

Experiment - 01

Aim -

To study and understand the immunization schedule for infants and children.

Reference -

Gupta G.D. "practical book of social pharmacy" edition october 2023. page No -

Theory -

A national immunization programme (NIP) is the organization component of minister of health charged with preventing disease disability and death from vaccine preventable disease in children and adult. A. NIP is a government programme that operates within the framework of a national health policy.

There are several types of vaccine including.

Inactivated Vaccine -

M. RNA Vaccine -

Toxoid Vaccine -

Viral Vector Vaccine.

Subunit, Recombinant, polysaccharide and Conjugate Vaccine.

The national immunization schedule clearly mentions different vaccines.

Anubhav

Teacher's Signature :

National Immunization Schedule

Vaccine	When to give	Dose	Route	Site	Disease prevented
B.C.G.	At Birth or as early as possible one year of age.	0.1 ml (0.05 ml until 1 month of age).	Intradermal	Left upper arm.	child hood Tuberculosis-
Hepatitis B Birth dose.	At birth or as early as possible less than 24 Hours.	0.5 ml	Im Intra muscular	Anterolateral side of mid high - LEFT.	Hepatitis B.
OPV Birth dose.	At Birth or as early as possible within the first 15 days.	2-dose.	oral	—	polio myelitis.
OPV 1, 2 and 3.	At 6 weeks, 10 weeks and 14 weeks.	2 drops.	oral	—	polio myelitis.
IPV Inactivated Polio Vaccine.	14 weeks.	0.5 ml	Im.	Anterolateral side of mid high - RIGHT.	Diphtheria, tetanus, Hepatitis B and Haemophilus influenzae type B.

Experiment no - 02

Aim -

To understand Reproductive health and child health program.

Reference -

Gupta G.D. Sharma Shailesh sharma. Anshu practical manual of Social pharmacy book of Nirali prakashan page no - 0.

Theory -

The Reproductive and child health program was formally launched by govt. of India on 15th October 1997.

The main Aim of programme is to reduce Infant, child and maternal mortality rate.

productive health and child Health.

People have ability to Reproduce and regulate fertility.

Women are able to go through pregnancy and child birth safely.

Couples are able to have sexual relations free of fear of unwanted pregnancy and of contracting sexually transmitted disease.

Component of RCH (Reproductive and child Health programme.)

Womens health, safe motherhood.

child health

Adolescent health

Effective family planning.

prevention detection and management of Reproductive Tract infection sexually.

Transmitted infections. HIV / AIDS and Cancer of the Environment disorder.

Reproductive health care of elderly persons.

Nutrition :

Nutrition is more closely related to some aspects of sexual and reproductive health. This topic will focus on the importance of good nutrition in two stage of life course -

Maternal and newborn health.

Adolescent health.

Iron and calcium deficiencies contribute substantially to maternal death.

Maternal Iron deficiency is associated with babies with low weight (2500g) at birth.

* Fetal growth Restriction is associated -e maternal short stature and under weight and its causes about.

* Increasing exclusive breast feeding to near-universal levels could save more than 900,000 lives/years.

Over nutrition among Adolescents.

Exces weight and Abdominal fat are risk factors for menstrual Abnormalities ovulatory dysfunction altered endometrial.

⇒ Eat fruits and vegetables of all kinds and colours daily.

⇒ Eat a wide variety of red and white meats while removing visible fat.

⇒ prepare meals with preferably some vegetable oil and avoid cooking fat.

⇒ Decrease the consumption of sugar and salt.

⇒ Consume a wide variety of bread, cereals, pasta, flour, starches, and legumes.

⇒ Do not consume alcoholic beverages.

⇒ Drink plenty of drinking water throughout the day.

Take advantage of mealtimes for getting together and chatting with others.

Experiment - 03

Aim -

To understand family planning method.

Reference -

Gupta G.D. Sharma Shailesh, Sharma Anshu.
A practical manual of social pharmacy page-
no- 15-26 Nirali prakashan.

Theory -

Family planning service are the ability of individuals and couples to anticipate and attain their desired number of children, the spacing and timing of their births. It is achieved through use of contraceptive methods and the treatment of involuntary infertility.

Family planning services include:

- Contraceptive Services.
- pregnancy achieving disease services.
- Basic infertility services.
- Sexually transmitted disease Services.
- Broader reproductive health services, including patient education and Counselling.
- Breast and pelvic examinations.
- Sexually transmitted infection (STI) and Human immunodeficiency - Virus (HIV) prevention education, Counselling, testing and Referral.

Anubhav

Teacher's Signature : _____

Method of Contraception.

A. Spacing methods.

a. Natural methods.

i) Coitus Interruptus / withdrawal method.

ii) Safe period.

iii) Abstinence.

b. Barrier methods.

i) physical barrier methods.

ii) chemical barrier methods.

iii) Intra-Uterine device.

iv) Hormonal methods.

v) post Conceptional methods.

c. Terminal methods.

a) Vasectomy.

b) Tubectomy.

A. Spacing methods.

These method help in prevention of pregnancy as long as they are used.

These methods can help in timing and spacing of pregnancies, preventing unwanted children. These methods are temporary methods.

Natural methods.

Natural methods do not involve the use of any of the man made devices. These methods are useful for timing and spacing of pregnancies.

Anubhav

Teacher's Signature : _____

Coitus Interruptus / withdrawal method.

In this method the penis is withdrawn from the Vagina before ejaculation. In this way semen is prevented from entering the uterine cavity and pregnancy does not take place. Since the penis is withdrawn and ejaculation takes place outside the Vagina, this method is called Coitus interruptus or withdrawal methods.

Merits :-

1. Involves no cost.
2. It does not require any other device.
3. With self-control and discipline it can be fairly effective.

Demerits -

1. Requires a great deal of self-control.
2. Thus failure rate is very high.
3. Slightest delay in withdrawal can lead to pregnancy.

Safe period :

Based upon the process of ovulation and menstrual cycle which helps in determination of the safe period when Coitus can be done and unsafe period when Coitus can be avoided to prevent pregnancy.

Merits -

1. Does not require any man made device.

Demerits -

1. Require self control by the partners during the highly unsafe period.
2. Not suitable for the women who does not have regular period.
3. Failure rate is high. Require great deal of will power and motivation.

I. Abstinence :

This involves complete avoidance of sexual cohabit.

Barrier methods:

Barrier methods are those methods which prevent meeting of sperms with the ovum. There are many major types of barrier methods.

Physical Barrier -Nirodh (Condom):

It is a thin rubber sheath which is use by men. It is rolled over the erect penis before having sex. This rubber sheath prevents the entry of semen into the vagina. The Condom must be held carefully when taking out the penis from the vagina to prevent spilling of semen into the vagina.

It is available free of cost from urban or rural family welfare centers.

Types -

1. Day microdh ② Delux microdh ③ Super Delux microdh.

Merits.

1. It is most simple and effective methods.
2. Easy to use.
3. Disposable.
4. No medical supervision is required.
5. protects from sexually transmitted disease.

Demerits.

1. If not used correctly it may slip or get torn and the semen gets spilled in to vagina.
2. In some rare cases the person may have allergic to rubber.
3. Some people may not enjoy sex because of interference with the sensation.

2. Diaphragm.

The diaphragm is used by women in her Vagina to form a barrier in front of the cervix. The diaphragm is dome shaped and is like a shallow cap. It is made of soft synthetic rubber or plastic with a stiff but flexible rim around the edge. It is also known as DUTCH CAP.

Anubhav

Teacher's Signature : _____

Diaphragm IUD available in different ranging from 5-10 cm² it is held in position partly because of the tension created by the spring and partly because of the muscle tone of Vagina. It is very important to observe the Vaginal muscle tone otherwise the diaphragm may not remain in position.

Merits.

1. A diaphragm along with spermicidal is very effective.
2. Failure rate is low.
3. There is not risk or any kind of Contraindication.

Demerits:

1. It requires the assistance of doctor and any other health personnel.
2. It requires privacy and time to place it in the Vagina. It requires periodical check up.
3. It requires facilities for its proper care and storage.

3. Vaginal sponge -

It is small polyurethane foam sponge, diffused with spermicide.

The sponge is shaped in a way that it can be fitted on to the cervix and has a loop on its outer surface which can be pulled out the sponge after use.

Chemical Barrier -

These method usually kill the sperm and thus, chemical contraceptive help in preventing the pregnancy. The chemical contraceptive which are in use are form of tablets, aerosols, Cream, jelly, suppositories.

Merits -

1. They are easy to administer.
2. Available free in health Centers.
3. Not very expensive.

Demerits -

1. Must be inserted deep down and in all such points where sperm are likely to reach.
2. Must be applied each time before sex.
3. May cause irritation and burning.

III Intra Uterine Device (IUD's):

These are the devices which are placed in the uterine cavity. Intra-Uterine Devices are small device placed in uterus to interrupt the process of isemination. IUD's are very popular around the world and one of the most effective forms of birth control. Earlier these devices were made up of silk worm, gut, silk and gold.

Three different types of IUD's generation are.

- First generation IUD's
- Second Generation IUD's
- Third Generation IUD's

First Generation IUD's:

These devices were made of polyethylene and are non-medicated. These are available in different sizes and shapes such as coils, spirals and loops. The clipped loop is the most popular and commonly used devices. It is made of polyethylene and contains barium sulphate which makes it possible to be located when required by X-ray. The loop is double's shaped and attached to a nylon threads.

Second Generation IUD's -

These are also made of polyethylene but copper is added in to these second generation IUD's. The copper enhances the contraceptive effect. Variety of copper devices are Copper-7 and Copper 4-200 Variants of T devices. TCU 220 C and TCU 380 A] multi load devices. ML-CU:250 ML: 375 Nova T: TCU-380 All Cu devices are more effective and less chances of side effects i.e pain and bleeding.

Third Generation - IUDs

These contain hormones which are released slowly in the uterus. The hormone affects the lining of the uterus and cervical mucus. It may affect the sperm. There are two types of hormone IUDs

Example. Progesteron & Levonogestrel device.

Merits —

1. Can be used for longer period.
2. Can be easily removed when couple wants to have child.
3. Do not interfere with Coitus.
4. Inexpensive.
5. Very effective and failure rate is less.
6. Do not require hospitalization.

Demerits.

1. Bleeding pain, perforation of uterus, expulsion.

Hormonal Methods.

1. Oral pills.

There are variety of oral contraceptive pills.

2. Combined pills —

The pills is composed of two hormones i.e. Synthetic oestrogen and progestogen in very small doses. Its action is to inhibit ovulation of ovum

By blocking the secretion of gonadotropin from pituitary gland progesterone also thickens the mucosa of the cervix which prevents the entry of sperm in to the genital canal. There are two types of pills available with the name of MALA-D. MALA-N. MALA-D: D-Norgestrel - 1.0 mg Ethinyl estradiol - 0.03 mg MALA-N: Norgestrel - 0.50 mg. Ethinyl Estradiol - 0.04 mg.

Merits -

1. It is 100% effective if taken regularly.
2. Easy to use and does not interfere with Coitus.
3. Reduce the risk of anemia because menstrual bleeding is less.
4. Reduce the risk of pelvic inflammatory disease, cyst and uterine cancer.

Demerits.

1. Failure rate increase if taken irregularly.
2. Minor side effects like dizziness, nausea, Vomiting headache, weight gain etc.
3. Increase the risk of heart problems if women is already at risk. May increase the risk of gall bladder disease and Cervical Cancer.

ii. Once A month pill pill.

It is modified combined pill. It contains long acting oestrogen and short acting progesterone.

Anubha



These pills are not in use because experimental result revealed high pregnancy rate and irregularity in the menstrual cycle.

Progestogen only pill.

The pill also known as mini pill. It contains only progestogen and it thickens the cervical mucus cavity. mini pills are taken throughout the menstrual cycle and these are not used widely because of its high failure rate.

2. Depot formulations:

These are long acting hormonal contraceptive. Contains only synthetic progestogen. These are available in three forms.

1. Injectable -
2. Subdermal implants.
3. Vaginal ring.

1. Injectable Contraceptive:

It is again of two types.

a) progestogen only injectable -

- I. DMPA (Depot medroxy progesterone Acetate)
 - II. NET-EN - (Norethisterone enanthate)
- Both of these contain synthetic progestogen. progestogen prevents ovulation.



Merits:

1. It is easy to administer. highly effective and irreversible, do not interfere with lactation and does not cause any effect on infant.

Contraindication:

Abnormal uterine bleeding any malignancy or the genital tract suspected malignant growth and Cancer breast.

b. Combined Injectable Contraceptives.

These Contains progestogen and oestrogen. Contraceptive action is similar to that of progestogen only injectable. The injection is given once in a month three days early or three days late. It is Contraindicated in pregnancy, women having any other problem like diabetes with complications, Vascular disorder and Suspected malignancy.

2. Sub dermal Implants:

There are two varieties. The earliest one is known as Norplant and latest one is Norplant R-2. The Norplant has six small silicon rubber tubes. each of these tubes contains 20 mg of progestogen. The norplant R-2 has small rods.

Experiment - 04

Date _____
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Aim -

To study and understand the oral health and hygiene.

Reference -

Gupta G. D., Sharma Shailesh, Sharma Anshu.
Practical manual of social pharmacy Nirali
Prakashan, page no - 29-35

Theory -

Oral hygiene is the practice of keeping mouth clean and free of disease and other problems (Bad breath) by regular brushing of the teeth (dental hygiene) and cleaning between the teeth.

The most common disease of dental disease are to decay (cavities) dental cavities and gum disease, including gingivitis.

The main method of the prevention of various oral disease like dental caries, gingivitis is by effective plaque removal. Oral hygiene maintenance is by tooth brushing, mouth rinses and flossing.

Objective of tooth brushing -



The main objective of tooth brushing include to prevent the plaque formation removable plaque and massage of gingival tissue.

Brushing techniques.

Brushing is the main method all cell removable plaque and debris by an individual.

The base or surface cleaning methods.

It is the most accepted and effective method for removable dental plaque present adjacent to and underneath the gingival margin.

Technique.

The bristles are placed and 45° Angle to the gingiva and move in small circle motion. stop are repeated around 20 time for each teeth at a time.

Advantage -

- ⇒ Effective method for removing plaque.
- ⇒ Provide good gingival stimulation.
- ⇒ Easy to learn.



Disadvantage.

Overzealous brushing may convert soft gingival margin techniques and case injury into

It is time consuming.

Scrub brush method.

The method of brushing requires vigorous horizontal vertical and sulcal motion. It is the vertical twice time of the brushing scene.

Disadvantage -

Note abrasive and plaque removal.

Roll technique

The method of brushing is also known as rolling stroke method of the sweep method. It works fairly well for patient anatomically normal gingival tissue.

Technique.

The bristles are placed at a 45° angle to the tooth brush base rolled



Access tooth surface forward and occlusal surface.

Advantage - Provide gingival massage and stimulation.

Disadvantage -

Replacing the brush with filament tip directed in to the gingives may produce parodontal lesion.

Ways to keep your teeth healthy.

1. Don't go to bed without brushing your teeth.
 2. Brush properly.
 3. Don't neglect your tongue.
 4. Use fluoride tooth paste.
 5. Treat flossing as important as brushing.
 6. Don't let flossing difficulties stop flossing.
 7. Consider mouth wash.
 8. Drink more water.
 9. Eat crunchy fruits and vegetables.
 10. Limit sugary and acidic foods.
 11. See your dentist at least twice a year.
- Result: understood about the oral hygiene.

Experiment - 05

Date

Page 24



Aim -

To understand Learn Hand washing Technique.

Reference -

Gupta G.D. Sharma, Shailesh, Sharma Anshu, practical manual of Social pharmacy Book of Nirali prakashan page no - 37-38.

Theory -

Hand are the main pathways of germ transmission during Health care. Hand Hygiene is therefore the most important measure to avoid the transmission of harmful germ and prevent Health care associated infection.

Thousands of people die every day around the world from infections acquired while receiving Health care.

Hand Hygiene helps to stop the spread of germs including ones that can cause Antibiotic resistant infection.

Antibiotic Resistance happens when germs like bacteria and fungi develop the ability to defeat the drugs designed to kill them.

Infections caused by antibiotic resistant germs are difficult, and some times impossible to treat.



Keeping your hands clean by washing your hand with soap and water. or using Alcohol - based hand Sanitizer is one of the best way to prevent germs from spreading and avoid infection.

If you don't have Soap and water, use a hand Sanitizer with at least 60% alcohol based.

If you do not have hand sanitizer or soap, but do have water. rub your hand together the the water and dry them with a clean towel or air-dry.

Rubbing your hands under water will rinse some germ from your hands, even though it's not effective as washing with soap.

Hand Care :-

Take care of hands by regularly using a protective Hand Cream or lotion at least daily.

Do not routinely wash hand with soap and immediately before or after using an alcohol based hand rub.



After hand rubbing or hand is washing
let your hand dry completely.

Washing hands with soap and water is the
best way to remove all type of
germs.

If soap and water is not available
using alcohol based and sanitizers (60% alcohol)

Points to Remember $\Rightarrow$

Do not wear artificial finger nails or
extended when in direct contact with
patients.

Keep natural nails short.

Result $\Rightarrow$

Under stood hand washing technique.

Experiment - 06

Date _____

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Aim :- To Learn Cough and Sneeze Etiquette.

Reference :- Gupta G.D. Sharma, Shailesh.
Sharma Anshu practical. Manual of Social
pharmacy Book of Nirali prakashan page
no - 41-42.

Theory :- Coughing and sneezing are a body's natural reaction to an allergy or infection. But since they can potentially transmit the disease to another person, we must not forget to follow cough and sneeze manners. A cough produces approximately 3000 droplets where as a sneeze releases an estimated 40,000 droplets.

Covering Coughs and Sneezes and Keeping hands clean can help prevent the spread of serious Respiratory illnesses like influenza, Respiratory Syncytial Virus (RSV), whooping cough and Covid-19.

Germs can be easily spread by

Coughing sneezing or talking. Touching your face with unwashed hands. After touching

Contaminated surface or objects; Touching surface or objects that may be frequently touched by other people.

Simple Cough and Sneeze etiquette.

1. Step far away from people and cover your mouth and nose when coughing or sneezing.
2. Do not roughly clear your nose or throat while in the presence of others - not only is it unhygienic but it also revolts another.
3. If you have an urge to cough or sneeze do it by folding of your elbow or in it a tissue.
4. If and when you use tissues in no-touch receptacles far disposal as touching the receptacle again and again is not advisable.
5. Off and when you use tissues, dispose them in a responsible manner. Bin it as medical waste, and do not toss it around like it was harmless stuff.



6. Wash your hands or use a hand-sanitiser every time you touch your mouth or nose.
7. Wear an N95 or N99 mask when you are in the company of others.
8. If you know you have any kind of flu - even serious or not - sit as far away from others as possible.
9. Avoid touching your face with your hands (or even if you have just wiped your sick, child's nose). When one touches the face with unwashed, uncleaned hands the cold and flu viruses get a chance to enter the mucous membranes of the nose and eyes and cause infection.
10. When you know you have an infection avoid travel. You can always travel later when you are healthier and thus contribute to breaking the chain of infection.

Result :- Understand Cough and Sneeze etiquette.

Experiment :- 7.

Date _____
Page 80



Aim :-

To learn how to wear and dispose masks.

Reference :- Gupta G.D. social pharmacy practical manual of 1st Theory. edition October 2021

⇒ Masks are a key measure to suppress transmission and save lives. masks covers your mouth and nose. Depending on the types masks can be used for either protection of healthy persons or to prevent word transmissions.

Types of masks :-

There are many types of masks you can to protect yourself and others from getting and spreading Covid-19 when choosing amount.

Choose one that fits snugly.

1. Bandana.
2. Homemade cloth mask.
3. Disposable Surgical masks.
4. Mas, knas and other respirators.

Result :-

Experiment :- 08.

Date _____

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Aim :-

To learn a standard operating procedure to wear the PPE Kit

Reference :-

Gupta G.D social pharmacy practical book
Nisali prakashan edition october 2021.

Theory :-

Personal protective equipment (PPE) is specialized clothing or equipment worn by an employee for protection against infectious materials. PPE prevents contact with an infectious agent or body fluid that may contain or potential infectious materials and the health care workers.

Components of personal protective equipment (PPE)
gloves :- gloves helps protected you, when directly handling potentially infectious materials on contaminated surfaces.

Gown :- Gown help protect you from the contamination of clothing with potentially infectious materials.

Shoes and head covers :- Shoe and head covers provide a barrier against possible exposures within a contaminated environment.

Experiment :- 08.

Masks and respirators :-

Surgical masks help protect your nose and mouth from splattered. of body fluids. respirators filter the air before you inhale it.

other face and eye protection :-

Goggles helps protected only your eyes from splatters. A face shield provides splatters protection to facial skin eye nose and mouth.

Sequence for donning (put on) and doffing (Tucking off) personal protective equipment (ppe).

steps to put on personal protective equipment (ppe)

Always put on essential required ppe when handling either a suspected, probable or confirmed case of viral haemorrhagic fever.

The changing and undressing of ppe should be supervised by another trained member of the team.

put on rubber boots.

Result :- understand the sop's of ppe kits.

Experiment — 09.

Aim —

To study on menstrual hygiene.

Reference —

Cruft G.D. Social pharmacy practical manual of student edition October 2021.

Theory —

menstruation or women in the natural body. person of releasing blood and associated matter from the absence through the Vagina on part. of the menstruation cycle.

Menarche —

It the onset of menstruation the time when a girl has her first menstrual period.

Menstrual hygiene material —

Are the products used catch menstrual flows such as pads, cloths, emmbees, items needed for MHH. such as body and laundry soap, under wear, and relief items. menstrual facilities are those facilities meant menstruation such as toilets and water impartment.

Hygiene of Sanitary protection material :-
Reusable and unReusable cloth pads :-

These cloth pads are reusable so they are
Cont - effective easily available and eco-friendly.

Commercial Sanitary pads :-

They are easily available at many stores chemist shops or online. They are expensive compared to cloth pads.

Tampads :- They are expensive not easily degradable in nature and hence not very environmental.

Banana fiber pads →

Now adays low-cost Sanitary pads for several women made from waste Banana fiber are used under sale name sathi in India.

Disposing menstrual waste :-

Incinerators → If incinerators are used according to ecofriendly guidelines they create less pollution. They should be operated at certain specific temperature around 800°C so that they emit less harmful gases.

Result - understood about the sanitary production.

UNITED SECULAR SOCIETY

Experiment - 10

Aim :-

To study different types of disinfectant and its market preparation.

Reference :-

Gupta G.D. Social pharmacy practical manual of 1st edition october 2021,

Theory :-

Disinfection is a process in which chemical or physical means is used to control or destroying the micro organism that are capable of causing diseases. There are three levels of disinfection (i.e. high intermediate and low level) with respect to the effectiveness of disinfection.

Alcohol $\Rightarrow$

Alcohol usually is the form of 70% isopropyl alcohol or 60-80% ethyl alcohol are commonly used topical disinfections.

Aldehydes :-

Aldehydes are broad-spectrum disinfection. The most commonly used agents are formaldehyde and glutaraldehyde.

Chlorine Compounds :-

Chlorine Compounds are considered broad spectrum being effective against both enveloped and non-enveloped viruses mycobacteria and fungi.

Iodine Compounds :-

Iodine Compounds are broad spectrum and considered effective for a variety of bacteria mycobacteria fungi and viruses.

Phenol :-

The disinfectants are phenol (carbolic acid) derivation. They have a characteristic pine like odour and form milky in water.

Ordinary Ammonia Compounds :-

Ordinary ammonium compounds. Such as benzal (Korium) chloride are generally colourless. (colourless).

Oxidizing Agent :-

Common oxidising agents are hydrogen peroxide, ozone, peracetic acid and potassium permanganate. The hydrogen Peroxide used as an antiseptic is also effective in disinfecting agents with very broad biocidal active agent micro-organism including

biochemical assay and View. It is a highly
cleavable chemical. It is toxic mutagenic and
carcinogenic. Chlorhexidine is a biguanide compound
one of widely and disinfectant.

Result $\Rightarrow$

UNITED SECULAR SOCIETY

÷ Experiment ÷ 11

Aim :-

To understand and learn about the latest preparation of antiseptics.

Reference :-

Gupta G.D. Social pharmacy practical manual
4th edition October 2021

Theory :-

An antiseptic is a chemical agent that shows or stops the growth of micro-organisms on external surface of the body and helps to prevent infections.

• When the skin or mucous membrane are changed or breached in surgery, antiseptic is used to disinfest the area and reduce the chances of infection.

• People who are treating patients with wounds or burn should wash their hands with an antiseptic solution to minimise the risk of cross infection.

Antiseptic are used for :-

• Hand washing chloride gluconate and povidone iodine solution are often used in hand scrubs and hand rubs in hospital setting.

Treating mouth and throat infections dequalinium chloride has both antibacterial and antifungal properties and is the active ingredient in antiseptic throat lozenges.

Results :-

UNITED SECULAR SOCIETY



Experiment → 12.

Aim →

To understand and learn about the marketed preparation of fumigating agents.

Reference →

Gupta, G.D. Social pharmacy practical manual of 1st edition October 2021.

Theory → Fumigation Formaldehyde chemically ($H-CHO$) in its pure form formaldehyde is a gas at room temperature in boiling point $+90^{\circ}C$ but it gradually polymerizes at a temperature below $00^{\circ}C$ to form a white solid. its important polymer is para formaldehyde. Colourless substance that rapidly yields formaldehyde on heating.

Advantage of Fumigation →

Fumigation Controls all live stages of micro-organisms because of toxic nature.

It is a quick way to Control micro-organisms saving money and time.

Fumigation is easy to process and able to reach in all areas where aerosol and spray can not reach.



Method and Concentration :-

- Steam can be used to increase humidity and temperature in a room up to the required limits

use 100 ml formaldehyde and one liter distilled water for 20 cubic metres of area for four hours over night.

This Concentration may be changed after proper validation.

Result :-

UNITED SECULAR SOCIETY



Experiment 12

Aim :-

To study antilarval agent and its marketed products.

Reference :-

Gupta, G.D. Social pharmacy practical manual of first edition october 2021.

Theory :-

A larvicide (alternatively larvicide) or antifungal agent is an insecticide that is specifically targeted against the larval life stage of an insect. Their most common use is against mosquito. Larvicides may be contact poison, stomach poison, growth regulator or (increasing) biological control agent.

Biological Control :-

Bacteria are used for the control of mosquito larvae. *Bacillus thuringiensis* HT and *Bacillus sphaericus*.

Bacillus sphaericus :-

It also produces toxin which is more effective in polluted water. Suitable for treatment of breeding sites of Anopheles.



Other bioherbicides :-

Fungi - Coelomyces, Culicinomyces.

Nematodes - Remonmermin chikki Varad and
Riyengical.

Marketed products :- Bactiver, Bacticle, Agurabae,
Teksan, Vectobae, Laruxand Vecto, Lx Ca.

Chemical Control :-

methoprene is an insect growth
regulator agent that interrupts the growth of cycle
of insect larvae.

Environmental Controls :-

proper disposal of waste.
cleanliness in and around the house.
observing 'day day' intermittent irrigation.

Result :-

Anti arachnid agent and its marketed
products are studied

Result :-

Experiment :- 14.

Aim :-

To prepare chart, video or slides etc. on Coronavirus about Virus, way of spreading, precaution, treatment etc.

Reference :-

Graphs G.D. Social pharmacy practical manual 1st edition october 2021.

Theory :-

Coronaviruses are a large family of viruses which may cause illness in animals or humans. In humans, several coronaviruses are known to cause respiratory infection ranging from the common cold to more severe disease such as middle east respiratory syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS).

Corona Virus spread.

person to person transmission -

Experts believe the virus that cause Covid-19 spreads mainly from person to person.

Droplets or Aerosols :- This is the most common transmission when an infected person coughs, sneezes or talks. droplets are tiny particles called aerosols.



Carry the Virus into the air from their nose or mouth.

Airborne transmission :-

Research shows that the virus can live in the air for up to 3 hours.

Surface transmission :-

A less common method is when you touch surface that someone who has the virus has coughed or sneezed on.

Fecal oral situation :-

also suggest that virus particles can be found in infected people's poop but experts are not sure.

Protection from Covid :-

- work from home if you can.
- wash your hands often.
- wear a face mask you go out.

Quarantine or isolate.

- stay at home.
- Don't have visitors.
- wash your hands often with soap and warm water.
- don't share your personal items like dishes, towel.



Medical treatments :-

Treatments for patients with mild/asymptomatic disease in home isolation.

- patients must be Communication with a treating physician and prompt report in case of any worsening.

Result → chest on Corona virus is prepared and Submitted.

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Experiments $\div$ 15

Aim $\div$

To prepare chart / Video or slide of malarial treatment etc. about various way of spreading prevention

Reference $\div$

Gupta G.D. Social pharmacy practical manual 1st edition October 2021.

Theory $\div$

Malaria is a life threatening disease. It is typically transmitted through the bite of an infected Anophelien mosquito. Infected mosquito carry the plasmodium parasite.

Symptoms of malaria $\div$

Malaria symptoms usually appear 10 days to one month after the person was infected.

Signs of malaria are similar to the symptoms.

- Fever and Sweating.
- Chills that shake the whole body.
- Headache and muscle aches.
- Fatigue.

Management and treatment →

Treating for malaria start as soon as possible. To treat malaria your provider will prescribe drugs to kill the malaria parasite. Antimalaria drugs include Artemisinin drugs (artemether and artesunate).

- Artemisinin (mefloquine).
- chloroquine
- Mefloquine.

Result :- understand about the disease malaria.

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Experiment $\rightarrow$ 16.

Aim $\rightarrow$

To prepare chart / video or slide or display on tuberculosis about virus, way of spreading, prevention, treatment etc.

Reference: Gupta G.D. Social pharmacy practical manual
1st edition October 2021.

Theory $\rightarrow$

Tuberculosis (T.B) is a contagious infection that usually attacks your lungs. It can also spread to other parts of your body like your brain and spine. TB is caused by the bacterium *Mycobacterium tuberculosis*.

Types of Tuberculosis $\rightarrow$

There are two forms of the disease.

Latent T.B - person with latent TB infection do not feel sick and do not have any symptoms they are infected with *M. tuberculosis* but do not have T.B. disease.

Active T.B -

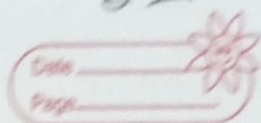
Active TB has a greater burden of TB bacilli than latent TB and acts as an infection source for contacts.



Diagnoses and Tests →

- There are two kinds of screening test for T.B
- The Mantoux tuberculin skin test (TST).
 - The Interferon Gamma Release Assay (IGRA).

Result → understand about the disease tuberculosis



Experiment :- 14.

Aim :-

To prepare chart / Video or slide show on Typhoid Virus, way of spreading, prevention, treatment etc.

Reference :- Gupta G.D. Social pharmacy practical manual 1st edition October 2021.

Theory :-

The bacterium *Salmonella typhi* (s. typhi) causes typhoid fever. The bacteria spreads through contaminated food, drink or water. People infected with *Salmonella typhi* carry bacteria in their intestines and blood.

Symptoms of Typhoid fever.

The incubation period is usually 1-2 weeks and the illness is about 3-4 weeks.

Symptoms includes.

- poor appetite.
- Head aches.
- generalized aches and pain.
- Lethargy.
- Diarrhoea.



Diagnosis of Typhoid fever :-

A Diagnosis of typhoid fever can usually be confirmed by analysing samples of blood / poo (stools).

Typhoid fever Treatment :-

Typhoid fever treatment with antibiotics which kill the *Salmonella* bacteria. Antibiotic are used to treat typhoid fever cause the infection.

Result :- understood about the disease typhoid fever.



Experiment :- 18.

Aim :-

To study Sexually transmitted disease and their transmission.

Reference :- Gupta G.D. Social pharmacy practical manual of first edition october 2021.

Theory :- ASTD may also be called a Sexually transmitted infection (STI) or Venereal disease (VD). Sexually transmitted disease (STDs) or Sexually transmitted infection (STIs) are infection that are passed from one person to another through Sexually contact.

Synonyms of Sexually transmitted disease (STDs).

STDs don't always cause symptoms, as may only cause mild symptoms. If these are symptoms they called include.

- Unusual discharge from the penis and vagina, painful and frequent urination. Abnormal vagina colour.

Prevention of Sexually transmitted disease.

If partners are allergic to latex he/she can use polyurethane condom. The most reliable way to avoid infection is to not have oral vagina or anal.



Sec. Condom can help protect against not only STIs and also unwanted pregnancy.

Diagnosis →

A health care professional can diagnose STIs (sexually transmitted infection) they will ask and question about sex history.

Result → understanding about sexually transmitted disease.



Experiment :- 19.

Aim :-

To study drinking water treatment by potassium permanganate.

Reference :-

Gupta G.D. Social pharmacy practical manual
1st edition October 2021.

Theory :- potassium permanganate (KMnO_4) is a strong oxidising agent. It oxidising the impurities in water and hence it is used for purifying drinking water potassium permanganate is a part of entry test.

Step in potassium permanganate water treatment.

There are three simple steps in order to use potassium permanganate water treatment successfully.

Step-1. First do a water sample test to check the water pH, temperature manganese and iron levels. monitoring the pH water is important to do all the time.

Step 2:-

Next filter the drinking water to remove the manganese dioxide and the elemental sulfur precipitate.



Step-3. Keep your leftous potassium permanganate in a air-tight container. store it in a cool, dry area that is well away from acid peroxide and combustible and oxidizable materials.

Special Considerations for potassium permanganate. using potassium permanganate requires careful calibration maintenance and monitoring potassium permanganate is sensible to temperature extremes and perform b/w 50 and 72 degree Fahrenheit. well water in approximately 55 degree Fahrenheit.

Result →

understand drinking water treatment by potassium permanganates.



Experiment :-

Aim :-

To Learn the use water testing kit --

Reference :-

Gupta G.D. Social pharmacy practical manual of first edition October 2021.

Theory :- In the whole world a majority of the people rely on the private water supply. This includes ponds, diguils and wells. A superior quality of water is crucial to the economic health and social well being of the people.

Water testing at home :-

- Identify a water source.
- Choose a testing method.
- Decide which contaminants to test.
- Calibrate testing to EPA standards.
- Ensure accuracy of results.

Commonly Conducted water quality test include.

Temperature testing
pH testing.
Chloride testing.
Salinity testing.



Dissolved oxygen test.
 Turbidity test.
 Nitrate and phosphate
 pesticides.
 Redox
 electrical Conductivity.
 metals.

Other test :-

petralium hydrocarbon (TRH) monocyclic
 Aromatic hydrocarbon (BTEx) polycyclic Aromatic Hydrocarbon.

Test strips :-

These are small single use strips that
 changes colour to indicate the concentration of a
 specific chemical. Depending on the particular test the
 user activates the paper or plastic strips by
 dipping it in to the water.

Colour disk kits :-

Colour disk kits are available for a
 wide range of chemical test.

Hand held digital instruments $\rightarrow$ Light weight and
 portable digital meters colourimeters and photometers.
 also available for water testing.

Result :- understood about the testing of potable
 water.



Experiment - 21.

Aim :-

To learn calculation of bleaching powder to be used for well / left.

Reference :-

Corupta G.D. Social pharmacy practical manual
1st edition october 2021.

Theory :-

The well can be disinfected by adding enough chlorine the well water to produce a strong chlorine solution. Bleaching powder is nothing but a compound and give and chlorine in fresh bleaching powder. normally chlorine content is 33% is more.

Chlorination :- Quantity of bleaching powder required for disinfecting as per above formula should be taken in a plastic bucket paste is be prepared then the bucket should be filled up to 50% to 45% by water and paste should be thoroughly stirred with a wooden stick.

Quantity of bleaching powder required :-

1. Formula for circular lake :-



Quantity of water in the tank (in litres) $\pi \times$ (tank diameter in metres) $\times$ height of water column in metres.

Formula for squared Rectangular tanks :-

Quantity of water in the tanks (in lit.) = length of tank (m) $\times$ width of tank (in m) $\times$ height of water in tank (m) $\times$ 1000

use of Bleaching powder in 50 cm at the required.

Quantity :-

There is a possibility of the sewage getting polluted start of monsoon and during heavy rains this may result in to epidemics Hence it is very important to take almost care in disinfection during such periods.

Result :- used and Calculation of bleaching powder is understood.



Experiment :- 22.

Aim :-

To prepare various chart on nutrition

Reference :- Gupta G.D. Social pharmacy practical manual
of first edition october 2021.

Nutrition Content of a well balanced.

Diet Function in the body.

Carbohydrate
(300 g daily) Main Source of energy Fiber Concern
many health benefits.

protein (100 g daily) Major structured building blocks.

Fat
(75 g daily) Energy storage synthesis and repair
of cell coats.

Water
(2000 g daily) Solvent lubricant medium for tears
pant and temperature regulation.

Vitamin
(200 m daily). Enable chemical reaction in the
Body.

Minerals
(5-10 g daily). Aid Enzymes functions electrical balance
generate nerve impulse bone structure.

Result :-



→ Experiment → 23.

Aim → To demonstrate Tobacco Cessation and Counseling Reference.

Reference → Gupta G.D. Social pharmacy practical manual first edition october 2021.

Therapy →

patient not ready to make a quit attempt may respond is a motivational intervention.

The Clinician can motivate patients by Consider a quit attempt with the "5R's" Relevance Risks Rewards. Good blocks and Repetition.

Relevance → Encourage the patient to indicate why getting is personally relevant.

Risks → Ask the patient to identify potential negative consequences tobacco use.

Rewards → Ask the patient to identify potential benefit to stopping tobacco use.

Good block → Ask the patient to identify barriers/impediments to quitting.

Repetition → The motivational intervention should be repeated every time a motivated patient has an interaction with a clinician Tobacco Cession.



who have failed in quit attempt should be told that most people make repeated quit attempt before they are successful.

The 5 A's The 3 R's to the
to quit Tobacco - potential unwilling to quit tobacco.

Ask Relevance - why quitting is important to them.
to quit every visit.

Advise Risk - negative consequence of going habit.
to quit tobacco every visit.

Assess Reward - Benefit to tobacco Cessation.
willingness to quit every visit

Assist Road blocks - Identify impediment to quitting.
quitting within 2 weeks with pharmacotherapy or Counseling

Arrange Respite - Report every time the patient comes to the lives.
follow-up contact in week after quitting.

Result :-



Experiment :- 24.

Aim :-

To learn about Soc's of first Aid.

Reference :- Gupta G.D. Social pharmacy practical manual
of first edition october 2021.

Theory :- First Aid refers to the emergency care you should provide when a person is injured.

Some of the benefits of basic first Aid knowledge include.

- providing supports in case of emergency - one of your colleagues may have serious own or an asthma attack with your instant response with first Aid you can save.
- Following the right procedure -> you can save an invaluable life by following the right procedure one brain dies in six minutes due to lack of oxygen.

Awareness of your own situation - if you can have first aid training you can make informed decision yourself at your encourage any issue.

Some common accidents and emergency:

- Anaphylaxis or anaphylactic shock.
- Heavy bleeding.
- Choking.



- Drawing.
- Electric shock switch off.
- Breathers.
- Heart attach.
- Strokes.

First Aid kit :-

Consider purchasing a commercially available first aid kit or making your own having a kit in your home.

Result :- understood the first aid techniques.



Aim :- Experiment :- 25.

To study and understand working of automated external defibrillator.

Reference :- Gupta C.D Social pharmacy practical manual
1st edition october 2021.

Theory :- An A and D or automated defibrillation is used to help those experiencing sudden cardiac arrest.

Application on AED.

It should be near be used on a patient suffering a heart attack, who is still conscious and breathing.

Before using an AED -

Turn on the person shield and wipe this on their chest dry.

Attach the AED pads and plug in the Connector (if necessary).

Make sure no one including you is touching the person.

Result :- A working of AED is understood.