describe the sparse necrotic clot and provoke fresh clot formation. Perform surgical curettage and irrigate copiously with normal saline.

v. Pack the socket with Alvogyl.

vi. Give tabs Ibuprofen 400mg orally, 8 hourly

vii. Administer metronidazole 400mg orally 8 hourly and amoxicillin 500mg orally 8 hourly as these may be of benefit where there is evidence of infection.

Management and Referral of Jaw Osteomyelitis

i. Initiate ibuprofen 400mg orally 8 hourly.

ii. Acute forms will require parenteral administration of an appropriate antimicrobial agent, e.g., clindamycin 300mg IM 6 hourly.

iii. Referral to multidisciplinary team/ dental surgeon for intra-oral examination, radiographic investigations and institution of appropriate treatment.

iv. Eliminate any focus of infection where diagnosed.

v. For chronic suppurative types, consider surgical intervention where sequestration has occurred.

vi. Investigate all patients to ascertain their immunological status.

4.3 Trauma of the Orofacial tissues

Injury to the teeth and the supporting alveolar bone occurs quite frequently, especially among children. Other more severe injuries to the soft and skeletal tissues of the orofacial area commonly arise through road traffic accidents, sporting activities, and interpersonal violence. Such violence where guns and the missiles are used may lead to extensive tissue destruction with high morbidity.

Injuries of the tissues in the maxillofacial area can at first appear daunting, but it is important to follow the basic principles of resuscitation: secure the airway, maintain breathing, and ensure circulation as a priority.

4.3.1 Orofacial injuries

Management of all Orofacial injuries

i. Stabilize as appropriate and maintain airway.

ii. Administer tetanus toxoid 0.5 ml IM STAT.

iii. Give analgesics: Ibuprofen 400mg orally 8 hourly.

iv. Referral to oral and maxillofacial surgeon / dental surgeon for intra-oral examination, radiographic investigations and appropriate medical/surgical procedures.

Management and Referral for Jaw Fractures and Severe Soft Tissues Injuries

Mandibular fractures may present with swelling, pain and loss of function due to derangement of occlusion: antimicrobial and analgesic cover is then mandatory.

i. Give amoxicillin 500mg orally 8 hourly + metronidazole 400mg orally 8 hourly.

ii. For analgesia, give ibuprofen 400mg orally 8 hourly.

iii. Ensure that the fractured fragments are adequately bandaged: Use of a crepe bandage around the jaw and over the head should minimize fragment movement.

iv. Order an orthopantomogram (OPG) radiograph, as this is the most useful radiographic investigation and should reveal the nature and severity of the fracture.

v. Referral to oral and maxillofacial surgeon / dental surgeon for intra-oral examination, radiographic investigations and specialist surgical management.

Primary care for gunshot and missile associated injuries entails the control of haemorrhage, surgical toilet, and suturing. Appropriate packing with antiseptic dressings (povidone iodine 10%) may be indicated in deep cavitating injuries where there is severs tissue loss. Do not be too aggressive at the primary surgical toilet procedure.

Useful tissue may be salvaged by employing multiple staged procedures afterwards.

i. For all severe injuries of the mid and lower face, protect the cervical spine. Hence choose any imaging investigations carefully. Where feasible and available, a CT scan of the full neck and cranium may be the most useful primary investigation.

ii. Avoid unnecessary plain radiographic view.

Criteria for the Admission of a Patient with a Craniofacial Injury

i. Prolonged loss of consciousness reported.

ii. Clinician is not able to predict the consciousness status.

iii. There is evidence of severe blood loss necessitating replacement.

iv. There is persistent/recurrent headache.

v. There is massive oedema in the facial region and especially in the floor of the mouth.

vi. Any condition that may adversely influence the stability of the airway.

vii. Evidence of general confusion of the statement.

viii. Clinician must use desertion to evaluate the minimum criteria that will necessitate the admission of an injured patient for appropriate management.

4.3.2 Dental injuries

This section includes all those traumatic dental injuries that result from improper brushing technique or from an accident or sports injury. The majority of these injuries are minor - chipped teeth. It is less common to have a dislodged tooth or avulsed out tooth, but these injuries are more severe. Treatment depends on the type, location and severity of each injury. Regardless of the extent of the injury, the tooth requires immediate examination by a dentist or an endodontist. Sometimes, the neighboring teeth suffer an additional, unnoticed injury that can only be detected by a thorough dental examination.

4.3.2.1 Dental hypersensitivity

Clinical Features

Dentinal hypersensitivity presents as sharp and sudden pain in response to an external stimulus. The most common trigger is cold, with 75% of people with hypersensitivity reporting pain upon application of a cold stimulus.

Management

i. Oral hygiene instructions

ii. Diet counselling

iii. Referral to dental surgeon for intra-oral examination and management.

iv. Desensitizing agents such as toothpaste and mouthwashes

Often teeth are injured during trauma and are fractured, displaced, or completely avulsed.

i. Antimicrobial cover is then prescribed appropriately: amoxicillin 500mg orally 8 hourly + metronidazole 400mg orally 8 hourly.

ii. Meticulous oral hygiene should be emphasized.

iii. Soft diet is advised.

4.3.2.2 Uncomplicated crown fracture

Clinical Findings

i. Fracture involves enamel or dentin and enamel

ii. The pulp is not exposed.

iii. Pulp test may have a false negative initially.

iv. Observe the pulp until definitive pulpal diagnosis can be made.

Radiographic Findings

Fracture involves enamel and /or dentin. Pulp is not exposed.

i. 3 angulations radiographs should be taken to rule out displacement or fracture of the root.

ii. Radiograph of lip or cheek lacerations is recommended to search for tooth fragments or foreign materials.

Management and Referral

i. Referral to dental surgeon for intra-oral examination, radiographic investigations and appropriate treatment.

ii. If tooth fragment is available, consider whether it can be bonded to the tooth.

iii. Restore the tooth with the composite resin.

iv. In case of severe crown fracture, consider a fixed prosthesis (crown).

v. Primary teeth: smooth sharp edges. If possible the tooth can be restored with the glass ionomer filling material or composite filling.

4.3.2.3 Complicated crown fracture

Clinical features

i. Fracture involves enamel and dentin and the pulp is exposed.

ii. Pulp test may have a false negative initially.

iii. Observe pulp until a definitive pulpal diagnosis can be made.

Radiographic Findings

Fracture involves enamel and dentin and the pulp is exposed

i. 3 angulations radiographs should be taken to rule out displacement or fracture of the root.

ii. Radiograph of lip or cheek lacerations is recommended to search for tooth fragments or foreign materials.

Management and Referral

i. Referral to dental surgeon for intra-oral examination, radiographic investigations and appropriate treatment.

ii. In immature teeth, pulp capping (exposure< 1mm) or partial pulpotomy with CaOH2. This treatment is also the choice in young patients with completely formed teeth.

iii. In older patients, root canal treatment can be the treatment of choice, although pulp capping or partial pulpotomy be considered.

iv. If exposure is>24hours between accident and treatment root canal treatment is indicated.

v. In extensive crown fractures, fixed prosthesis can be considered (crown).

vi. Extraction may be the last option.

vii. Primary teeth: Pulpotomy is indicated with subsequent restoration with a stainless steel crown thereafter. If not, extraction is the choice of treatment.

4.3.2.4 Root fracture

Clinical Findings

i. The coronal segment may be mobile and may be displaced.

ii. The tooth may be tender to percussion.

iii. Pulp test may have false negative initially.

iv. Observe pulp until a definitive pulpal diagnosis.

v. Transient crown discolouration (red or grey) may occur.

Radiographic Findings

i. The fracture involves the root of the tooth and is horizontal or diagonal plane.

Management and Referral

i. Referral to dental surgeon for intra-oral examination, radiographic investigations and appropriate treatment

ii. Reposition, if displaced, the coronal segment of the tooth as soon as possible.

iii. Check position radiographically.

iv. Stabilize the tooth with a flexible splint for 4weeks. If the root fracture is near the cervical area of the tooth, stabilization is beneficial for a longer period of time (up to 4 months). But this has poor prognosis.

v. Monitor healing up to 1 year to determine pulpal status.

vi. If pulp necrosis develops, root canal treatment of the coronal tooth segment to the fracture line is indicated.

vii. In case of poor prognosis, extraction of tooth is advised.

Primary teeth: If the coronal fragments displaced, extract only that fragment. The apical fragment should be left to be resorbed.

4.3.2.5 Dental alveolar fracture

Clinical Findings

i. The fracture involves the alveolar bone and may extend to adjacent bone.

ii. Segment mobility and dislocation are common findings.

iii. An occlusal change due to misalignment of the fractured alveolar segment is often noted.

iv. Vitality testing may or may not be positive.

Radiographic Findings

i. Fracture lines may be located at any level, from the marginal bone to the root apex.

ii. The panoramic technique is of great help in determining the course and position of fracture lines.

Management and Referral

i. Referral to dental surgeon for intra-oral examination, radiographic investigations and appropriate treatment

ii. Reposition any displaced segment and then splint.

iii. Stabilize the segment for 4 weeks.

iv. Primary teeth: Same treatment as permanent. However, monitor permanent teeth in the fracture line.

Clinical Findings

i. The tooth is tender to touch or tapping .No displacement, no mobility.

ii. Pulp tests are positive.

iii. Radiological findings are normal.

Management and Referral

i. Referral to dental surgeon for intra-oral examination, radiographic investigations and appropriate treatment

ii. No treatment; same for primary teeth.

iii. Monitor pulpal condition for at least one year.

4.3.2.7. Subluxation

Clinical Findings

i. The tooth is tender to touch or tapping and has increased mobility but has not been displaced.

ii. Bleeding from gingival crevice maybe noted.

iii. May get a false negative pulp test.

Radiological Findings

i. Radiographic abnormalities are usually not found.

Treatment

i. Referral to dental surgeon for intra-oral examination, radiographic investigations and appropriate treatment

ii. A flexible splint to stabilize the tooth for patient comfort can be used for up to 2 weeks.

iii. Primary teeth: Same treatment as permanent.

4.3.2.8. Intrusive luxation

Clinical Findings:

i. The tooth is displaced axially into the alveolar bone. It is immobile and percussion may give a high, metallic (ankylotic) sound.

ii. Pulp test will give negative result. In immature, not fully developed teeth, pulpal revascularization may occur.

Radiographic Findings

The periodontal ligament space may be absent from all or part of the root.

Management and Referral

i. Referral to dental surgeon for intra-oral examination, radiographic investigations and appropriate treatment

ii. Teeth with incomplete root formation: Allow spontaneous repositioning to take place. If no movement is noted within 3 weeks, recommend rapid orthodontic repositioning.

iii. Teeth with complete root formation: Reposition the tooth either orthodontically(a division of dentistry that prevents, diagnoses and corrects dental and facial irregularities.) or surgically as soon as possible. The pulp will likely be necrotic and root canal treatment using a temporary filling with calcium hydroxide is recommended to retain the tooth.

iv. Primary teeth: If the apex is displaced toward or through the labial bone plate, leave the tooth for spontaneous repositioning. If the apex is displaced into the developing tooth germ, extract.

4.3.2.9. Lateral luxation

Clinical Findings

The tooth is displaced, usually in a palatal/lingual or labial direction.

Radiological Findings

The widened periodontal ligament space is best seen on eccentric or occlusal exposures.

Referral and Treatment

i. Referral to dental surgeon for intra-oral examination, radiographic investigations and appropriate treatment

ii. Reposition the tooth with forceps to disengage it from its bony lock and gently reposition it into its original location.

iii. Stabilize the tooth for 4 weeks using a flexible splint.

iv. Monitor the pulpal condition. If the pulp becomes necrotic, root canal treatment is indicated.

v. In immature, developing teeth, confirm revascularization radiographically by evidence of continued root formation and possibly by positive vitality testing.

vi. Primary teeth: if there is no occlusal interference, as is often the case in anterior open bite, with the use of local anaesthesia, gently reposition the tooth by combined labial and palatal pressure.

vii. In severe displacement, when the crown is dislocated in a labial direction, extract. If minor occlusal interference, slight grinding is indicated.

4.3.2.10 External luxation

Clinical Findings

The tooth appears elongated and is excessively mobile. Vitality tests will likely give negative results.

Radiological Findings

Increased periodontal ligament space apically (at the root region of the tooth).

Referral and Treatment

i. Referral to dental surgeon for intra-oral examination, radiographic investigations and appropriate treatment

ii. Reposition the tooth by gently reinserting it into the tooth socket.

iii. Stabilize the tooth for 2 weeks using a flexible splint.

iv. Primary teeth: determine treatment on the basis of the degree of displacement, mobility, root formation, and the ability of the child to cope with the emergency situation. For minor extrusion (<3mm) in an immature developing tooth, careful repositioning or leaving the tooth for spontaneous alignment are acceptable treatment options. Extraction is the treatment of choice for severe extrusion in a fully formed primary tooth.

4.3.2.11 Avulsion

Clinical findings

i. The tooth is completely out of the socket

Referral and Treatment

i. Referral to dental surgeon for intra-oral examination and appropriate treatment

ii. Re-implant immediately (a physician can do it easily).

iii. Cleanse tooth with clean water. Storage/transport medium should include buccal succus, milk, normal saline, or saliva.

iv. Splint tooth for 4 weeks using a flexible splint.

v. Primary teeth: DO NOT re-implant.

4.4 Orofacial congenital and dysplastic conditions

Clefts of the lip and palate constitute the most commonly encountered congenital malformations. When they are particularly severe, they may pose feeding problems for the affected babies from birth. Special methods for feeding the affected children have to be instituted to facilitate normal growth and weight gain while awaiting surgical intervention. Fortunately severe forms of this condition that necessitate such drastic and innovative feeding methods are rare.

Dysplastic lesions may include those that are lead to aberrant tissue growths such as congenital malformations and natal and neonatal teeth. Dysplastic lesions of bone may manifest much later in life and should be easy to recognize. Although rare, some bone dysplasias may manifest with endocrine disorders that could have generalized effects. In the presence of any tissue malformation, therefore, clinicians are advised to institute a full investigation of the affected patient.

Ankyloglossia is a common condition in newborns that interferes with breastfeeding and with speech at a later age.

Management and Referral

i. Multidisciplinary teams are required to address correction, management, and concerns regarding speech and nutritional intake.

ii. For cases with severe clefts, ensure adequate feeding.

iii. Where facilities are available special feeding devices can be fabricated.

iv. Otherwise nasogastric feeding should be the most important.

v. Natal and neonatal teeth do not generally cause any impairment. Refer for their removal to allay parent anxiety that they could be inhaled or swallowed.

vi. Most congenital epulides may be excised under local analgesia, e.g., lignocaine 2%+adrenaline 1:80,000 local infiltration. They hardly recur.

vii. Bone dysplasias may be monitored appropriately until criteria for surgical intervention are defined.

viii. Cases with the clefts should be advised for immediate follow-up and management at an appropriate facility.

ix. Speech therapy is advisable in all cases of the cleft Palate.

x. Surgical excision of ankyloglossia should be carried out to avoid speech disturbance.

4.5 Cysts and benign tumors of the orofacial region

Cysts may occur in soft tissues or facial bones. They are generally growing and painless. Eventually they cause swelling and disfigurement, as for the bony cysts, pain may manifest due to tissue tension and /or supervening infection.

Similarly, benign tumours of the orofacial region may originate from either soft tissue or bone. Those originating from bone are much more common and particularly infiltrative. Early identification of this condition is extremely important because of the capacity of this tumour to infiltrate the surrounding tissues. The ossifying/cementifying fibroma is the next most important benign tumour that should be diagnosed early since it also causes severe disfigurement.

Management and Referral

i. Referral to pathology for biopsy and radiology for radiographic imaging to define the nature of the lesion

ii. Aspiration of soft tissue lesions for cytological analysis where feasible.

iii. Incisional biopsy or excision biopsy for all benign tumours is mandatory

iv. The odontogenic keratocyst has now been classified as a benign infiltrative tumour of the jawbones. A diagnostic incisional biopsy must be performed to ascertain its existence before surgical extirpation is executed.

v. Surgical management includes enucleation or marsupialisation.

4.6 Malignant neoplasms of the orofacial region

It must be recognised at the outset that the mouth, jaws, and facial region constitute an area of the body that manifests the highest diversity of neoplastic pathology. All clinicians ought to be particularly vigilant to this reality.

i. Embryologically and developmentally, the oral cavity and the jaws consist of tissues and organs originating from all the three embryonic stem tissues: the ectoderm, the mesoderm and the endoderm. Basically, the classification of malignant neoplastic pathology anywhere in the body essentially follows this premise.

ii. These neoplasms may be broadly classified as those of epithelial, mesenchymal and vasorformative in origin.

iii. Owing to its prevalence, oral squamous cell carcinoma (OSCC) constitutes the most important malignant neoplasm of epithelial

origin. The aetiological factors associated with this neoplasm include tobacco use and sustained alcohol consumption. Apparently, immunosuppressive conditions may precipitate the prevalence of OSCC. Malignant neoplasms whose cells of origin are mesenchymal in nature are broadly classified as sarcomas. As a group almost all these lesions have hardly any identified definite aetiological associations. Sadly, effective management of almost all the lesions remains most disheartening.

iv. Cells of the mononuclear-macrophage system (the reticulo-endothelial system) may also give rise to malignant neoplasms manifesting in the orofacial region.

v. Among these, lymphomas are common, with Burkitt's lymphoma being the most common type.

Management and Referral

i. Order appropriate radiographic imaging, as it may be of value

ii. Refer the patient immediately for a diagnostic biopsy procedure

iii. Identify a centre that can deal effectively with specific neoplastic lesions and advise the patient accordingly

iv. Where necessary, give analgesia: Ibuprofen 400mg orally 8 hourly.

4.7 Neuropathies of the orofacial region

4.7.1 Paroxysmal trigeminal neuralgia

This condition carries very high morbidity because of the severe often intractable pain associated with it. This disease is common among middle-aged and elderly persons. Patients may report of sequential symmetrical tooth extraction with no relief of pain. There is no known aetiological factor. The pain will be reported as severe and piercing, lasting only a few seconds at particular sites (trigger zones) known to the patient. Often, sleep may not be disturbed at night. During the day there are usually multiple attacks of pain.

Management

i. Listen to the history of the pain carefully

ii. Establish that there are no other lesions that may precipitate similar pain

iii. Give analgesia – Diclofenac 100mg orally once daily for 3 days. After 3 days reassess

iv. Always examine the patient while you have a syringe loaded with local anaesthetic lignocaine 2% (preferably a dental syringe)

v. In the event that an attack occurs, quickly infiltrate the anaesthetic directly at the trigger zone. The patient will report immediate pain relief. This is diagnostic of the condition.

vi. Referral to dental surgeon for intra-oral examination, radiographic investigations and appropriate treatment

vii. Institute treatment accordingly: Carbamazepine 100-200mg orally nocte or 100mg orally 12 hourly constitute the mainstay of the treatment. Always start with the lowest recommended dosage of either formulation. Monitor the condition for at least 1 week and adjust the dosages appropriately. Get a physician's review. Since this treatment is often open-ended, review the patients regularly and evaluate haematological indexes accordingly. An assay of the drug in the serum may also be necessary.

viii. For patients who may have suffered for lengthy periods without treatment, emotional instability may be clinically apparent. Therefore, provide backup treatment with a tricyclic antidepressant e.g. amitriptyline 25mg orally 8 hourly for a week, then 50mg nocte as maintenance.

ix. Note that suicidal tendencies among patients whose pain is poorly managed are remarkable.

4.7.2 Facial palsy (Bell's palsy)

Facial palsy may manifest as a result of a variety of factors, including trauma, deep seated craniofacial neoplastic lesions, and non-specific viral infections. More commonly, the idiopathic type of facial palsy (Bell's palsy) is seen. The history of the condition is often short and there may be no clear-cut associated aetiological events.

Management

i. Take a clear history to try to determine the type of facial palsy

ii. Order craniofacial radiographic imaging and/or magnetic resonance imaging where indicated

iii. Use an eye pad to protect the eye on the affected side

iv. Institute steroid treatment over a 10-day period. Tabs prednisolone 15mg 8 hourly for 2 days then 10mg 8 hourly for the next 2 days then 5mg 8 hourly for the next 3 days, then 5mg 12 hourly for the remaining 3 days.

v. Refer for any long-term definitive management

4.8 Herpetic infections

The herpes group of viruses and especially Herpes zoster constitutes one of the most common causes of vesiculo-bullous lesions in the orofacial region. The lesions are usually of acute onset manifesting with irritating pain. Where there is underlying immunosuppression due to HIV infection, fulminating Herpes zoster infection may cause extensive damage to the periodontium leading to spontaneous tooth exfoliation from the affected jaw segments. After the acute phase of the herpetic infections the cutaneous lesions heal with scarification accompanied by hyperaesthesia over the affected area. This post-herpetic facial neuralgia is often difficult to manage effectively.

Investigations

Investigate for HIV, carry out Mantoux and examine the sputum

Management

i. Diagnosis of the acute lesions is often made clinically as the crops of vesicles are typical

ii. Do not touch these lesions without gloves.

iii. Referral to dental surgeon for intra-oral examination and appropriate treatment

iv. In the acute phase, administration of tabs acyclovir 200mg orally 5 times daily for 7 days is the mainstay of treatment. In Immunocompromised patients, give 500mg orally 8 hourly for 10 days

v. Apply lignocaine 1% cream PRN 5-7 days to manage hyperaesthesia.

vi. Diclofenac 100mg orally once daily may be chosen where pain is persistent (post-herpetic neuralgia). Add Carbamazepine 200mg orally 12 hourly if pain persists.

4.9 Temporomandibular joint (TMJ) disorders

Temporomandibular joint pain and dysfunction may be intertwined with stressful life events that are often difficult to elucidate clinically. The condition has become particularly common in persons in the 2nd decade in life and above.

Generally, TMJ pain can be most variable in quality, may be nonspecific and without any clear-cut associated local events. However, it is often possible to correlate the manifestation of TMJ pain with painful conditions in other areas such as the spine, recurrent headaches, and even abdominal cramps. No radiographic or other imaging modality may demonstrate a tangible biologic basis for the dysfunction and pain. Currently, professional consensus worldwide indicates that this group of conditions should be referred to as temporomandibular joint disorders (TMJD).

Management of TMJD

i. Essentially, manage emerging symptoms especially pain.

ii. Tricyclic antidepressants: amitriptyline 25mg orally 8 hourly for 7 days, remains useful

iii. Ibuprofen 400mg orally 8 hourly

iv. Referral to dental surgeon for intra-oral examination, radiographic investigations and appropriate treatment

Investigate selectively to rule out any 'organic' changes in TMJs.

i. Note that, overall, expensive and extensive high tech investigations may yield little value in the management of the individual

ii. Evaluate the patient and collectively settle on a management modality that the patient feels offers relief

iii. Avoid active invasive surgical intervention unless there is firm evidence that surgery would offer help

iv. Consult for alternative opinion – maxillofacial surgeons

4.9.1 TMJ Dislocations

This is the excursion of the mandibular condyle beyond the normal range, where it is displaced out of the glenoid fossa, much anteriorly beyond the articular eminence, but still remaining within the TMJ capsule.

Management

i. Analgesia Paracetemol 1000mg orally 8 hourly or Ibuprofen 400mg 8 hourly.

ii. In acute dislocation, manipulation for reduction with or without anaesthesia

   Local or general anaesthesia may be required. Muscle relaxants or sedatives are also indicated

iii. Referral to dental surgeon for intra-oral examination, radiographic investigations and appropriate treatment

iv. In chronic recurrent dislocation, mandibular manipulation for reduction with intermaxillary fixation to limit the mouth opening (crepe bandage may be used as a substitute)

v. Surgical intervention, e.g., eminectomy, capsule tightening, or creation of a mechanical block may also be necessary.

4.10 Oroantral communication and fistula

This is an unnatural communication between the oral cavity and the maxillary sinus. Commonly occurs after the extraction of upper posterior teeth.

Clinical Features

i. Escape of fluids from the oral to the nasal cavity

ii. Epistaxis

iii. Escape of air from the mouth to the nose

iv. Pain

v. Persistent purulent or mucopurulent nasal discharge

Management

i. Amoxicillin 500mg 8 hourly orally

ii. Ibuprofen 400mg 8 hourly orally

iii. 0.9% normal saline nasal drops

iv. Referral to dental surgeon for intra-oral examination, radiographic investigations and appropriate treatment. It requires a multidisciplinary approach.

v. Surgical intervention

4.11 Edentulism (loss of teeth)

Edentulism is a condition where teeth are missing as a result of trauma or disease or sometimes are congenitally missing.

Management

i. Referral to dental surgeon for intra-oral examination, radiographic investigations and appropriate prosthesis

ii. Removable prosthesis: Partial dentures, complete dentures, or overdentures

iii. Fixed prosthesis: Crowns, bridges, or implants

iv. In deciduous dentition, space management should be considered to prevent loss of arch length

4.12 Malocclusion

Malocclusion stands for the deviation observed from the normal occlusion (bite). This can be the result of either a skeletal or a dental deformity and can result in crooked, crowded, or protruding teeth, leading to gum problems/periodontal disease, severe headaches, and sleep disorders.

Management

i. Symptomatic treatment

ii. Prompt referral to a specialist (an orthodontist) for correction

iii. Removable orthodontic treatment

iv. Fixed orthodontic treatment

v. Orthognathic treatment with orthodontic treatment

4.13 Dental fluorosis

Dental fluorosis is a disturbance of the tooth structure caused by extensive intake of fluoride during the tooth development stage. It is characterized by hypomineralization of the inorganic component, which will present with tooth discolouration, pitting of the teeth and in severe cases brown discolouration of the teeth with destruction of the surface. In some cases, there is extreme sensitivity to temperature extremes.

Management

i. Referral to dental surgeon for intra-oral examination and appropriate treatment

ii. Topical fluoride therapy where there is sensitivity

iii. Microabrasion or bleaching may be attempted

iv. Restorative techniques to restore aesthetics: Composite masking, porcelain veneers, porcelain crowns are indicated.

5. MAINTAINING GOOD ORAL HYGIENE

5.1 Key messages for mothers of infants and toddlers

- Plaque is a layer of bacteria that forms on the teeth. It can develop on any surface of the teeth, especially along the gum line
- The bacteria produces acid which dissolves the enamel of a tooth and leads to dental decay
- If dental plaque accumulates and is not removed, it can harden and turn into calculus or tartar which is a risk factor for gum disease
- Poor oral hygiene makes it easy for large amounts of plaque to build-up
- Use no more than a pea-sized amount of fluoride toothpaste
- Teach children that they should not swallow the toothpaste
- Tooth brushing with fluoridated toothpaste helps make teeth stronger teeth and protect against dental decay
- Make sure the bristles are soft to protect the child's teeth and tender gums
- Use a small size brush to fit toddler's mouth

- Change the toothbrush every three months or when bristles begin to wear
- Only water or milk in baby's bottle. Do not put baby to bed with a bottle
- Wean child from bottle by 1 year of age
- Avoid sugary, starchy snacks or sugary drinks especially between meals. Prepare healthy snacks for your child and encourage
- more water consumption
- Eat a balanced diet rich in vegetables, fruits, dairy, meats and beans
- Recommend first dentist visit by age one
- Visit a dentist at least once a year for check-ups

5.2 Tooth brushing tips for mothers of infants and toddlers

- Wipe infants gums after feeding with a clean washcloth
- When teeth start to erupt, brush the gums and teeth with a small soft bristled toothbrush
- Brush toddlers' teeth with a pea-size drop of fluoride toothpaste for at least two minutes, twice a day
- Teach children to spit out toothpaste, not to swallow it
- Always clean children's teeth before going bed. The last thing that touches children's teeth before bedtime should be a toothbrush with fluoride toothpaste

5.3 Tooth brushing techniques for young children

- Place a toothbrush to the teeth at a 45-degree angle and gently brush in a circular motion. Clean the outside surfaces of the upper and lower teeth
- Clean the inner surfaces of the upper and lower teeth
- Clean the chewing surfaces of the upper and lower teeth. Do not forget to brush the tongue!
- Parents and caregivers should take an active role in brushing their children's teeth

- Brush children's teeth with fluoride toothpaste, or assist children with tooth brushing, at least twice a day

5.4 Techniques to maintain a healthy mouth for the elderly

5.4.1 Brush morning and night

- Poor oral hygiene allows the bacteria in dental plaque to produce acids and other substances which damage teeth, gums and surrounding bone.
- Dental plaque forms continuously and begins as an invisible film that sticks to all surfaces of the teeth and or dentures, gums and tongue. When it is not removed it hardens into calculus (tartar).
- Brushing is the most effective and economical method of physically removing dental plaque from gums, tongue, teeth and or dentures.
- Note that while oral swabs may be useful for applying therapeutic products they do not effectively remove plaque and food debris.

5.4.2 Natural teeth

- Place the toothbrush at a 45% angle to the gum line.
- Gently brush front, back and chewing surfaces of the teeth and gums in a circular motion. Give particular attention to the gum line.
- If some teeth are missing make sure all surfaces of single teeth are cleaned.

5.4.3 Dentures

- Older people who wear dentures are at risk of developing fungal infections.
- Fungal infections can be attributed to wearing dentures at night, poor cleanliness of dentures, denture plaque, permeability of acrylic denture resin, diet and pre-existing general health factors such as diabetes.
- Clean dentures with a denture brush and mild soap to remove plaque from all surfaces, then rinse well under running water.
- Hold dentures carefully while brushing and clean them in a bowl of water placed in a sink, to protect from breakage if dropped.

- Do not use fluoride toothpaste as it is abrasive and can damage the denture surface.
- A scratched denture can be a source of irritation and increase the risk of oral infections.
- Remember gums and tongue should also be brushed using a soft toothbrush to remove plaque.
- Gum tissue needs time to rest from denture wearing.
- Encourage the older person to remove dentures overnight.
- Store cleaned dentures in cold water overnight in a denture container labelled with the person's name.

5.4.4 Use of fluoride toothpaste on teeth

- Fluoride protects natural teeth by remineralising and strengthening tooth enamel.
- For frail and dependent older people, high fluoride (5000ppm) toothpaste is recommended to therapeutically protect against tooth decay.
- Use a pea-size amount of toothpaste when brushing teeth.
- Encourage the older person to spit but not to rinse the mouth after brushing to allow the fluoride to effectively soak into the teeth.

5.4.5 Use of soft tooth brush on gums, tongue and teeth

- A soft tooth brush is gentle on oral tissue and gums.
- Regardless of whether an older person has teeth or dentures/partial dentures or has no teeth and chooses not to wear dentures, it is important to brush gums and tongue.
- The presence of bacteria on the tongue is related to bad breath as well as aspiration pneumonia. Ask the person to stick out their tongue and carefully brush the tongue carefully from back to front.
- Brushing the tongue can also improve an older person's taste and hence enjoyment of food.
- Following brushing, thoroughly rinse the toothbrush under running water, tap to remove excess water then store in a dry place.

- As an infection control measure a toothbrush should be replaced:
  - when the bristles become shaggy
  - every three months
  - following an acute infection such as thrush or common cold.

5.4.6 Keep the mouth moist

- Saliva has antibacterial properties. When the quantity and quality of saliva is reduced, oral disease can develop very quickly.
- Dry mouth is also linked with increased risk of aspiration pneumonia.
- Dry mouth is uncomfortable, unpleasant and can impair taste, chewing, swallowing and speech.
- Note that some oral care products exacerbate dry mouth and damage oral tissue. Unless otherwise directed do not use mouthwashes or swabs containing – alcohol, hydrogen peroxide, sodium bicarbonate, lemon and glycerine.
- Keep the mouth moist by frequently rinsing or sipping water.
- Keep lips moist by frequently applying a water-based moisturiser.
- Discourage sipping of fruit juices, cordial or sugary drinks.
- Try to reduce intake of caffeine drinks.
- Stimulate saliva production with 'tooth friendly' lollies as required.
- Use dry mouth products (saliva substitutes) as directed.

5.4.7 Cut down on sugar intake

- Tooth decay is directly related to the frequency of sugar intake rather than the total amount of sugar eaten.
- Encourage a drink of water after meals, after sugary drinks or snacks and after taking medications especially if they have been crushed and mixed with a sweetener. This helps to reduce the acid that causes tooth decay.
- Meals or snacks containing milk or cheese also help reduce acid that causes tooth decay.
- Encourage a selection of 'tooth friendly' alternatives in food, drinks and medications such as xylitol products.

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MEDICAL PROFESSIONALISM

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Being a good doctor touches every aspect of medical life

Niall Dickson

Introduction

The history of Medicine is as old as the history of mankind. The practice of medicine has evolved from the days of witchcraft to empirical symptomatic treatment to recent times where we are talking of basics such as life-style to evidence-based medicine.

The practice of Medicine in the modern era is beset with unprecedented challenges that centre on increasing disparities among the legitimate needs of patients, the available resources to meet those needs, the increasing dependence on market forces to transform health care system, and the temptation for physician to forsake their traditional commitment to the primacy of patient's interests. Physician must reaffirm their active dedication to the principles of professionalism, which entails not only their personal commitment to the welfare of their patients but also collective efforts to improve the health care system for the welfare of the society.

Ethical codes

The sea of changes in the concept and knowledge of medicine has come about due to major advances in diagnostic and therapeutic modalities. Despite that the values and ethics have always formed the underlying current of medical profession and have guided the physician about providing the best and most effective care to the patients.

Ethical codes form the founding principles of the medical profession. They embody the values of the time in which they have been formulated and the culture from which they emerge. They provide an ethical structure to govern the practice of the physicians, and their relationship with the patients and society. Hippocratic oath (*circa* 400 B.C.) gave direction to the moral code to be followed by the physician.

American Medical Association formulated principles of medical ethics in 1957 and stressed the necessity to possess the following qualities by the physicians serving the humanity .

Improving medical knowledge

Assuring physician competence

Maintaining confidentiality, and

Protecting patient vulnerability

The physician who is the key in the medical practice is in a position to fulfil these commitments. Recent years have witnessed a fall in medical profession's dedication to its core values. It is failing to satisfy expectations of the patient and society. The complexity of the medical profession and the demands by the public in the recent years has necessitated the renewal of the physician's dedication to the patient's interests, and the intrinsic virtues necessary for the medical profession.

Charter on Medical Professionalism

The medical professionalism project jointly sponsored by the American Board of Internal Medicine (ABIM) Foundation, American College of Physicians (ACP) and European Federation of Internal Medicine began in November 1999 as a collaborative effort designed to raise the concept of professionalism within the consciousness of internal medicine both in US and Europe. It brought out a charter in 2002, on medical professionalism detailing the fundamental principles and professional responsibilities to both patients and society to be followed by the physicians. There are 3 fundamental principles and 10 professional responsibilities as follows (2).

Charter on Medical Professionalism

Fundamental principles

Principles of primacy of patient welfare

Principles of patient autonomy

Principles of social justice

Professional responsibilities

Commitment to professional competence

Commitment to honesty with patients

Commitment to patient confidentiality

Commitment to maintaining appropriate relation with patients

Commitment to improving quality of care

Commitment to improving access to care

Commitment to a just distribution of finite resources

Commitment to scientific knowledge

Commitment to maintaining trust by managing conflicts of interest

Commitment to professional responsibilities

Reiser in an editorial in Annals of Internal Medicine has summarised them as **4 ethical priorities for physicians (3).**

1 advance the well being and dignity of patients

2. improve the accessibility and quality of institutional health services

3. encourage principled physician behaviour

4. move society to equitable positions in distributing health resources

Physician's responsibilities

The charter is a commendable effort to widen the physician's responsibilities for patient welfare and change organisational and social health policies. Boston internist

Francis Peabody (1881-1927), Harvard Physician while writing 'The Care of the Patient', highlighted the need for the physician's dedication in the welfare of the patient, and stated that 'medicine is not a trade to be leaned but a profession to enter. The treatment of a disease may be entirely impersonal, but the care of a patient must be completely personal. A physician who neglects the emotional life of a patient is as 'unscientific as the investigator who neglects to control all the conditions that may affect his experiments'. The secret of the patient is in caring for the patients.

The most common criticism made at present by older practitioners is that young graduates have been taught a great deal about the mechanism of disease, but very little about the practice of medicine- or to put it more bluntly, they are too

'scientific' and do not know how to take care of patients. The good physician knows his patients through and through, and his knowledge is bought dearly. Time, sympathy and understanding must be lavishly dispensed, but the reward is to be found in that personal bond which forms the greatest satisfaction of the practice of medicine. One of the essential qualities of the clinician is interest in humanity, for the secret of the care of the patient is in caring for the patient' . The charter on medical professionalism is intended to encourage such dedication and to promote extra agenda for the profession of medicine that is universal in scope and purpose.

3 principles lie at the core of the professionalism. They are-

1. primacy of patient welfare, stressing altruistic dedication to the well being of the individual patient,
2. autonomy of the patient, urging physician to facilitate patient involvement in treatment decisions, and
3. social justice, calling upon physician to work actively toward equitable societal distribution of health care resources

Concept of Professionalism

The concept of professionalism has evinced keen interest among physicians since a very long time. Many attempts have been made to define a universally accepted definition of professionalism. The Royal College of Physicians (RCP) in collaboration with other organisations in its report, Doctors in Society: Medical professionalism in a changing world, defined it as 'a set of values, behaviours and relationships that underpin the trust the public has in doctors'(6).

Subsequently, RCP with the King's Fund has produced Understanding Doctors: Harnessing Professionalism and the 21st Century Doctor: Understanding the Doctors of Tomorrow. It states medical professionalism as 'a strong value-based framework within which doctors can shape the improvement of health care and exercise a constructive influence on health policy in the public interest'.

The rapid changes that are taking place in the Society have also seen a sea of changes in the medical community. In that backdrop the practice and maintenance of the traditional concept of professionalism has assumed significance. Professional standards represent a code of practice universal to any given profession. They have been created with the expectation that these

standards will be internalised and subsequently represent the norms of the profession (7).

Professional standards help in promotion and guidance of practice of a medical professional. The professional behaviour of an individual depends on a variety of factors such as personal values, internal compose, environment, culture, and context (7).

Expectations of patients

All patients want to be looked after by a good doctor. This is because they know instinctively that a doctor's decisions and advice about diagnosis and treatment can affect the outcome and possible consequences of illness and may make the difference between life and death . Patients equate 'goodness' with up to date medical knowledge and clinical skill, strong ethical standards and a bedside manner that is empathetic, courteous and kind. These qualities form the fundamental attributes of doctor's professionalism.

Medicine is in transition from a predominantly doctor-oriented culture to a patient-centred culture of professional values . This has necessitated doctors to treat patients with dignity and respect. The patients are to be involved fully in undertaking decisions about their medical care. Such an approach gives the patients a better experience and can improve the clinical results.

The qualities of a professional man, in the words of Thomas Russell, Executive Director of American College of Surgeons, are multi-dimensional. They consist of competency and dedication to improve the skills, becoming a role-model for future generation of medical men and placement of welfare of the patient above everything else . The ultimate aim of the physician is patient care and to that end all their efforts must be directed.

True Professional

Today, the medical profession is confronted by an explosion of technology, changing market forces, problems in health care delivery, bioterrorism and globalization. It has resulted in increasing difficulty to meet their responsibilities to patients and society. In these circumstances reaffirming the fundamental and universal principles and values of medical professionalism, which remains ideal to be pursued by all physicians, become all the more important.

Justice Louis Brandeis has described four distinguishing characters of a true professional . They are-

1. Professionals are keepers, transmitters, and advancers of knowledge gained, at least in part through experience,
2. Professionals governed by a guiding code of ethics that includes service to others,
3. Professionals set and enforce their own standards, and
4. Professionals value performance above reward.

Epstein and Hundert have defined professional competence as 'the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and the community being served (12).

The competence develops on the scientific knowledge and basic clinical skills attained. The physician has to acquire knowledge and apply it to find a solution to real-life situations. The training must make him competent to take a good history from the patient, to make a proper physical examination and to undertake side-room investigations and procedures, and to determine the special investigations that are going to be useful in establishing the diagnosis, and in formulating the treatment.

Charles Odegaard, President-Emeritus of the University of Washington in his book Dear Doctor has said, 'what we need above all now is a greater bond of faith and trust between patient and doctor, sufferer and healer, which is accommodated with whatever health care institutional arrangement encourage in our society. There should be a renewed trust and confidence in each other .

Good physician

The focus of the 21st century health care system must be the patient. Such a system will ensure that patients have access to the safest and highest quality care. We must re-establish and promote the value of doctor-patient relationship.

One of the essential qualities of the clinician is interest in humanity. A *Punch* cartoon of 1884 featured a conversation between two women

First: What sort of a doctor is he?

Second: Oh, well, I don't know very much about his ability; but he's got a very good bedside manner

What makes a great physician? Dr. Jacob Bigelow (1787-1879) put a question to self and answered as follows: 'I would answer that he is a great physician, who, above other men understands diagnosis. It is not he who promises to cure all maladies, who has a remedy ready for every symptom, or one remedy for all symptoms; who boasts that success never fails him, when his daily history gives the lie to such assertion'.

Sir William Osler has said 'A good physician treats the disease, but the great physician treats the patient. It is much more important to know what sort of patient has the disease than he knows what sort of disease the patient has'. The physicians must put the interest of their patients before themselves. They have to be devoted to their duty and strive hard to put their head and heart in the work. The love to the work will give dividends in the form of appreciation by the patients.

Medical Training

Every medical institution has an aim to impart their alumni total education so that they become efficient to serve the suffering humanity. The Association of American Medical Colleges (AAMC) undertook a major initiative in 1996 to formulate guidelines to medical schools about learning objectives for medical student education. It found that there are four important attributes which a medical graduate should possess so as to be able to deliver effectively the health service. The attributes are altruism, knowledge, skill and duty.

Robert Coles in his book 'A life in Medicine, a literary anthology' has given these objectives a pride place as moral education . A graduate so trained has to be altruistic exhibiting compassion and empathy while treating the patients under his care. He must possess an impeccable integrity and honesty. He must show respect for privacy of the patient under his care. The dignity of the patient has to be maintained as a person and treated with utmost care.

In order to provide relief, the physician must be knowledgeable about the art and science of medicine. He must possess good knowledge of the scientific basis of medicine and must be in a position to apply them in his practice. . Learning is a life-long process, thus he has to be a life-long student.

'Medical education' according to William Welsh, a well-known US bacteriologist, 'is not completed at the medical school. It is only begun. Hence it is not only the quantity of knowledge which the student takes with him from schools which will help him in his future works: it is also the quality of mind, the disciplined habit of correct reasoning, the methods of work, the way of looking at medical problems, and the estimate of the value of evidence'.

The physician must possess all the skill to provide the care needed by the patient. He has to obtain proper history, with details of the chronological events, careful physical examination, interpretation of the physical signs in the background of the knowledge, selection of proper diagnostic procedures that will help in confirmation. In the light of all these findings physician will be in a position to look into therapeutic options and make selection of treatment that is best suited to the patient. He must discuss the details about the condition and treatment with the patient and his/her family and relieve their anxiety and concern.

Major advances in diagnosis and therapeutic modalities have brought a sea of changes in the concept and knowledge of Medicine. This has necessitated the medical men to enhance and to expand their professional competence to find a solution to real-time situations. Skills are attained over a period of time by following examples, and by experience gained by trial and error. There is need for life-long learning and involvement in a periodic self assessment.

The physician must be duty conscious. He must be in a position to tackle the complications, side effects of medication and prevention of risk factors. During treatment of the condition, the economic condition of the patient has to be considered and unnecessary diagnostic procedures should not be undertaken. The medication selected must be within his reach. He must educate people about the preventive measures.

Medicine addresses the extreme situations that are faced by the human being. They oscillate between 'pain and comfort, loss and acceptance, tragedy and recovery, birth and death'. The medical care-giver works by interacting intimately with people who are in difficulties. They want good medicine. They would like to regain their lost health. Though there has been a significant change in the medicine over the years, the relationship between doctors and patient has not changed.

'Voltaire said, 'the art of medicine consists in amusing the patient while nature cures the disease'. Hans Krebs explaining the Nature said, 'the great and ultimate

healer is always nature itself and that the drug, the physician and the patient can do no more than assist nature by providing the very best conditions for the body to defend and heal itself'. Paracelsus considered 'the physician is only the servant of nature, not her master. Therefore it behooves medicine to follow the will of nature'. Health becomes the nature's reward for getting into harmony with her laws. Nature heals under the supervision of the medical profession. After all, the physician is the nature's assistant.

Competence is a professional habit and it is an interaction of the task and clinical abilities. It involves a judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and the community. The competence develops on the scientific knowledge and basic clinical skills attained.

Patient care

The physician has to be trained to see the patient as a person and not as a bunch of diseases, a sympathetic, caring manner is therapeutics in itself.. Theodor Bilroth has said, 'he who combines the knowledge of physiology and surgery, in addition to the artistic side of his subject, reaches the highest ideals of medicine'.

Etiquette-based medicine will improve the behaviour, develop character, bring professionalism to the career and satisfaction to the patient. A compassionate physician will be able to bring a greater bond of faith and trust between patient and doctor, sufferer and healer.

Hugh Catrus while answering a question, how does one become a great doctor? says, 'a good doctor is one who is shrewd in diagnosis, and wise in treatment; but, more than that, he is a person who never spare himself in the interest of his patients; and in addition he is a man who studies the patient not only as a case but also as an individual.... The good doctor, whether a general practitioner or a specialist, is also a man who studies the patient's personality as well as the disease'.

Medicine is a profession. The persons pursuing it always put the needs of the patients before their own self interests. They are neither perturbed at the unhealthy competition which has made the profession a business by unscrupulous elements, nor look at the financial benefits. They practice the profession following the ethical principles.

Care givers

There is a continuous quality improvement with new information, new techniques and new technology. The medical profession has formulated its own code of conduct explaining the physician's duties toward the patient and his obligations to the Society. Though they have been altered in the recent years, the basic principles have remained unaltered. The primary obligation of the physician is his professional duty. The physician must willingly consecrate his life to the service of humanity and must practice the art and science of Medicine with conscience and dignity, maintaining the honour and noble traditions of the profession.

Physician must keep before him the high ideals of profession. While defining the ideals, Charaka has told that 'one who desires to become a physician must initially become thoroughly knowledgeable and cultivate virtues by working hard. Then only he is in a position to restore the lost health of the patient and bring him back to normal life. The physician according to Charaka, must develop the qualities of friendliness, compassion for the suffering patient and eagerness to do his best to relieve the suffering.

Medical ethics is 'the obligation of a moral nature which governs the practice of medicine'. It highlights the obligations involved in performance or non-performance of an act, and the morals of doing things correctly or incorrectly. The medical profession has prescribed for its members from the ancient times, high moral standards and responsibilities. A good relation has to be maintained between its members, and between the Physician and the patient.

Physician has to be competent to take the health care system in which he is working. There is no uniformity agreeable definition of competence that encompasses all the about mentioned areas of professional medical practice. There is no examination after a person has graduated. There is no system of re-certification. Though the physicians are encouraged to attend the continuing medical education programs held periodically throughout the country to update their knowledge, there is no yardstick to assess their knowledge. There is no procedure of self-assessment.

Qualifications of a medical man

The ancient medical texts have prescribed necessary qualifications to the medical man. Physician must be well informed and learned. He must have

thorough acquaintance of medical texts and must have gained experience from the internship with the master. The medical knowledge must be profound and clear. He must have watched carefully how patients are treated for various ailments. He should have love of study. He should be free from addictions, irritability, greed, arrogance and intolerance. He must be enthusiastic in his profession, hard working and sincere.

These are the instructions prescribed by Charaka to a medical graduate

1. Your actions must be free from ego, vanity, worry, agitation of mind or envy. You must plan the treatment of the patient carefully
2. Your efforts must be directed towards achieving professional success
3. Your efforts must be directed towards giving health to the suffering patients
4. You must never harbour feelings of ill will towards your patient
5. You should not entertain thoughts of sexual misconduct
6. Your appearance and dress must bespeak modesty
7. You should not take liquor, commit sin or keep company with the wicked
8. Your speech must be soft, pleasant, virtuous, truthful, useful and moderate
9. Your actions must be appropriate to the place where you practice and the time
10. Your efforts must be unremitting in enriching your knowledge and promoting your health
11. You should not undertake to treat criminals, traitors and other anti-social elements
12. You should not undertake to treat a women when her husband or any other relative of hers is not present
13. You should not accept any gift presented by a woman patient without ascertaining that it has been approved by her husband or guardian

14. You should not enter the house of your patient uninvited
15. When you are seeing the patient you take care to confine your sense organs, mind, awareness and speech on matters strictly relating to the patient's health and welfare
16. Do not reveal to others what goes on in the patient's household
17. Even when you have discovered that the patient's life-span is severely limited, do not disclose
18. Do not exhibit your own erudition
19. conduct with dignity and decorum
20. he should exhibit friendliness, kindness for the suffering, eagerness to do his best to alleviate the suffering, and withdrawal of treatment from one whose condition is definitely moribund

Duties

Sir William Osler, the renowned Physician of twentieth century said that 'the physician must be friend, philosopher, well-wisher and guide of patient and the family under his care'. The medical student during his training is not educated about the obligations and responsibilities natural to the medical profession. The primary obligation of the physician is his professional duty. He must willingly 'consecrate his life to the service of humanity' and must practice the art and science of medicine with 'conscience and dignity' and maintain the honour and noble tradition of his profession.

Illness prevents a person from pursuing the values of life and there is an inability to satisfy normal desires, to derive pleasures of life and to lead a productive life. Physician strives to restore the health of a sick person so as to enable himto achieve and fulfil he values of life and to be useful to the society.

Obligation

The physician has an obligation to teach and pass his expertise and skills on to the next generation of medical men. As they educate the medical students and residents about approach to the diagnosis and management, procedures and techniques, they impart high standards of professional behaviour and lifelong commitment to leaning.

Research is basically creativity. It involves seeing the connection between things that were not previously seen to the connected. Professional man must get himself involved in such a pursuit. Creative research does not always require sophisticated equipment and facilities; on the contrary it requires a well trained and creative brain. Creative research can be undertaken with old methods. The examples of Withering (digitalis), Robert Koch (tuberculosis), Ronald Ross (malaria), Robert McCarrison (Himalayan endemic goiter), Haffkine (plague) are before us. They did research with ordinary equipments and keen observation. The professional man can get stimulation from their work.

Good Medicine

A definition for 'good medicine' could be found in the Accreditation Council for Graduate Medical Education's 6 competencies as outlined below:

1. Patient care that is compassionate, appropriate and effective for the treatment of health problems and the promotion of health,
2. Medical knowledge about established and evolving biomedical, clinical and cognitive (eg, epidemiologic and social-behavioural) sciences, and application of this knowledge to patient care,
3. Practice-based learning and improvement that involve investigations and evaluation of them (the practitioners') own patient care, appraisal and assimilation of scientific evidence and improvements in patient care,
4. Interpersonal and communication skills that result in effective information exchange and learning with patients, their families and other health professionals,
5. Professionalism as manifested through a commitment to carrying out professional responsibilities, and sensitivity to a diverse patient populations, and
6. System-based practice as manifested by actions that demonstrate an awareness of, and responsiveness to the longer context of system of health care of the ability to effectively call on systemic reserves to provide care that is of optimal value.

Medicine addresses the extreme situations that are faced by the human being. They oscillate between 'pain and comfort, loss and acceptance, tragedy and recovery, birth and death'. The medical care-giver works by interacting intimately with people who are in difficulties. They want good medicine. They

would like to regain their lost health. Though there has been a significant change in the medicine over the years, the relationship between doctors and patient has not changed.

Ultimate aim

The society has looked at medical profession with great reverence as it provides health to the sick, and relief from suffering. The physician is held in high esteem. In the recent decades there has been a steady erosion of the ethics and the service has been made a commercial venture. There is an urgent need to halt this downfall of the profession.

Practice of Medicine

Professionalism is the basis of medicine's contract with society. It demands placing the interests of patients above those of the physician, getting and maintaining standards of competence and integrity, and providing expert advice to society on matters of health.

Today, the medical profession is confronted by an explosion of technology, changing market forces, problems in health care delivery, bioterrorism and globalization. It has resulted in increasing difficulty to meet their responsibilities to patients and society. In these circumstances reaffirming the fundamental and universal principles and values of medical professionalism, which remains ideal to be pursued by all physicians, become all the more important.

Benefits

The latter half of the 20th century has witnessed dramatic gains in the benefits medicine has to offer. Along with that it has faced a bewildering array of social problems. A strong doctor-patient relationship will help preserve the professionalism that has been central to achieving the best medicine has to offer. Charles Odegaard, President-Emeritus of the University of Washington in his book Dear Doctor has said, 'what we need above all now is a greater bond of faith and trust between patient and doctor, sufferer and healer, which is accommodated with whatever health care institutional arrangement encourage in our society. There should be a renewed trust and confidence in each other.

The focus of the 21st century health care system must be the patient. Patient must be first priority. Such a system will ensure that patients have access to the safest and highest quality care. We must re-establish and promote the value of doctor-patient relationship.

Information revolution

The information revolution has given an opportunity to the patients to understand their own conditions and also to know the performance of the medical profession in delivering their treatment. The patients are better informed due to the availability of information through internet. These developments have necessitated to look into the place of the physician in the society and their practice, and to redefine medical professionalism for better patient care.

Medicine is a vocation in which a physician's knowledge, clinical skills and judgment are put in the service of protecting and restoring human well-being.

The student who enters the medical institution is groomed into the profession. It sows the seed to become a professional having proper attitudes, skills and competences. In UK they have developed the clinical aptitude test to identify the candidates exhibiting right aptitudes to be doctors. The test essentially explains the cognitive powers of candidates and other attributes considered to be valuable for health care professionalism.

Professional behaviour

Professional behaviour is to become part of the curriculum. It has to be learnt and taught in the classroom and in the outpatient and in the wards. Good medical practice has formulated certain duties to the doctors which they have to follow to exhibit professional behaviour in the rapidly changing health care environment . They consist the following:

1. care of the patient
2. protection and promotion of health of the patients and the public
3. offering a good standard treatment of care by keeping an up-to-date professional knowledge and skills with competence
4. treatment of patients as individuals and respecting their dignity and maintaining confidentiality
5. work in partnership with patients
6. work with honesty, and integrity

Professionalism is changing under the influence of changes in the society. It is a set of values, behaviours, and relationships that underlies the trust the public has in doctors .

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MENTAL HEALTH LEGISLATIONS

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MENTAL HEALTH LEGISLATIONS

INTRODUCTION

People with mental illness are particularly vulnerable to abuse and violation of their rights. Absence of a protective mechanism often renders them susceptible to abuse by anyone in the society including family members, spouses, caregivers, professionals, friends, fellow citizens and even law enforcing agencies. The primary responsibility of ensuring respect for the rights of persons rests with the Government. Special provisions and protections are ensured for the high risk population.

Mental health legislations are not only essential to uphold the rights of the mentally ill but are also an important mechanism to ensure appropriate, adequate, timely and humane health care services. It also helps in protection of human rights of the disadvantaged, marginalized and vulnerable citizens. Ensuring human rights of these groups is reflective of a civilized society that respects and cares for its disabled and marginalized citizens. This, in turn, clearly reflects high values, morals, attitudes, culture, traditions, customs, aspirations and practices. Further, legislation is needed to prevent discrimination against persons with mental illness .

Discrimination takes many forms, affects several fundamental areas of life and is pervasive. Discrimination and stigma may impact access to adequate treatment and care as well as other areas of life, including employment, education, marriage and shelter.

Interface between persons with mental illness and law can be classified into

a. issues related to curtailing of liberty during admission and treatment,

b. civil responsibility and

c. criminal responsibility.

Considering the vast coverage of areas under mental health legislations, the authors have focused on issues related to mental health care and law. Even within that area, the study is primarily focused on issues surrounding persons with mental illness in the specific context of admission, consent, treatment, discharge, disability, rehabilitation and community treatment. Though the authors have dealt with the above aspects, it does not cover all the aspects of

legal issues and mental illness care such as insanity defence, fitness to stand trial, marriage and divorce, child custody, testamentary capacity, fitness for job and so forth. In simple words, it does not focus on the civil responsibilities & criminal responsibilities. This chapter focuses on the mental health legislations in India, and provide an overview of mental health legislations for the general care practitioners.

Treatment	Civil	Criminal
Admission Treatment Discharge Follow-up Community Rights of Person with Mental illness	Testamentary capacity Marriage Divorce Adoption Guardianship Contract Fitness to duty Occupation Management of property	Fitness to stand trial Criminal responsibility

Interface between person with mental illness and law

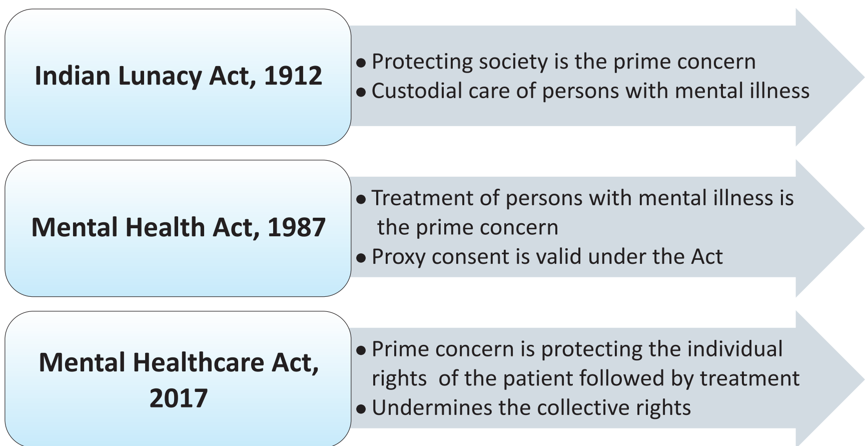
PRINCIPLES OF MENTAL HEALTH CARE LAW

The World Health Organization (1996) prescribes ten basic principles for 'Mental Health Care Law' (3) as follows:-

1. Promotion of Mental Health and Prevention of Mental Disorders
2. Access to Basic Mental Health Care
3. Mental Health Assessments in Accordance with Internationally Accepted Principles
4. Provision of the Least Restrictive Type of Mental Health Care
5. Self-Determination
6. Right to be Assisted in the Exercise of Self-Determination

7. Availability of Review Procedure
8. Automatic Periodic Review Mechanism
9. Qualified Decision-Maker
10. Respect of the Rule of Law

EVOLUTION OF MENTAL HEALTH LEGISLATION



The paradigm shift noted in the Mental Health Legislations of India

In the earlier days of the evolution of the mental health legislation, the aim was to safeguard members of the public from dangerous patients and isolating them from rest when there were no adequate treatment facilities. Now with the advance of new treatment there has been change in the scenario. A paradigm shift from custodial care to community care has occurred because of the following reasons:

a. The human rights movements

b. WHO's definition of 'health'(4)

c. Proactive legislation

d. Advances in the medical technology in assessment and treatment of mental illness

e. Promotive, preventive, curative, rehabilitative approaches and mitigation of disability.

This shift has given a new perspective to the care of persons with mental illness and has led to the review of mental health legislation (5).

MENTAL HEALTH LEGISLATION IN INDIA

Worldwide, mental health legislations are concerned mainly with: (i) rights of the mentally ill (right to care and human rights), (ii) quality of care, (iii) the use of administrative and budget control measures, and (iv) consumer participation and involvement in the organisation and management of mental health care services (6). There have been significant advances with respect to mental health legislations in India. These achievements include legislations and case laws. The purpose of this chapter is to briefly review important legislations of India. Legislations that come under the purview of mental health in chronological order include:

1. The Mental Health Care Act, 2017 (MHCA, 2017)
2. Narcotic Drugs & Psychotropic Substances Act, 1985 (NDPS, 1985)
3. Juvenile Justice (Care and Protection of Children) Act, 2000 (JJA, 2000)
4. National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999 (NTA, 2001)
5. Protection of Women from Domestic Violence Act, 2005 (DMV, 2005)
6. Rights of Persons with Disabilities ACT, 2016 (RPWD, 2016)

All the above legislations have one common objective, which is, providing dignified living, protecting human rights, and addressing the promotive, preventive and curative aspects of mental health. Almost all the above Acts have excellent vision and many positive aspects. We discuss below the main features of the Act and focus on their shortcomings and possible remedies.

THE MENTAL HEALTHCARE ACT, 2017 (MHCA)

The Mental Healthcare Act, 2017 received the assent of the President on the 7th April, 2017, which superseded the previously existing Mental Health Act 1987(7). The MHCA has been described as "an Act to provide for mental healthcare and services for persons with mental illness and to protect, promote and fulfil the rights of such persons during delivery of mental healthcare and services and for matters connected therewith or incidental thereto". The Act seeks to fulfil India's international obligation pursuant to the Convention on Rights to Persons with Disabilities and its Optional Protocol.

The MHCA is categorized into 16 chapters consisting 126 sections. The following are the chapters – I- Preliminary, II- Mental illness and capacity to make mental healthcare and treatment decisions, III- Advance Directive, IV- Nominated Representative, V- Right of persons with mental illness, VI- Duties of appropriate government, VII- Central mental health authority, VIII- State mental health authority, IX- Finance, accounts and audit, X- Mental health establishments, XI- Mental health review boards, XII- Admission, treatment and discharge, XIII- Responsibilities of other agencies, XIV- Restriction to discharge functions by professionals not covered by profession, XV- Offence and penalties and XVI- Miscellaneous.

Thus, the objectives of MHCA are :

a. To protect the rights of persons with mental illness.

b. To make advance directive and nominate representative for future care.

c. Establish a Central Mental Health Authority and State Mental Health Authorities for Mental Health Services. The State authorities to establish Mental Health Review Board.

d. Regulate the minimum standards for establishing, registering and controlling mental health establishments for mentally ill persons.

e. Regulate the procedure of admission and discharge of mentally ill persons to the mental health establishments either on voluntary basis or involuntary.

f. Provide free legal aid to mentally ill persons.

g. Restriction to discharge functions by professionals not covered by profession.

h. Punishment for contravention of provisions of the Act.

i. Establish duties and responsibility for various agencies.

Hospital Standards: MHCA is a proactive legislation (Chapter X, section 4) to achieve the ideal minimum standards of mental hospitals but is difficult to implement pragmatically because of acute shortage of trained mental health manpower resources. MHCA includes government mental hospitals for registration, despite being under the direct supervision of the Central and State Mental Health Authorities by including it in mental health establishments (Chapter 1, sections 2p). The Act by including other alternative health systems in defining mental health establishment has made uniform regulations in establishing and regulating mental health care delivery. Psychiatry units in general hospitals are included under the purview of the MHCA which is highly controversial and debatable. This makes mandatory registration of the general hospitals to provide care for persons with mental illness. If they are not registered they cannot provide care and deny much needed treatment in general hospital settings.

The lack of standards and monitoring mechanisms can give rise to disasters, best exemplified by the horrific incident at Erwadi in Ramanathapuram (8). To curtail such incidents, minimum standards for care and facilities for the persons with mental illness in such institutions which is set by MHCA is required. Ensuring adequate standards of care both in institutions and in the community requires active public-private linkages, as only governmental agencies cannot comprehensively shoulder the responsibility of the care of the mentally ill. Epidemiological data suggests that 6 to 7% of mentally ill persons need active professional mental health assistance at any point in time (9).

Advance Directive and Nominated Representative: MHCA makes provisions for the Advanced Directives (Chapter III, Section 5-13), by which every person will have the right to decide how an individual would like to be treated for mental illness in the event of a mental health condition and the individual will also have right to specify who will be the nominated representative responsible for taking decisions with regard to the treatment, admission etc. However, in case of emergencies, the Act also gives the treating team the right to oversee such Advanced Directive. The MHCA provides power to review, alter, modify or cancel

the advanced directive through concerned board. It also states that mental health professional shall not be held liable for any unforeseen consequences on following a valid advance directive.

Prohibition of unmodified Electro-convulsive therapy (ECT): Available evidence clearly documents the efficacy of ECT. Hence, this treatment continues to exist in many developed and developing countries. The debate is whether to consider modified ECT (under anaesthesia) or unmodified ECT (without anaesthesia). While modified ECT is preferred over unmodified ECT, non-availability of anaesthetists poses a practical difficulty as does the relatively greater cost of ECT. Overall, the cost difference for one course of ECT is approximately Rs 2500 to Rs.7000. The issue of anaesthetist unavailability has led to some facilities continuing with direct ECT. The issue of cost should not be a factor for considering unmodified ECT treatment which, even if effective is inhumane. Consider the same issue in a different perspective: if it were proposed to conduct a surgical operation without anaesthesia, how many would consent to it? Use of unmodified ECT has resulted in severe stigma attached to this potentially useful treatment. Substantiating the above, MHCA has restricted the usage of ECT to only the modified type (i.e., with use of muscle relaxant and anaesthesia), but also additionally been prohibited to be used for minors. In case of minors requiring ECT, the Act has added additional prior permission from concerned board along with guardian's consent making clinical situation complex. While in special circumstances like hypersensitivity or delayed recovery from the pre-ECT drugs it doesn't allow use of un-modified ECT.

Further the MHCA prohibited certain procedures such as,

a. Sterilization of men or women, when intended as a treatment for mental illness

b. Chained in any manner or form whatsoever.

c. Seclusion of persons with mental illness

This definitely is going to curtail the inhuman treatment of persons with mental illness.

Psychiatric Emergency Services and Ambulance Services: The Act provides provisions for use of the ambulance services in the same manner, extent and quality as provided to persons with physical illness (Chapter-V, Section-21) and also prescribes specific duties for police officers in respect of persons with

mental illness (Chapter-XIII, Section-100). There by clearly providing provisions under MHCA for families in case of emergency for shifting and taking necessary help of resources in the community and enable better crisis intervention. However, the current limited awareness and resources personnel in concerned area will definitely hamper the vision of the Act.

Decriminalization of Suicide: According to the Indian Penal Code 309, which states, "Whoever attempts to commit suicide and does any act towards the commission of such offence, shall be punished with simple imprisonment for a term which may extend to one year or with fine, or with both". On an average mental health problems like depression or schizophrenia are associated with higher rates of suicide (approximately 10% with these illnesses commit suicide) when compared to the general population. Thereby, such an act of criminalization will lead to under reporting and those in need of help for such attempts will definitely take a step back. The MHCA states that any person who attempts to commit suicide shall be presumed, unless proved otherwise, to have severe stress and shall not be tried and punished under the said code. The appropriate government shall have a duty to provide care, treatment and rehabilitation to a person, having severe stress and who attempted to commit suicide, to reduce the risk of recurrence of attempt to commit suicide.

Rights of Persons with Mental Illness: The MHCA provides every person right to access to mental healthcare and treatment from mental health services run or funded by the Government. It will help in providing good quality of mental health care at affordable cost and also ensures that the mental health services are geographically accessible and are provided without discrimination. That mental health establishment's run or funded by the Government shall provide persons with mental illness living below the poverty line or who are destitute or homeless the mental health treatment and services free of any charge and at no financial cost.

Right to Legal Aid: The Act guarantees a person with mental illness will be entitled to receive free legal services to exercise any of his rights given under this act.

Right to Confidentiality: Persons with mental illness shall have the right to confidentiality in respect of his/her mental health, mental health care, treatment and physical health care. It also restricts release of information in respect to mental illness. The Act also extends the confidentiality aspect even to the information stored in electronic or digital format in real or virtual space. Without consent of person with mental illness no information can be released to

media by the establishment. However, all the persons with mental illness will have the right to access their basic medical records.

Insurance: Every insurer is bound to make provision for medical insurance for treatment of mental illness on the same basis as is available for treatment of physical illness.

The MHCA aims for social integration of persons with mental illness by making provisions for increasing the awareness and emphasising that treatment to be provided in a way that enables these persons to live in their own community. However, there are certain challenges in implementation such as human resources, medical infrastructure, adequate funds and lack of strong political that may defeat the purpose of this Act.

NATIONAL TRUST FOR WELFARE OF PERSONS WITH AUTISM, CEREBRAL PALSY, MENTAL RETARDATION AND MULTIPLE DISABILITIES ACT, 1999 (NTA 1999)

The National Trust is a statutory body under the Ministry of Social Justice and Empowerment, Government of India, setup under the "National Trust for the welfare of persons with Autism, Cerebral Palsy, mental Retardation and Multiple Disabilities" Act (Act44of1999) (10).

The NTA is divided into 9 chapters consisting of 36 sections. The following are the Chapters- I- Preliminary, II- The National Trust for welfare of persons with Autism,

Cerebral Palsy, Mental Retardation and Multiple Disability, III- Objects of the Trust,

IV- Power and Duties of the Board, V- Procedure for registration, VI- Local level

Committees, VII- Accountability and Monitoring, VIII- Finance, Accounts and Audit and IX- Miscellaneous.

In summary, the objective of NTA 1999 are to:

a. To enable and empower persons with disability to live as independently within or as close to their own community.

b. Promotion of the measure for their care.

c. To extend support to registered organizations to provide need-based services during the period of crisis to the families of the disabled (11).

d. To encourage and support the formation of Parent's Associations where persons with intellectual, severe and multiple disabilities are themselves unable or unwilling to engage in self-advocacy.

e. To deal with problems of persons with disability who do not have family support.

One of the criticisms that the National Trust Act has been facing is regarding the appointment of guardians to taking care of and making proxy decisions on behalf of the disabled. This, it is argued, defeats the very purpose of empowerment, equality, rights and full participation goal. Asserting that each individual should make their own decisions does not mean that each individual does not need help, assistance and support in doing so. It should rather be a 'shared decision' making or 'assisted decision' making or 'informed decision' making. *The combination of ownership (patients) and responsibility (guardians) is most empowering.* Recognizing and responding to the need to provide facilities to persons with disability, help them live with their own families in the community, providing protection/care/support when family members are unavailable is definitely a boon under this act.

NARCOTIC DRUGS AND PSYCHOTROPIC SUBSTANCE ACT, (Amendment) 2014 (NDPS ACT, 2014)

Drug abuse has become a major social, economic, health, crime and terrorism related issue. It destroys not only the individual, the family, society but also adversely affects the economic growth of the country. Drug use is no more an individual problem but a global issue. To combat this problem, the Indian Government took the first step by enacting the Narcotic Drugs and Psychotropic Substances Act, 1985, also known as the NDPS Act (12). Under the NDPS Act, the cultivation, production, manufacture, possession, sale, purchase, transportation, warehousing, consumption, inter-state movement, transshipment and import and export of narcotic drugs and psychotropic substances is prohibited, except for medical or scientific purposes. The Act has been amended thrice- in 1988, 2001 and 2014. The Act covers to the whole of India and it applies to all Indian citizens outside India and to all persons on ships and aircraft registered in India.

NDPS Act is divided into 6 chapters consisting of 83 sections. The following are the Chapters- I- Preliminary, II- Authorities and Officers, II-A- National fund for

control of drug abuse, III- Prohibition, Control and Regulation, IV- Offences and Penalties, V- Procedure, V-A- Forfeiture of illegally acquired property and VI- Miscellaneous.

The NDPS Act focuses on three different categories of persons liable for prosecution. They are:

a. Drugs manufacturers / Cultivators

b. Dealers / Traffickers /Transporters

c. Consumers (Substance users / addicts)

Under section 27 of the Act, whoever consumes any narcotic drug or psychotropic substance shall be punished (13). This clear prohibition and penalty for personal consumption raises important issues in terms of mental health treatment and rehabilitation. The legal implication when a person comes to a rehabilitation center directly for treatment reporting that he/she was consuming banned drugs is unclear. Should the mental health professional treating him/her inform the law enforcing agencies? If mental health professionals start informing law enforcing agencies, then the people who seek voluntary treatment will decline rapidly. The Act has partially addressed this issue by providing once in life-time immunity against conviction for undergoing de-addiction treatment, if he/she is willing to execute the necessary bond prescribed under the Act.

The first two groups (manufacturers and traffickers) have monetary motives, whereas the third group (consumers) is a drug dependent group, which does not have any profit making motive but requires treatment. Research has proven beyond doubt that substance dependence is an illness and requires treatment for long duration. However the Act does not differentiate between these offender groups.

Section 27 of the NDPS Act states that individuals found to be in illegal possession of drugs in a small quantity for personal use are liable to punishment up to six months of imprisonment or fine or both, which, in case of hard drugs like heroin would be up to one year's imprisonment or fine or both. The Sec 27 of this Act requires amendment because of the following reasons:

a) Substance dependence syndrome is a life-long illness like diabetes and hypertension. In substance dependence, relapse is a rule rather than an exception. Hence, provision like once in life-time immunity for treatment is simply not practical.

b) Treatment is made available only after executing necessary bond in the court as prescribed under the Act. Seeking courts' permission before treatment is impractical. It also goes against the concepts of right to health and confidentiality.

c) NDPS Act may itself act as a deterrent for people seeking treatment when they relapse.

d) The quantity fixed is so small that it may not suffice for even a single use and such provisions make it difficult for persons with addiction to openly seek medical help and rehabilitation.

e) Punishing the persons with substance user is a violation of the human rights

The NDPS Act should act as a facilitator for treatment for persons with substance use. Amendment of Sec 27 is necessary to facilitate treatment especially for users. In practice, this section is rarely seen in operation. This Act's emphasis should be on stringent action against people involved in manufacturing and trafficking of drugs.

To tackle the menace of drug abuse and facilitate the treatment, NDPS amended rules of 2015, brought in paradigm shifts in the perspective of the legislation. Section 52N of the amended rules gives all Government dispensary or Government medical institution, with at least one registered medical practitioner possessing a minimum qualification of a degree in medicine or dentistry and who has undergone training in pain relief and palliative care for prescription of essential narcotic drugs for pain relief and palliative care or training in opioid substitution therapy for prescription of essential narcotic drugs for treatment of opioid dependence, who shall prescribe and dispense essential narcotic drugs, shall be deemed to be a recognised medical institution under these rules for possessing, dispensing or selling of essential narcotic drugs for medical purpose. Further, under 52(O) A medical institution seeking, to be a recognised medical institution or renewal of such recognition, under these rules for possessing, dispensing or selling essential narcotic drugs for medical purposes shall apply in the prescribed form (3F) to the Controller of Drugs.

Drug abuse is a medical, social, psychological and security problem across the world. The drug abuse is growing and increasing number of youth is becoming addicted. Every year new drugs of addiction are discovered and pushed into the market. Drug addiction threatens to kill the whole generation and has potential

to destroy the nation. Though NDPS Act is making an attempt to regulate the use of banned drugs, the society needs to collectively decide and move forward.

THE PROTECTION OF WOMEN FROM DOMESTIC VIOLENCE ACT 2005 (DMV 2005)

An Act to provide for more effective protection of the rights of women guaranteed under the Constitution who are victims of violence of any kind occurring within the family and formatters connected therewith or incidental thereto. The DMV Act is divided into 5 chapters consisting of 37 sections. The following are the Chapters- I- Preliminary, II- Domestic Violence, III- Powers and Duties of Protection Officers, Service Providers, etc., IV- Procedure for obtaining orders of reliefs and V- Miscellaneous.

As per the DMV 2005 Act (14), domestic violence is defined in terms of mental, physical, sexual, verbal, emotional and economic abuse. This legislation recognizes a woman's right to live free from violence (15) and is critical to a person's mental health. Disputes, differences of opinion, economic difficulties, criticisms and gender differences occur in every family. Previously, a majority of these problems were solved by families themselves or by the elders of the family. Now, these family differences and difficulties have reached new legal dimensions. The DMV may help many women who are silently undergoing domestic violence to get help. The Act if utilized in a proper manner can prevent domestic violence and can be a boon for Indian women. For e.g. a lady lodged a case against her husband for beating her with an umbrella, as a result of which she sustained injuries on her face. This violent act took place when the man demanded money from her for alcohol and on her refusal, decided to punish her. This man was arrested under the DMV and subsequently referred for counseling.

In domestic violence, the weaker gender requires more than just legislation. Victims will need shelter, food, social support, emotional support, legal aid, financial aid and above all, safety. The important question which requires to be answered is whether we have a system to support and empower women. The government should work towards improving the social, health, economic, educational and occupational status of all women. This leads to true empowerment. There are many instances during which the Anti-Dowry Act has been misused and then the whole family has been punished. This new legislation leaves the male members unprotected in circumstances of a woman mounting an attack on men. As with any law, there will always be a possibility of its misuse.

All members of society need to look at this Act from a different perspective. This Act will provide relief and support to millions of abused women.

The Juvenile Justice (Care and Protection of Children) Act (JJA), 2015 (JJ Act)

This JJ Act (16) focuses on two different types of child populations: a) juveniles in conflict with law (law offending children) and b) children in need of care and protection (neglected children). This Act ensures protection, proper care and treatment by catering to the developmental needs of this population. This Act also promises a child-friendly approach in the adjudication and speedy disposition of matters in a newly formed juvenile jurisprudence. In this Act, every human being below the age of 18 years is treated as a juvenile and this group is exempt from the death penalty and degrading punishments.

The salient features of the act are:

a. Provides special provisions for heinous offences committed by child in age group of 16-18 years.

b. No child can be awarded the death penalty or life imprisonment.

c. Non-disclosure of identity of juvenile offenders by media.

d. Registration of child care institute must under the act.

e. To regulate the adoption process of orphaned, abandoned and surrendered children.

This Act has a serious drawback of falling back on the same old custodial centres. Instances of children being ill-treated, physically and even sexually assaulted by the staff or by older residents (seniors) of these institutions, are not uncommon. This issue needs to be addressed seriously. However, there is provision in the Act for social reintegration through restoration (back to home), adoption, foster care, sponsorship and sending the child to after-care organisations. It also attempts to develop a greater co-ordination and collaboration through joint ventures between the governmental and non- governmental agencies, families, corporate and other stake holders.

The JJA 2000, provides for the rehabilitation and social integration of children in conflict with law as well as children in need of care and protection. There should have been more emphasis on investing in the establishments of institutions governed under JJA. Many of the institutions established under this Act only

provide some shelter but have no quality of care. This ultimately defeats the very purpose of the Act to protect and promote the rights of children by providing safe, protective, rehabilitative and social reintegration for full participation.

Recent amendment to JJ Act, prescribing punishment to the adolescents in par with adults is highly controversial. This contentious Sec 15 of the Act, says that in case of a heinous offence alleged to have been committed by a child, who has completed or is above the age of sixteen years, the Board shall conduct a preliminary assessment with regard to his mental and physical capacity to commit such offence, ability to understand the consequences of the offence and the circumstances in which he allegedly committed the offence. Act also clarifies that preliminary assessment is not a trial, but is to assess the capacity of such child to commit and understand the consequences of the alleged offence. If the court is of the opinion that the child had the capacity, then Act prescribes that the juvenile of age 16-18 to be treated as adult. However, Child rights activists believe that adolescent's brain is not fully developed and they may not be in a position to understand and control their behavior. Although the JJ Act appears to be progressive but the controversial sections needs to be debated and amended. There is an urgent need to invest in future of our children both in terms of time and resources.

THE RIGHTS OF PERSONS WITH DISABILITIES ACT, 2016 (RPWD)

India ratified the United Nations Convention on Right to Persons with Disability on the 1st day of October, 2007. To align the national law RPWD (17) was enacted, which received the assent of the President on the 27th December, 2016. There are 102 Sections divided across 17 Chapters.

Disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others. Disability is an evolving concept and it is dynamic in nature. Disability is not just a disease dependent but a bio-social construct. The RPWD defines “person with disability” means a person with long term physical, mental, intellectual or sensory impairment which, in interaction with barriers, hinders his full and effective participation in society equally with others. The Act also defines “person with benchmark disability” means a person with not less than 40% of a specified disability where

specified disability has not been defined in measurable terms. as certified by the certifying authority. Further, “rehabilitation” refers to a process aimed at enabling persons with disabilities to attain and maintain optimal, physical, sensory, intellectual, psychological environmental or social function levels.

The specified disabilities under the Act are specified in the Schedule are as follows

1. Physical disability –
    a) Locomotor disability, leprosy cured person, cerebral palsy, muscular dystrophy, acid attack victims & dwarfism
    b) Visual impairment
    c) Hearing impairment
    d) Speech and language disability
2. Intellectual disability including
    a) specific learning disabilities
    b) autism spectrum disorder
3. Mental behaviour
4. Disability caused due to
    a) chronic neurological conditions such as multiple sclerosis, parkinson's disease etc
    b) blood disorders are haemophilia, sickle cell diseases & thalassemia
5. Multiple Disabilities
6. Any other category as may be notified by the Central Government

The application for assessment of disability shall be accompanied by (a) proof of residence (b) two recent passport size photographs and (c) aadhaar number. After receiving the application, the medical authority shall, verify the information as provided by the applicant and shall assess the disability and issue the certificate within one month of receipt of the application.

Appropriate Government shall appoint in every Government establishment, not less than four per cent of the total number of vacancies in the cadre strength in

each group of posts meant to be filled with persons with benchmark disabilities. The legislation also specifies that all Government institutions of higher education and other higher education institutions receiving aid from the Government shall reserve not less than five per cent seats for persons with benchmark disabilities.

The disability legislation prescribes punishment for fraudulently availing any benefit meant for persons with benchmark disabilities under Sec 91, which states that Whoever, fraudulently avails or attempts to avail any benefit meant for persons with benchmark disabilities, shall be punishable with imprisonment for a term which may extend to two years or with fine which may extend to one lakh rupees or with both.

RPWD elucidates legislation implementing and monitoring mechanisms as follows a) Central and State Advisory Boards on Disability, b) District Level Committee, c) Chief Commissioner and State Commissioner for Persons with Disabilities, d) Special Courts and e) Disability certifying authority.

RPWD is cheered by many as it increased the number of identified disabilities from seven to 21, the employment reservation to not less than 4% and educational reservation to not less than 5%. It spoke of inclusive education and penalties for offences against persons with disabilities (PWDs). The Act also specifies provisions for special courts (to speed up the trial of cases of said offences), a national fund and a state fund for persons with disabilities.

Conclusion

People with mental illness are one of the most vulnerable populations in society. They are often isolated, stigmatised, discriminated, humiliated and marginalised. They often end up in unhygienic and inhumane living conditions either in the community or in the mental hospitals with increased likelihood of human rights violation. Hence, mental health legislation acts as an important means of protecting the rights and dignity of persons with mental illnesses. It also provide a legal framework for addressing issues such as admission, treatment, care in institutions and discharge; civil, political, economic, social and cultural rights; and implementation of mental health policy and programmes. Ultimately, objectives of all the mental health legislations are to ensure equal access to mental health services, protection of human rights and reintegration of person with mental illness into the main stream of society.

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