

Resource name LAW AND ETHICS IN DENTISTRY

Resource description This is lecture notes for law and ethics in dentistry

Resource content

Legal and Ethical Issues

Contents:

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1. The Principles of Practice in Dentistry

As a **dental professional**, you are responsible for doing the following:

1. Putting patient's interests first and acting to protect them.
2. Respecting patient's dignity and choices.
3. Protecting the confidentiality of patients information
4. Co-operation with other members of the dental team and other health care, colleagues in interests of patients.
5. Maintaining your professional knowledge and competence.
6. Being trustworthy

2. CPD

CPD is now mandatory requirement for [REGISTRATION](#) with the GDC.

Dentists

- Recertification every 5 years.

- 250 hours of CPD in every 5 year cycle (average 50 hours annually)
- Minimum 75 hour- VERIFIABLE CPD. Example formal teaching which considers and approximates educational aims and objectives.
- Remaining hours non-verifiable/general CPD for example reading professional journal, books.
- From 1 Jan 2007, new recommendation- 5 hours
- Radiography/Radiation Protection -5 hours, Medical Emergencies 10 hours, Disinfection/Decontamination 5 hours: VERIFIABLE CPD SUBJECTS.
- For dentist working in a clinical environment, CPD in legal/ethical issues and handling complaint should be carried out.
- All dentist must maintain their own records, keep certificates etc. and submit CPD
- Failure to comply can result in erasure from the Registers

DCPs (Dental Care Professional)

- Compulsory CPD started on 1 Aug 2008 for all DCP's
- 150 hours of CPD over 5 year cycle
- Minimum 50 hours VERIFIABLE

Requirements to Practice legally

Minimum requirements deemed necessary-

1. A dental degree that is register able with the GDC.
2. Professional Indemnity
3. DBS (previously called CRB)
4. Health clearance
5. Proof of Ongoing CPD.

In 2006, with amendments to Dentist Act and opening of Dental Care Professional Register, and all GDC registrants can own dental practices. It is now

Clinical Governance

It is the name for quality assurance within the NHS.

A practice with an NHS contract must comply with clinical governance arrangements established by PCT (Primary Care Trust) including:

The practice framework is subdivided into Distinct elements:-

- Quality improvement (including Clinical **AUDIT**)
- Evidence based practice
- **Infection Control**
- Patient safety through child protection
- **Consent**
- Confidentiality
- Staff Development
- Data and record keeping
- Radiation Protection

Clinical AUDIT and peer review are an integral part of **Clinical Governance**.

Professional Indemnity and Defence Organizations

All GDC registrants are required to have adequate and appropriate indemnity cover to ensure that patients can claim compensation if they are entitled to.

Currently there are **3 defence organisations**

1. Dental Protection (DPL)

2. Medical and Dental Defence Union of Scotland (MDDUS)

3. Medical Defence Union (MDU)

As well as providing professional indemnity cover the provide members with advice, information and support in proceedings involving professional matters. Fc

INDEMNITY INSURANCE

- Some professional organisation BDA. Includes some degree of indemnity insurance as part of membership subscription.
- Insurance-based indemnity provides cover for claims arising during the period that the policy is in force.
- ⚡Run-off⚡ cover may need to be purchased to cover claims arising outside the insurance team if changing indemnity provide or are retiring.

NHS indemnity:

- Provides congregating to acts or omissions of doctors and dentist working in NHS hospitals and Salaried Primary Care.
- It covers work undertaken **within the NHS contract**.
- Does not provide assistance for private treatments, disciplinary issues (GDC/GMC), fatal accident enquiries
- Additional indemnity should be taken to cover such situations.

General Dental Council and Registration

The GDC is a statutory regulatory body set; up by the amendments to Dentists Act. 1948, now updated in the Dentist Act 1984. It keeps an up-to-date registe

- Dental hygienists
- Dental therapists
- Dental nurses
- Dental technicians
- Clinical dental technicians

Orthodontic therapist

Council

Originally set up in 1956 with 50 members.

On 1st October 2013 council consisted of 12 members all appointed:

- **6:REGISTRANTS**
- **6:LAY MEMBERS**

Functions of GDC:

- **Maintain a register of qualified dental professionals**
- **Set standards of dental practice/conduct.**
- **Assure quality of dental education**
- **Protect patients and assist with complaints**

FITNESS to PRACTICE PROCEEDING

If GDC receives information that raises questions about a registrant's fitness to practise it can investigate and where necessary impose conditions on ar

- Misconduct either professional or personal including convictions/ cautions received in UK or elsewhere.
- Deficient professional performance
- Adverse health.

Fitness to practise procedures are clearly laid out in primary legislation in the **Dentists ACT 1984** (As amended) and the accompanying rules; The Gen

Assessment meeting:

Where caseworkers take a decision about whether information received could amount to an allegation that a registrant's fitness to practise may be imp

Investigating Committee:

Where the independently appointed members consider the cases referred to it from assessment meetings. If there is a realistic prospect (the **realistic** a **Practise Committee**. If there is no realistic prospect, the Investigating Committee can direct that the case be closed with either no further action, or w

Practice Committee (conduct, health or performance):

Where a final determination is made on a registrant's fitness to practise. When practice committee divides that **on the balance of probability**, furthe

- Erasure from the register for 5 year (except for grounds of adverse health)
- Suspension from the register for up to 12 months
- Condition applied to registration for a period of up to 3 years

THE LAW- APPLICABLE TO CLINICAL PRACTICE GDC AND ITS ROLES

The General Dental Council: **DENTIST ACT (1984)**

Registration:

- Duty to maintain dentists' register and roles of dental auxiliaries
- Register and chief executive responsible for accuracy of roles
- Collects **annual retention fee** and can strike you off for not paying it. If struck off formal application and payment of a restoration fee in addition to retention f

Education:

- The responsibility to supervise all stages of dental education, post graduate as well as under graduate
- GDC determines minimum standards as set out in its Recommendations Concerning The Dental Curriculum
- Sends visitors to check on standards of teaching and examinations of various dental schools.
- Has the power to recommend that the recognition of a dental qualification by the GDC is withdrawn
- Evaluates qualifications of foreign graduates (IQE/ORE)

Criminal Offences:

- The police tell the council if registrant has been convicted or cautioned in the United Kingdom. We can also consider convictions and cautions imposed abroa
- The council can consider any criminal conviction. This includes offences not directly connected with a registrant's profession or which occurred while the reg
- The Investigating Committee as to considers the offence whether it requires a referral to a Practice Committee.
- If referred to a Practice Committee (PC), they must accept the finding of the court on matters of fact. This means that a dental professional cannot claim to ha

- The only duty of the Practice Committee is to decide whether (and what) further action needs to be taken against the dental professional.

Professional Performance Committee

Poor Performance:

- The Council's performance procedures allow the GDC to deal with cases where a dental professional's performance may put patients at risk.
- The Council has powers under the 1984 Dentists Act (as amended) to take action when an allegation is made that a dental professional's fitness to practice is impaired.
- In cases where this may be the case, the Council will request that the dental professional undergoes a full assessment of their performance, to find out where

Health Committee:

- The Council has powers under the 1984 Dentists Acts to take action when an allegation is made that a dentist's fitness to practice is impaired by reason of
- A registrant suffering from physical impairment, which might jeopardize the well being of patients, should seek medical advice, and, if necessary, restrict the s

The **third stage** is a full public inquiry before a **Practice Committee**. These are public hearings where the Committee then decides whether the registra

Patients may be needed as a witness at the hearing, which will mean giving formal evidence. **At each stage in procedures, the patient is informed.**

Anybody that is involved in a fitness to practice case may be asked to be a witness. A witness may need to make a statement or appear at a hearing to

If a dentist is found guilty in any of these hearings then the following actions may be taken:

- **-The dentist is penalised**
- **-Order the suspension of the dentist for a specific period up to 12 months**
- **-Direct that the dentist's name be erased from the dentist register.**

However following suspension or erasure, the dentist has a 28 day period during which the dentist may lodge an appeal with the Judicial Committee of

The LAW- Applicable To The Business Of Dentistry

- Applicable to GDP as they are employers as well
- Usually managed as part of clinical governance
- Managed by team members (practice managers) or clinic head

HEALTH AND SAFETY AT WORK

◆ **To secure and maintain the health, safety and welfare of people at work and to protect others that may enter the workplace** ◆

Duties cover:

- Identifying hazards and assessing risks
- Introducing risk control measures
- Preparing health and safety policy statements
- Providing adequate training
- Assessing the effects of work on the employee's health.

RIDDOR

Reporting of Injuries, Diseases and Dangerous Occurrence Regulations (1995) places a legal duty upon employee's, self employed and people in contro

- Work-related deaths
- Major injuries including any injury resulting in admission to hospital > 24 hours unless for observation only.
- Injuries causing individual being unable to **work >3 days**.

- Work related diseases
- Dangerous occurrences including explosions. For example- Compressor, inhalation, ingestion substance requiring medical treatment.

SHARPS INJURY

PROTOCOL TO FOLLOW-

1. **Sharps Injury**

1. **STOP ALL PROCEDURES**

1. **INJURY ASSESSMENT**

- How deep is injury?
- Is device contaminated with blood?
- Has needle been in patient's blood vessel?
- Is the wound bleeding?

WASH WITH WATER

- DO NOT scrub the affected area
- DO NOT suck the area
- DO encourage bleeding of accidental puncture wound by gentle squeezing above wound to increase venous back pressure

- DO treat mucosal surfaces such as mouth or conjunctiva by rinsing under cold water or saline.
- DO NOT swallow water used for rinsing the mouth.

Assess patient's risk factors

- Has the patient ever had: **HIV HBV or HCV infection?**
- Male to male sex?
- Injected drugs?
- Lived in Africa/ Far East and had sex or blood transfusion?
- Sex with prostitutes or persons in the above groups?

Identify staff immune status for HBV

- **PROTECTED** - Antibody titre > 100 IU/L
 Antibody titre 10-99 IU/L (if last dose <2 years)
- **INCOMPLETE PROTECTION**
 - Antibody titre 10-99 IU/L if last dose > 2 years
 - No antibody check after full primary course
 - Results unavailable after full primary course

Action: Booster dose of HBV and Follow up

- **UNPROTECTED** -No history of immunisation with HBV vaccine
 - Failure to reach >10 IU/L antibody titre
 - Incomplete primary course of HBV

Action - Booster dose of HBV, Give HBIG, Follow up

Obtain expert advice from one of the telephone source (to be completed by each practice)

- A&E Deptt.:
- Occupational Health:
- Medical Practitioner:

You may be **asked** the following information

- Type of injury
- Source patient risk assessment:
- Your hepatitis B serostatus:
- Arrangement for sampling of baseline bloods (HCW and possibly patient) should also be determined.

Incident Reporting:

❖ Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR)

Reporting of various accidents and violence at work:

- All accidents are recorded in RIDDOR BOOK
- When reporting please include:
 - Date and time of accident
 - Name and occupation of person involved
 - Nature of injury
 - Place and circumstances of the accident

HAZARDOUS SUBSTANCES WITHIN THE PRACTICE

Control of Substance Hazardous to Health Regulation 2002 (COSHH)

- Legal requirement to protect the health of people in the work place from hazardous substances.
- Exposure to hazardous substances is either prevented or when not practicable, adequately controlled.

HAZARD = Potential of a substance to cause harm

RISK = Likelihood that will cause harm in the actual circumstances of use.

COSHH Assessment

- Identify hazardous substances

- Who might be harmed
- Assess the risk
- Health monitoring
- Prevent or control risk
- Staff training
- Record assessments

COSHH covers pathological microbes in blood and saliva therefore cross infection control is also under COSHH

Failure to employ adequate measures of infection control would certainly make you liable to a charge of serious]

The following produce is recommended:

- Assess risk to health from hazardous substances.
- Identify precautions needed example eye/skin protection, ventilation
- Prevent exposure (example don't use substance) or control exposure (if preventing use is not practicable.)
- If >5 employees, make and keep a record of the findings of the assessment.
- Measure to control exposure is used and safety procedure followed.

- Monitor exposure and carry out health monitoring.
- Plan to dial **ACCIDENT/EMERGENCY** involving hazardous substances.
- Proper training of the staff.

COSHH also covers the handling of mercury:

Mercury is extremely toxic and any handlers of it must know the potential risks.

To comply, you must have:

- Adequate ventilation in areas of mercury vapour presence
- Training of team members in using equipment involving mercury
- Closed capsule mixing system should be used
- Amalgamators should stand in a shallow tray lined with aluminium foil
- Floors and work surfaces should be seamless (no crevices)
- All clinical teams should have regular health checks to monitor mercury level
- Mercury spillage kit should be available

- In case of spillage, it must be suitable to record and inform the person in charge.
- **Disposal of amalgam/mercury and capsule should be by a licenced person.**
- Amalgam separators are a legal requirement of dental practices to ensure amalgam is flushed out of main water drains
- Small spillage - lead from radiographic packs and paste of equal parts of calcium hydroxide + flowers of sulphur with

CLINICAL WASTE

The Hazardous Waste (England and Wales) Regulations 2005

List of Wastes Regulations 2005

- The introduction of a healthcare waste policy
- The definition and classification of *infectious and offensive waste*
- The classification of dental amalgam as a hazardous waste
- The need for an amalgam separator if dental amalgams are placed or removed.
- The removal of prescription only medicines (POMs) as a hazardous waste

- The inclusion of European waste catalogue (EWC) codes on waste documentation
- A revised colour-coding system
- Revised documentation for hazardous waste, including applicable fees
- April 2009 all premises producing **less than 500 kg of hazardous waste** in 12 months period will not have to notify to

Disposal of Waste

- Segregate: special, clinical and non-clinical
- Store in suitable containers
- Arrange collection by authorised person
- Consignment or transfer note
- Responsibility remains with the producer until disposal process is completed.

Waste Classification Summary

1. **Special Waste** (Special Waste Regulations 1996)

2. Hazardous Waste

- Clinical waste
- Dental amalgam
- Amalgam capsules
- Amalgam-filled teeth
- Radiograph fixer and developer solutions
- Lead foils
- Cytotoxic and cytostatic medicines

3. Offensive Waste

- Feminine hygiene waste

4. Trade Waste

- General business waste.

Single USE Medical Devices

How do I know if a device is for single-use?

It will have this symbol on the packaging or the device:



What does single-use mean?

DO NOT REUSE. A single-use device is used on an individual patient during a single procedure and then discarded. I

Is single-patient use the same as single-use?

No. Single-patient use means the medical device may be used for more one episode of use on ONE patient only; the de

Why shouldn't they be reused?

The MHRA (MEDICINE AND HEALTH CARE REGULATING AGENCY) is aware of serious incidents relating to reu

Reuse can be unsafe because of risk of:

- Cross-infection- inability to clean and decontaminate due to design.
- Endotoxin reaction- excessive bacterial breakdown products, which cannot be adequately removed by cleaning.

- Patient injury-device failure from reprocessing or reuse because of fatigue, material alteration and embrittlement.
- Chemical burns or sensitisation- residues from chemical decontamination agents on materials that can absorb/adsorb

Also, if you reuse a single-use device you may be legally liable for the safe performance of the device.

Can I sterilise a single-use device?

A few single-use devices are marked as non-sterile. These may require processing, in line with the manufacturer's instructions.

- 1) Gloves should be removed first
- 2) Wash hands
- 3) Plastic disposable apron (break neck strap)
- 4) Face Mask (break straps or lift over the ears)
- 5) Face and eye protection
- 6) Wash hands thoroughly

Two primary legal Perspectives

- Ionising Radiation Regulations (1999)
- The Ionising Radiation (Medical Exposure) Regulations 2000

To comply:

- Inform the health and safety executive
- Radiation protection supervisor
- Radiation protection advisor
- Risk assessment
- Recommended standards for equipment (1994 guideline)
- Prepare and display local rules

Guidelines on radiology standards for primary dental care 1994

To comply:



- Instruct/train staff
- Control the dose

- Contingency plans
- Malfunction of equipment
- Accidental over-exposure.

The guidelines are:

- Operating potential
- Film holders and beam aiming devices
- Warning signals
- QA programme(Quality Assurance)
- Manufacturers guidance on maintenance
- Radiation survey
- Up-to-date knowledge

ELECTRICITY

Electricity at Work Regulations 1989

To comply:

- Carry out regular visual inspections of all portable electrical appliances at six monthly intervals
- Have all electrical equipment formally tested and checked every 2-3 years by a qualified person
- Keep records of all inspections and tests.

FIRE SAFETY

Fire Precautions (Workplace) Regulations 1997

Fire precautions should be included in the general risk assessment carried out under the MHSW regulations.

To comply:

- Perform a fire assessment
- Means of detecting fire and raising alarms
- Means of fighting fire
- Adequate means of escape (signs) including emergency lighting where necessary
- Provision of suitable information and training (fire drills)

FIRST AID AND COLLAPSE PROCEDURE

Health and Safety (First Aid) Regulations 1981

Employers must provide readily available and satisfactory first-aid cover.

There should be an appointed person to take charge in event of an accident and to maintain the first aid box.

To comply:

- First-aid personnel
- First-aid training
- First-aid box clearly marked
- Record keeping-accident book

Medicine Storage:

Dentists and other team members must follow these guidelines:

- Medicines should be stored according to manufacturer's guidelines
- Stocks should be regularly checked and out of date drugs disposed of appropriately
- Records of batch numbers and suppliers should be kept
- Drug needing refrigerated storage should be stored in the same refrigerator as foods

Protective Clothing And Equipment

- Dentist must provide, free of charge, protective clothing and equipment to all team members

- All protective equipment must have a **CE marking**.

The following PPE equipment should be provided to all surgery personnel:

- Gloves
- Eye protection
- Masks or visors
- Protective clothing

Safety signs within the practice

- Dentist must ensure that safety signs and signals of appropriate design must be in place

To comply:

- All safety signs contain a pictogram
- Fire-fighting equipment and fire exits are adequately signposted
- Fire evacuation procedures are displayed with assembly point
- First aid facilities are sign posted
- All radiographic equipment has a warning signal to indicate when in use.

VENTILATION

- Dentists must ensure that all enclosed places are adequately ventilated with fresh or purified air.

- Average size window
- If ventilation system is used **ventilation should not fall below 5-8 l/ sec per occupant**
- Consideration for active scavenging should be given if sedation gasses are used.

Visual Display Unit (VDU)

- Determine who are the USERS in the team
- USER: uses **VDU for more than 2 hours continuously per day for 5 days a week**
- User should undertake some other work task for 90 mins or when feeling tired
- Regular users must be offered eye tests by the employers and corrective glasses must be provided if been shown neces

The LAW- Applicable to Clinical Practice- Medical Ethics

Dentistry is a self-regulated profession.

Therefore the GDC determines the standards against which the dentists are judged.

It is important that dentist retain public trust and confidence both as individuals and in the profession as a whole

Complying with certain fundamentals principals, which are the basis of sound ethical practice will ensure that de

What are the various medical ethics?

- The Principle of respect for Individual Autonomy

-Individuals must be respected as independent moral agents with the right to choose how to live their own lives

- The Principle of Beneficence.

-One should strive to do good where possible

- The Principle of Non-Maleficence

One should avoid doing harm to others

- The Principle of Justice

People should be treated fairly, although this does not necessarily equate with treating everyone equally.

DENTAL ETHICS

- Acting in patients best interests
- Provide appropriate, necessary care and treatment to a high standard

- Not misleading patients
- Putting patients needs first
- Treating patients regardless of race, sex, religion, sexual orientation or disability
- Providing information that is necessary to make an informed choice about care
- Communicating with patients and listening to their concerns
- Obtaining consent to treatment and keeping personal health information confidential
- Complying with rules and regulations that apply to dentist
- Providing patients with best possible clinical outcomes
- Providing appropriate emergency care

Records and Documentation

- Good record keeping is central to good dental practice: accurate records are essential to ensure that patients receive appropriate care
- Dentists are often judged on the quality of their record keeping and poor or no records can sometime render complaints invalid
- Poor record keeping can be attributed to time constraints or inadequate relevant data.
- All records stored should be in accordance with the prevalent laws on data protection and confidentiality

What A Good Dental Record Should Have?

- Comprehensive and up to date medical history
- Dental and periodontal charting
- A contemporaneous description of treatment and by who it has been provided
- Contemporaneous description of complications or problems
- Records of appointments cancelled or not kept
- A record of advice given and consent obtained for treatment including where required consent forms
- A record of any unusual incidents, instances where the patient does not consent to treatment/record keeping
- Notes of telephone conversations
- Information of patients personal circumstances that is relevant to dental care
- Copies of test results, referral letters and other correspondences
- Radiographs (name, dated, region, operator), study models, photographs
- A record of drugs prescribed along with any adverse reactions
- A factual account of any complaints received and any action taken

- Records of estimates and treatment plans and copies of those supplies In writing requirements
- Written prescription for dental hygienist/dental therapist
- Any changes should be scored with a single line and initialled and dated

CONSENT

Key definitions:

1) Express Consent:

A patient gives express consent when he/she indicates orally or in writing consent to undergo examination or treatment.

2) Implied Consent:

In very limited circumstances consent may be implied.

Example: Patient indicated agreement to an examination by lying in the dental chair and opening their mouth.

Consent to others types of dental procedures, cannot normally be implied from complaint actions, an open mouth.

3) Informed Consent

Informed consent requires a full explanation of the nature, purpose and material risks of the proposed procedures.

The patient should have the opportunity to consider the information and ask question in order to arrive at a balance

4) **Specific Consent**

Patient consents expressly to each of the procedure (S) to be undertaken.

For example, obtaining a patient's informed consent to sedation does not mean the patient has given specific consent

For consent to be VALID it must be:

- Specific
- Informed
- Patient or a parent/guardian (if the patient is under 16 and unable to give informed consent.)

5) **Restricted Consent:**

Sometimes patients will consent to part of a treatment plan but withhold consent for part of the treatment, such as

- Competent to give it
- Adequately informed of the nature of the procedures that is being agreed to.
- In a position to give consent freely

Who can obtain consent?

- **Dentist:**

Consent for examination and treatment must be obtained by a dentist (normally who is undertaking the treatment)

For treatment undertaken by a dental hygienist or dental therapist, the prescribing dentist should obtain consent

6). Written consent-

- Must be obtained in undergoing a procedure under GA or sedation and the patient is not fully conscious of the treatment
- Also advised for any complicated or expensive treatment even when done under local anaesthesia
- Advised in procedures where there is one or more specific risks example **STALL (swelling, trismus, anaesthesia of lip)**
- Must be entered in patient's records along with details of the procedure and the type of anaesthetic with any complications

What makes Consent Valid?

- The patient must have sufficient understanding, described a mental capacity or mental competence, to make the decision
- The patient must consent to or refuse to the treatment of his own free will with no duress or under influence = VOLUNTARY
- The patient must have been given sufficient information about the proposed treatment including the nature of the procedure

Capacity is defined as the patient's ability to:

- Understand and retain information that is relevant to the decision about treatment
- Believe in that information

- To weigh it in the balance where arriving at a choice

❖ **A person lacks capacity is some impairment or disturbance of mental functioning render the person unable to make**

Therefore the test and position of the court assumed that all adults have capacity unless proven otherwise however

Family Law Reform Act 1969

- Any person age 16 years or over and of sound and mind may legally give consent to any surgical, medical or dental treatment
- A parent could lawfully consent to the treatment of a child who is refusing consent, but a parent **CANNOT** over rule
- Best practice would be make an application to court where parents are prepared to consent but child is capable to understand

Standard Test of Disclosure

BOLAM Test:

❖ **A doctor is not guilty of negligence if he has acted in accordance with a practice accepted as proper by a responsible**

The degrees of probability of a risk arising, and the seriousness of possible injury are two important facts that a patient

Challenges to the bolam standard

- Mental Health Act, Code of Practice (1999), Department of Health

Challenge Bolam as the code of practice, which placed more weight in the direction of full disclosure of information to

- Challenge by the Case of Bolitho

- ◆ Responsible practice has to stand up to logical analysis ◆

- ◆ expert evidence should still satisfy minimum legal standards ◆ HL

- Change in the standard: Pearce V United Bristol Healthcare NHS Trust

- ◆ Standard moved away from the emphasis on what a reasonable medical professional would provide to what a

- Common law rule of doctrine of necessity and best interest

- ◆ It is lawful to treat an adult patient who lacks capacity if the treatment is considered for the patient is in his be

Doctrine of necessity: can be involved in case of emergency. However, the treatment should only be proportiona

- In case of infectious diseases(Sec 37 of the public health (control of disease) act)

- National Assistance Act 1948: removal to suitable premises of persons in need of care and attention e.g. grave chronic

Gillick competence

- After 1985 case of Gillick v West Norfolk and Wisbeck Area Health Authority where law lords ruled that a child unde

- The ability of a child to understand will depends on

- Child ◆s age

- Maturity

- Proposed treatment

Parental responsibility

The following have parental responsibility:

- The child ◆s father and mother, where they were married to each other at time of birth

- The child's mother and father (biological father) who are separated do have rights to give consent.
- A person appointed as the child's guardian and a person in whose favour the court makes residence order with res

Consent minors and mature minors

English age of majority: 18 years. **Family Law Reform Act 1969:** provides minors who have attained the age of 16

the consent of a minor who has attained the age of 16 years to any surgical, medical or dental treatment which, in the person, shall be as effective as it would be were of full age to any treatment, it shall not be necessary to obtain any c

However, the courts have acknowledged that there was no magic in the age of 16, and that younger children may be a

that is, generally known as **Gillick Competence**

Developed from the case of Gillick v Northford and Wisbeck AHA (1986)

The Human Rights Act 1998

Article 2: the right of life,

Article 3: prohibition of torture and inhuman or degrading treatment or punishment

Article 5: right to liberty and security of person

Article 8: right to respect for private and family life

The Mental Health Act/2007 Mental Capacity Act 2005

Amended the law in relation to treatment of both incompetent adults and also laid clear for assessing capacity. Also gave guidance and supervision of the allowances, the provision of a second opinion doctor, independent mental capacity a

Complaints procedure

Dealing with complaints



Local resolution

- . Verbal complaint ♦ try to sort out as soon as possible
- . Written complaints ♦ acknowledge in 3 working days, stating how long it might take to process

Complaints must be made within 6 months of the event or within 6 months of realising that there is something to

However, the time limits can be waived.

Conciliation and mediation

The complaints that cannot be solved in house are passed onto local health authority which might attempt at resolution

Independent review

- . If patient still not happy with local measures and mediation, then within 4 weeks must request independent review.
- . Enquired from patient why they are still dissatisfied- then decided if should be investigated by a special panel
- . Special panel has 3 members: 1 lay chairman, the convenor and no other person

The health service commissioner/ombudsman

- . If patient still dissatisfied can ask health service commissioner to investigate
- . Independent of nhs or the government. May look into the way procedure is working.

♦Failure to exercise reasonable skill and care♦

♦**Omission** to do something which a reasonable man, guided by those considerations which ordinarily regulate

Any patient can initiate an action to recover damages by way of compensation against his dental practitioner on

To succeed in such a claim, it has to be proved that:

- The dentist owed a duty of care to the patient in prevailing circumstances
- That there was a breach in that duty
- Damage was sustained as a result

NEGLIGENCE

PROFESSIONAL NEGLIGENCE is defined as a failure to exercise reasonable care in one's professional capacity.

Criminal Negligence: for criminal proceeding to be started the negligent action must be very serious and have some accentuating factor

Contributory Negligence: When the actions of a patient have been partially (or completely) to blame for the damage that occurred, then

Vicarious Liability: An employer can be held responsible for any negligence by an employee which occurs during his employ. eg: dentist is

NHS exempt from payment

- Aged under 18
- Under 19 and receiving full-time education
- Pregnant or mother who has had a baby in the previous 12 months
- Staying in an NHS hospital and your treatment is carried out by the hospital dentist
- An NHS Hospital Dental Service Outpatient (however, you may have to pay for your treatment for your dentures or b
- You are included in an award of
 - Income support
 - Income related employment and support allowance
 - Income based job seeker's allowance

- Pension credit guarantee credit universal credit (check entitlement after 31 October 2014 or
- You are named on a valid NHS tax credit exemption certificate or
- You are entitled to an NHS tax credit exemption certificate
- You are named on a valid HC2 certificate

NHS payment bands

NHS dental charges from 1 April 2014

Band 1 course of treatment - £18.80

This covers an **examination**, diagnosis (e.g. £ x-rays), advice on how to prevent future problems, a scale and polish if

Band 2 course of treatment - £51.30

This covers everything listed in Band 1 above, plus any further treatment such as **fillings**, root canal work or if your d

Band 3 course of treatment - £222.50

This covers everything listed in Band 1 and 2 above, plus crowns, **dentures** and bridges.

AUDITING

Audit

Clinical audit is the systematic, critical analysis of the quality of dental care, including the procedures and processes used, the resulting outcome and quality of life as measured by both professionals and patients.

Why audit

- Improves patient care
- Encourages teamwork
- Useful clinical practice
- Reduce errors / minimise risks
- Financial benefit
- Professional development
- An audit of a practice is carried out annually
- Auditing document should be stored for at least 2 years

Meeting to agree **❖gold standard❖** of care for a specific condition



Prospective analysis of care for that condition



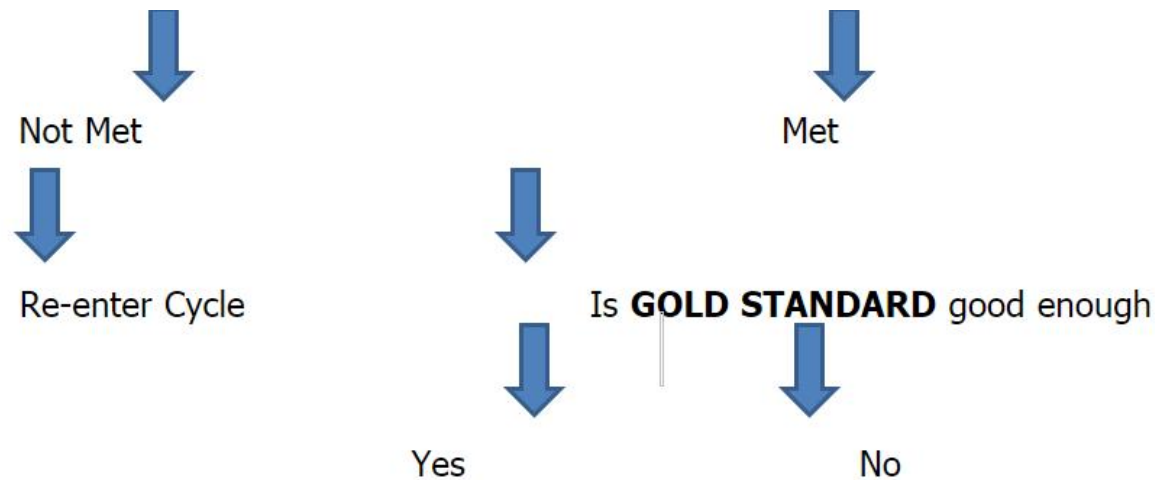
Meeting to compare actual standard with **❖Gold Standard❖**

Identify areas where deficiencies exist and make recommendation

Agree to implement recommendations for improvement



Meeting to compare actual standard with **❖Gold Standard❖**



CLINICAL RECORDS TO INCLUDE XRAY AND MODELS SHOULD BE KEPT FOR AT LEAST 11 YEARS ,FOR CI LONGER

Sterilisation in dental practice

Decontamination of reusable dental instrument includes:

- Cleaning
- Thermal disinfection, if washer-disinfector is available
- Rinsing
- Drying
- Inspection for dryness, functionality and cleanliness
- Wrapping before sterilisation when using a vacuum sterilisation
- Sterilisation
- Wrapping after sterilisation when using a non-vacuum sterilisation

Modes of transmission

- Direct contact with blood or bodily fluids
- Indirect contact with a contaminated instrument or surface
- Contact of mucosa of the eye, nose or mouth with droplets or spatter
- Inhalation of air-borne micro-organisms

Elements of standard precautions

- Hand washing
- Use of gloves, masks, eye protection and gowns
- Patient care equipment
- Environmental surface
- Injury prevention

Automated cleansing:

Washers & Disinfectors

- Used to carry out the processes of cleaning and disinfection consecutively in an automated cycle
- A typical washer-disinfector cycle includes 5 stages
 1. Flush removes difficult gross contamination including blood, tissue, debris, bone fragments and other fluid and
 1. Wash removed any remaining soil. Mechanical and chemical processes loosen and break-up contamination adhering

- Detergent used in the process

Rinse removed detergents used during cleaning process

3. Thermal Disinfection

- The temperature of the load is raised and held at the pre-set disinfection temperature for the required disinfection hold

Drying purges the load and chamber with heated air to remove residual moisture

Critical instruments

- Penetrate mucous membranes or contact bone, the bloodstream or other normal sterile tissues (of the mouth)
- Heat sterilise between uses or use sterile single use, disposable devices
- Examples include surgical instruments, scalpel blades, periodontal scales and surgical dental burs.

Semi-critical instruments

- Contact mucous membranes but do not penetrate soft tissues
- Heat sterilisation or high level disinfection
- Examples include dental mouth mirrors, amalgam condensers and dental hand pieces

Non-critical instruments and devices

- Contact intact skin
- Clean and disinfect using a low to intermediate level disinfectant

- Example: x-ray heads, face bows, blood pressure cuff

Instruments are regarded sterilised when:

- Have been cleaned, inspected and have undergone sterilisation unwrapped (in any type of steriliser) and are stored in

Instruments are considered to be sterile when:

- They have been cleaned, inspected and then wrapped before being sterilised in a steriliser designed to process wrapped instruments must be stored with the wrapping until immediately before use.

OR

- Are bought as sterile single-use items and used in accordance with manufacturers instructions (i.e. used immediately on

- Steam sterilisers in dental practices have a chamber volume of less than 60L

- Standards describe 3 types of bench top sterilisers used within the healthcare setting

a. Type N: non vacuum steriliser designed for non-wrapped solid instruments

b. Type B (vacuum): sterilisers incorporate a vacuum stage and are designed to reprocess load types such as a hollow

c. Type S: specially designed to reprocess specific load types. The manufacturer of the sterilisers will define exactly what

Type B and N are frequently used in dental practices

Instrument storage and wrapping recommendation:

I. Wrapped instruments may be stored up to 1 year:

-Pre-sterilisation wrapped if type B or S

-Post-sterilisation wrapped if type N

II. Un-wrapped instruments in the clinical area: maximum storage 1 day. Instruments should be

-Dry and Protected from contamination for e.g. mini racks placed in cupboards or in covered drawer inserts

III. Unwrapped instruments in non-clinical area: maximum storage 1 week. Instruments should be:

-Dry and Protected from contamination

Decontamination of treatment area

- Patient treatment area should be cleaned after every session using disposable cloth or clean microfibre material
- Area and items of equipment local to dental chair that need to be cleaned between each patient include:
 - Local work surfaces
 - Dental chairs
 - Curing lamps
 - Inspection lights and handles
 - Hand controls including replacement of covers
 - Trolleys/delivery units
 - Spittoon
 - Aspirators
 - X-ray units
 -
- Area and items of equipment that need to be cleaned after each session include
 - Taps
 - Drainage points
 - Splash backs

- Sinks
-
- Items of furniture that need to be cleaned at weekly intervals include
 - Window blinds
 - Accessible ventilation fitting
 - Other accessible surfaces such as shelving radiators and shelves in cupboards
 -
- After clinical procedure, it is necessary to start cleaning as soon as care of individual is complete. In these cases, staff s
- Intra-oral radiology film and devices used in digital radiology imaging are potential sources of cross infection
- Intraoral holders require the use of steam sterilisation following washing and disinfections

Blood spillage

- Use **hypo-chlorite at 1000 ppm** available chlorine is recommended
- Hypochlorite should be made up either freshly using hypochlorite generating tablets or at least weekly
- **10,000 ppm sodium hypochlorite solution** is useful, particularly for blood contamination

Protocol for manual cleaning of dental instruments

- Wash hands
- Wear personal protective clothing (PPE)
- Prepare sinks, equipment and setting down areas
- Dismantle and open the instruments, ready for immersion
- Fill the clean sink (not wash-hand basin) with appropriate amount of water and detergent
- Fully immerse the instruments in the solution and keep under water during the cleaning process to prevent aerosols
- Agitate/scrub the instruments using long handheld brushes with soft plastic bristle

- Drain any excess cleaning solution prior to rinsing
- Rinse in a second sink with satisfactory portable, distilled or RO water
- After rinsing, drain and dry if instruments are to be wrapped
- Visually inspect all items under an illuminated magnifier ensuring they are clean, functional in good condition
- Lubricate any relevant items prior to sterilisation with a non-oil based lubricant
- Dispose of cleaning materials safely in accordance with local policy
- Replace cleaning solution and the rinse water after each use
- Complete any relevant documentation

Impression, prosthesis and orthodontic appliances

Decontamination of these devices is a multi step process, conducted in accordance with the device or material manufa

Process:

- a. Immediately after removal from the mouth, rinse under clean running water, until device is visibly clean
- b. Disinfect according to manufacturer's instruction. Device should be washed thoroughly again. This process should
- c. If the device is to be returned to a supplier/laboratory or in some other fashion of practice
 - a. A label to indicate that decontamination process has been used should be affixed to package

Hand hygiene

- The term hand hygiene not only covers hand washing, but also alternative and additional measures such as ha:
- Key stages in the decontamination process are to minimise the risk of contamination:

- Before and after each treatment session
- Before and after removal of PPE
- Following the washing of dental instruments
- Before contact with instruments that have been steam-sterilised (whether or not these instruments are wrapped
- After cleaning or maintaining decontamination devises used on dental instruments
- At completion of decontamination work
-

Method	Agent	Purpose	Area	Duration (minimum)
Routine hand wash	Water and non-antimicrobial soap (i.e. plain soap)	Remove soil and transient micro-organisms	All surfaces of the hand and fingers	10 to 15 seconds
Antiseptic hand wash	Water and antimicrobial soap (e.g. chlorhexidine 2-4%, 5- 7.5% iodine and 1% iodophors, chlorxylenol [PCMX], triclosan)	Remove or destroy transient micro organisms and reduce resident flora (persistent activity)	All surfaces of the hand and fingers	15 to 30 seconds
Antiseptic hand rub	Alcohol based hand rub	Remove or destroy transient micro-organisms and reduce resident flora (persistent activity)	All surfaces of the hand and fingers	Until the hands are dry

Surgical antiseptics	Water and antimicrobial soap (e.g. 4% chlorhexidine, 7.5% iodine and iodophors, chlorxylenol [PCMX], triclosan) Water and antimicrobial soap (i.e. plain soap) followed by an alcohol based surgical hand scrub product with persistent activity	Remove or destroy transient micro-organisms and reduce resident flora (persistent activity)	Hands and forearms	2-3 minutes Follow manufacturer instructions for surgical hand product with persistent activity
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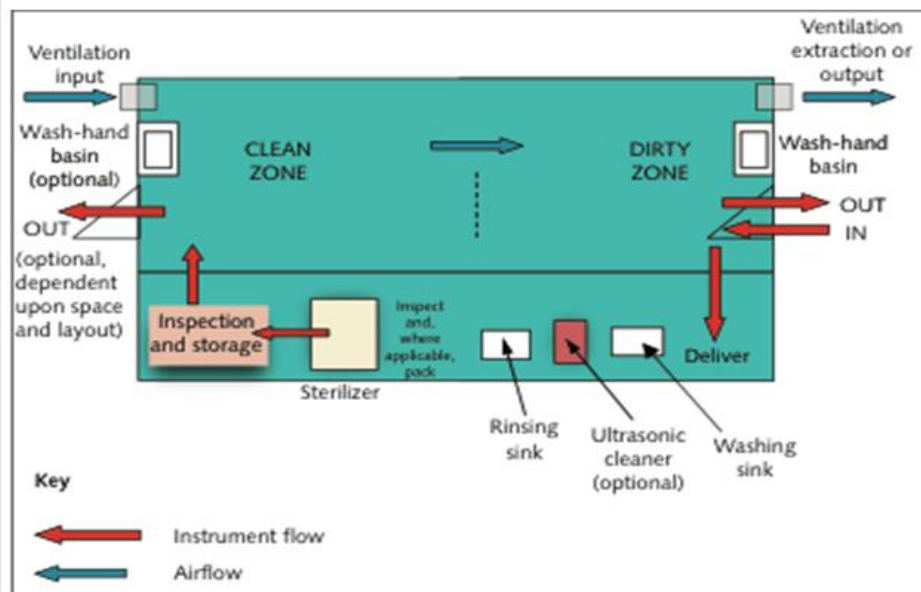
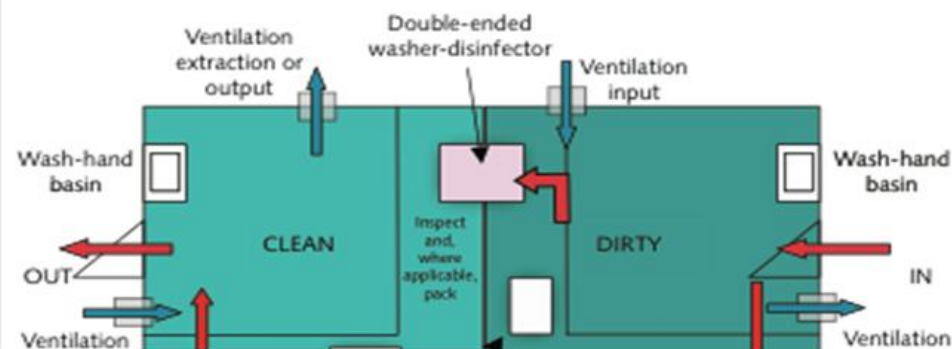
Prion decontamination

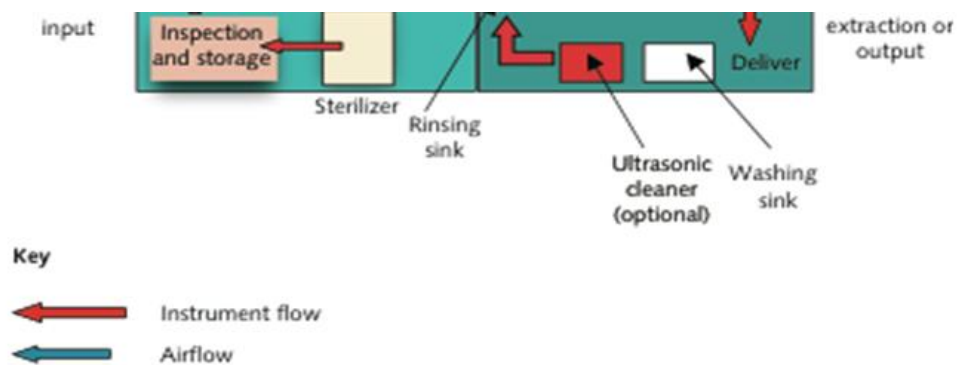
- Prions are not virus but are **protein**
- The word **prion** is derived from the words protein and infection
- Prions are responsible for transmissible spongiform encephalopathies in a variety of mammals. In humans, prions cause
- Prions are highly resistant to normal sterilisation procedures, including standard autoclaving procedures, irradiation and
- Tissue of CNS contain high concentration of prions protein in affected patients
- Iatrogenic transmission of CJD via neuro-surgical instruments has been reported

Implication for dentistry

- Tissues where evidence suggests risk of prion contamination (previously used a prion disease carrier) is most pronoun
- For patients with highly suspected or confirmed CJD, all instruments used in dental procedures must be incinerated at
- For patients at risk, either use disposable instruments or clean instruments autoclaved for 18 minutes at 134⁰C in vacu

According to electrical regulation all portable electrical appliances should be inspected every 6 months





- Movement of contaminated instruments in a dental practice should be from DIRTY ZONE to CLEAN ZONE.
- Whereas the airflow should be from CLEAN ZONE to DIRTY ZONE.

			Referen
DAILY			
Remove and clean strainers and filters	Ensures filters and strainers are clean	User or, by delegation, Operator	Manufac
Drain machine at end of day/ session	Ensures contaminated water is not stored in tank	User or, by delegation, Operator	Manufac
Cleaning efficacy	Visual examination of all load items	User or, by delegation, Operator	Manufac
WEEKLY including daily tests plus:			
Safety checks	Check condition of door-seal	User or, by delegation, Operator	Manufac
Protein residue test	Confirms that cleaning process retains the capability of removing protein	User or, by delegation, Operator	
QUARTERLY (or to manufacturers recommendations) including weekly tests plus:			
Automatic control test			
Verification of calibration			
Cleaning efficacy test			
Ultrasonic activity test			
ANNUALLY including quarterly tests plus:			
Completion of all validation tests above			

Classification of epidemiology

- A. Descriptive
- B. Analytical
 1. Ecological

2. Cross-sectional ♦ one time point. Also c/a prevalence study
3. Case control study/panel study
 - i. Prospective
 - ii. Also c/a longitudinal/forward/follow-up/incidence study

c. Experimental

Types of study

Study type	Design	Measure/example
Case control study Observation and retrospective	Compares a group of people with disease to a group without. Looks for prior exposure or risk factors	Odds ratio (or)
Cohort study Observation and prospective	Compares a group with a given exposure or risk factor to a group without. Looks to see if exposure increases the likelihood of disease	Relative risk (RR)
Cross sectional Study observational	Collects data from a group of people to assess frequency of disease (and related risk factors) at a particular point in time	Disease prevalence

Odd ratio (OD)

For case control studies: odds of having disease in exposed group divided by odds of having disease in unexposed group

Relative risk (RR)

For cohort studies: relative probability of getting a disease in the exposed group compared to the unexposed group

= Incidence among exposed group

Incidence among un-exposed group

Attributable risk

The difference in risk between exposed and unexposed group, or the proportion of disease occurrence that are attributable to exposure
= Incidence (among exposed) - incidence (among unexposed)

Incidence among exposed

	+	-
+	A	B
-	C	D

Odd ratio = $a/b / c/d = ad/bc$

Relative risk = $a/(a+b) / c/(c+d)$

Attributable risk = $a/a+b - c/c+d$

Meta-analysis

Pools data from several studies to come to an over-all conclusion. Achieves greater statistical power and integrates results from multiple studies.

Statistics

• **Mean, median, mode** are measures of central tendency

• **Mean**

◦ Simplest measure of central tendency

Sum of all observations

No. of observations

◦ Not appropriate as it is sensitive to extreme scores

• **Median**

- When distribution has even no of observation, average of middle score is median

◦

• Mode

- Most frequently occurring value in a set of observations
- Two scores occurring in greatest frequency is c/a BIMODAL
- More than 2 scores occurring with great frequency is c/a MULTINODAL

In normal distribution, the curve of distribution of a given character is more or less symmetrical

Normal $\approx$ Gaussian $\approx$ Bell shaped

(Mean = median = mode)

Total area of bell shaped curve is **ONE**

Negative Predictive Value (NPV)

◆ Probability that person actually is disease free given a negative test result.

◆ Proportion of negative test result that are true negative.

$$NPV = TN / FN + TN$$

	+	-
+	TP TRUE POSITIVE	FP FALSE POSITIVE
-	FN FALSE NEGATIVE	TN TRUE NEGATIVE

a. Sensitivity

- Probability of correctly identifying a case of disease
- Indicated the proportion of truly won diseased person in the screened population who are identified
- Sensitivity = $TP / (TP + FN)$

a. Specificity

- It is probability of correctly identifying disease free persons
- It indicates the proportion of truly diseased person who are identified as more diseased by screening
- $\text{Specificity} = \text{TN} / (\text{TN} + \text{FP})$

b. Positive predictive value (PPV)

- Probability that person actually has the disease given positive test results
- Proportion of positive test results that are true positive
- $\text{PPV} = \text{TP} / (\text{TP} + \text{FP})$

c. Negative vs. incidence

- a. **Prevalence** ♦ is the proportion of a given population affected by a condition at a given point of time

=

Total no of cases at a given patient of time

Estimated total population at that point of time

- b. Occurrence of a disease at a given point of time is called point prevalence

- c. **Incidence**: the number of new cases of specific disease occurring in a particular period of time

=

Number of new cases of a specific disease at a given time period

The Population at risk

- d. **INCIDENCE is new INCIDENTS**

Chi square test: Measures the quantitative data between two portions.is any statistical hypothesis test in which the sampling di more categories

STANDARD DEVIATION

In statistics and probability theory, the standard deviation (SD) (represented by the Greek letter sigma, σ) measures the amount of variation or dispersi

SYSTEMATIC REVIEW

A systematic review is a review focused on a research question that tries to identify, appraise, select and synthesize all high quality research evidence

PRINCIPAL SOURCES AND FURTHER READING:

- BDA 2000 Advice sheet in Dentistry.
- GDC guidance on Standards for dental Profession.
- Master Dentistry Volume 2
- Oxford handbook of Clinical Dentistry.

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