

## AN INTRODUCTION TO GENERAL PRACTICE NURSING

3RD YEAR PRE-REGISTRATION STUDENT NURSE WORKBOOK

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# WELCOME TO GENERAL PRACTICE NURSING -

# IF YOU HAVE ALREADY COMPLETED A PLACEMENT IN GENERAL PRACTICE PLEASE USE THIS WORKBOOK AS A REVISION AID.

During your placement with us you will have the opportunity to observe a variety of consultations face to face, virtually, via video link, telephone and E-consult run by the practice nursing and HCP team.

As a third year you will have the opportunity to undertake some of the practice nurse HCP duties under supervision and where appropriate/competent will be given a designated clinic with direct support from your Practice Assessor/Supervisor(PA/PS). Within this placement you will be expected to lead and manage a period of time as agreed with your PA/PS which could include the following:

- 1. Duty Rotas
- 2. Break times
- 3. Charing clinical/MDT meetings
- 4. Liaising with admin/reception (you will first point of contact)

This workbook has been devised to help you navigate your journey through the complexities of General Practice and Primary Care from treatment room through to chronic disease management

On completion, these sections can then be discussed with your assessor/supervisor and help you to consolidate your learning, linking theory to practice and identify future learning needs.

# GENERAL PRACTICE

- HTTPS://WWW.ENGLAND.NHS.UK/6CS/WP-CONTENT/UPLOADS/SITES/25/2015/04/CNL-MANCHESTER-260315.PDF
- HTTPS://WWW.ENGLAND.NHS.UK/PRIMARY-CARE/
- HTTPS://WWW.LONGTERMPLAN.NHS.UK/AREAS-OF-WORK/PRIMARY-CARE/
- How are GP surgeries funded?
- How do they purchase services from their local healthcare providers
- Research the surgery you are personally registered with on the internet and compare It to other local surgeries in terms of list size, access and services offered.
- Look at the catchment area size of the surgery you are with.
- What are the stipulations set by the surgery to register at the practice?
- How many surgeries are within a 2 mile radius of yours?
- How may this affect patient choice?
- Consider the transport links to the surgery and think about the physical access to the surgery, i.e. parking, arrangements for the disabled etc.
- What interpertion facilities do they offer?
- Think about the streets surrounding your surgery and look at the area. You may want to take a walk to do this.
- How many fast food outlets are there?
- How many examples of healthy lifestyle promotion are there?
- List the public houses, fast food outlets, leisure center's & gyms.
- What impact does the local high street and surrounding area have on the health of the local community?
- How are GP surgeries funded?
- How do they purchase services from their local healthcare providers

## **FOODBANKS**

- <a href="https://www.pecan.org.uk/southwark-foodbank/?">https://www.pecan.org.uk/southwark-foodbank/?</a>
  GCLID=EAIAIQOBCHMIGVUHOZTA9QIVBVLRCH3SFQCMEAAYAIAAEGLPDVD\_BWE
- WHAT FOOD BANKS NEED GIVE FOOD
- HTTPS://WWW.LONDON.GOV.UK/CORONAVIRUS/VOLUNTEER-AND-DONATE/CORONAVIRUS-COVID-19-SUPPORTING-FOODBANKS
- HTTPS://WWW.ETHARRELIEF.ORG/FOOD-PACKS-IFTAR-SAYEM-FIDYAH-KAFFAARAH
- Consider how people on a low income are supported in your area:
- Where are your local foodbanks? You may want to arrange a visit to one
- How do they get their donations?
- How would people access a foodbank?
- What are the reasons people may not access foodbanks?
- Where are they advertised?
- Do they have a social media presence?
- Who runs them?
- How often do they open?

## **HOMELESSNESS**

- HTTPS://WWW.SHELTER.ORG.UK
- HTTPS://WWW.GOV.UK/IF-YOURE-HOMELESS-AT-RISK-OF-HOMELESSNESS
- HTTPS://WWW.CRISIS.ORG.UK/ENDING-HOMELESSNESS/ABOUT-HOMELESSNESS/
- How many homeless people are in your local area?
- What are the most common causes of homelessness?
- What out reach services exist?
- What facilities are there during the winter months to ensure they are not sleeping outside in sub zero temperatures?
- Do you have a local soup kitchen they can access?
- Which charities exist in your local area to help them

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# CHARITY MENTAL HEALTH SUPPORT SERVICES

- HTTPS://WWW.WHO.INT/HEALTH-TOPICS/MENTAL-HEALTH#TAB=TAB 1
- HTTPS://WWW.MENTALHEALTH.ORG.UK
- HTTPS://WWW.NHS.UK/MENTAL-HEALTH/
- How many charity mental health services are there in your local area?
- Choose one of the services in your local area. What support do they provide to people?

## MENTAL HEALTH APPS

- HTTPS://PSYCHCENTRAL.COM/BLOG/TOP-10-FREE-MENTAL-HEALTH-APPS
- How many mental health apps are listed on the NHS Apps Library?
- Choose one of the NHS mental health apps.
- Who is the app suitable for?
- How does the app work?

What do you think the advantages and disadvantages are of someone using an NHS mental health app?

## GENERAL PRACTICE NURSING TREATMENT ROOM

## AS GENERAL PRACTICE NURSES WE ARE EXPECTED TO PROVIDE TREATMENT ROOM CARE WHICH COMPRISES THE CORE SKILLS SUCH AS:

- 1. Injection administration and Travel health
- 2. Ear irrigation (under review)
- 3. Wound care management
- 4. Cervical screening/Contraception/Sexual Health
- 5. Chronic Disease Management
- 6. Suture removal,
- 7. Phlebotomy

## 1

### **ADMINISTRATION OF INJECTIONS**

- 1. · What is a PGD?
- 2. Who can use?
- 3. What is a PSD?
- 4. How does this differ from the PGD?

## IDENTIFY THE ROUTES AN INJECTION CAN BE ADMINISTERED AND WHAT ANATOMICAL SITES SHOULD BE USED?

| ANATOMICAL SITES SHOULD BE USED? |
|----------------------------------|
| 1.                               |
| 2.                               |
| 3.                               |
| 4.                               |

Prior to giving an injection a comprehensive history needs to be taken.

List what information needs to be ascertained and how this will help the assessment:

|   | WHAT ARE THE 8 R'S;   |
|---|---|
|   | 1.  |
|   | 2.  |
|   | 3.  |
|   | 4.  |
|   | 5.  |
|   | 6.  |
|   | 7.  |
|   | 8.  |
|   |   |
| V | HAT IS THE COLD CHAIN AND WHY IS IT IMPORTANT TO MAINTAIN IT? |
|   |   |

In the practice we administer a variety of injections to our patients, working to a PGD or PSD.

Below are the most commonly administered ones.

Find out why they are prescribed, recording what conditions they would be used for and what benefit they will give. You can use the BNF and/or the Emc (medicines.org.uk) for reference.

| MEDICATION       | INDICATION AND BENEFIT | POTENTIAL SIDE EFFECTS |
|------------------|------------------------|------------------------|
| VITAMIN B12      |                        |                        |
| DEPIXOL / HALDOL |                        |                        |
| ZOLADEX/PROSTAP  |                        |                        |
| NEBIDO           |                        |                        |
| DEPO PROVERA     |                        |                        |
| CLEXANE          |                        |                        |

#### CHILDHOOD IMMUNISATION'S

| There is | a ( | comprehensive | vaccination | programme | for | the | under | 5's | in | the |
|----------|-----|---------------|-------------|-----------|-----|-----|-------|-----|----|-----|
| UK.      |     |               |             |           |     |     |       |     |    |     |

| ۸ .              |           | ,     |             |                     |      |                          | •         | •                        |
|------------------|-----------|-------|-------------|---------------------|------|--------------------------|-----------|--------------------------|
| $\Lambda$ $\tau$ | 14/ h a f | 100C/ | intorvalc   | $\gamma$ r $\Delta$ | tho  | $t \cap I \cap M \cap G$ | Waccinac  | $\alpha i \vee \alpha n$ |
| $\neg$ L         | wilat     | aucs/ | IIILEI Vals | aıc                 | LIIC | following                | vactilics | uiveii.                  |
|                  |           | - 9 / |             |                     |      |                          |           | 9                        |

- dTaP/IPV/Hexa (Diphtheria/Tetanus/Polio/Pertussis/Haemophillis B influenza/Hepatitis B)
- Rotavirus
- Pneumococcal (Prevenar 13)
- Meningitis B
- MMR
- Meningitis C/ Haemophillis B (Menitorix)

## WHAT IS THE PURPOSE OF WAITING A MINIMUM INTERVAL TIME BETWEEN TWO DOSES OF THE SAME VACCINE?

## WHY DON'T WE GIVE MMR TO BABIES UNDER 12 MONTHS OLD?

A 5-YEAR-OLD CHILD HAS MOVED TO THE UK FROM ROMANIA. SHE HAS HAD THE FOLLOWING VACCINATIONS:

- DTAP/IPV 2MONTHS
- DTAP/IPV 4 MONTHS
- MEASLES 12 MONTHS
- POLIO 12 MONTHS

| WHAT DOES SHE NEED NOW TO CATCH U | JP WITH THE UK SCHEDULE? |
|-----------------------------------|--------------------------|
|-----------------------------------|--------------------------|

You can use the incomplete immunisations schedule to work this out:

<u>Vaccination of individuals with uncertain or incomplete immunisation status</u>

<u>algorithm (publishing.service.gov.uk)</u>

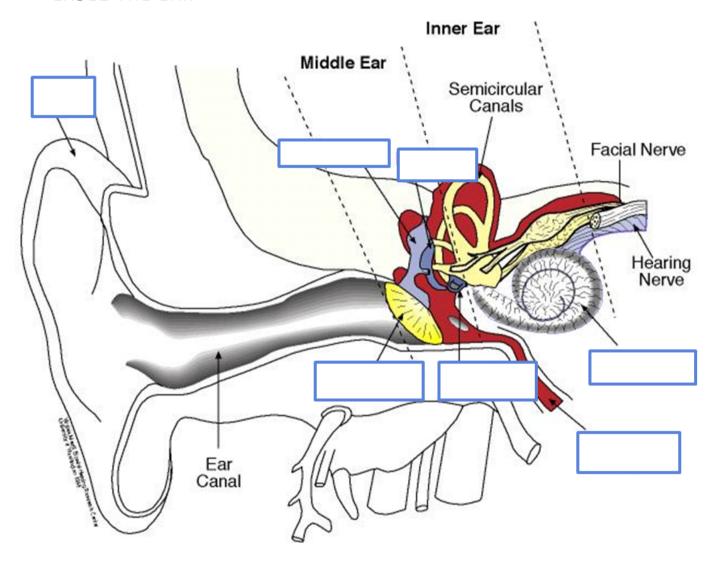
#### **TRAVEL**

Please look at this website:

www.janechiodini.co.uk

## 2 EAR IRRIGATION

LABEL THE EAR -



#### WHAT ARE THE CONTRAINDICATIONS AGAINST EAR IRRIGATION?

#### WHAT WOULD OUR AFTERCARE ADVICE INCLUDE?

3 WOUND CARE

LABEL THE 3 MAIN FEATURES OF THIS LEG ULCER:



#### WHAT ARE THE MOST COMMON SIGNS OF A WOUND INFECTION?

WHAT IS THE RECOMMENDED ANTIBIOTIC AND ALTERNATIVE IF ALLERGIC TO PENICILLIN FOR SIMPLE WOUND INFECTIONS? WHAT BACTERIA DOES IT COVER?

| WHAT TYPE OF DRESSING WOULD WE USE ON A NECROTIC WOUND? WHAT IS THEIR ACTION? WHICH BRANDS COULD WE SELECT? PLEASE CHECK THE LOCAL WOUND FORMULARY |   |
|--|---|
|  |   |
| WHAT TYPE OF DRESSING WOULD WE USE ON A GRANULATING WOUND? WHAT IS THEIR ACTION? WHICH BRAND OF DRESSING COULD WE SELECT?                          |   |
|  |   |
| WHY WOULD WE USE A COMPRESSION BANDAGE OR STOCKINGS FOR A PATIENT WITH VENOUS LEG ULCERS? (WHAT IS THEIR ACTION?)                                  |   |
|  |   |
| IF WE ARE GOING TO PERFORM COMPRESSION, WHAT DIAGNOSTIC TEST D<br>WE NEED TO UNDERTAKE FIRST, WHY?   | 0 |
|  |   |

| WHEN WE SEE A PATIENT FOR THE FIRST TIME WITH A WOUND, PARTICULARLY A CHRONIC WOUND OR LEG ULCER, WHAT WOULD WE INCLUDE IN OUR ASSESSMENT? THINK ABOUT THE PATIENT AS A WHOLE WHAT COULD AFFECT WOUND HEALING, NOT JUST ABOUT THE WOUND ITSELF. |
|---|
|   |
| CERVICAL SCREENING AND WOMEN'S HEALTH   |
| WHAT AGE DO WOMEN GET CALLED FOR CERVICAL SCREENING?  |
|   |
| WHAT IS THE ROUTINE RECALL INTERVAL FOR THE FOLLOWING AGE GROUPS?   |
| 25  |
| 50  |
| 65  |

| WHAT DOES HPV STAND FOR?  |
|---|
|   |
| WHICH STRAND IS PERTINENT TO CERVICAL CYTOLOGY?                         |
|   |
| WHAT IS THIS? HOW WOULD WE DESCRIBE WHAT WE ARE SEEING HERE TO A WOMAN? |
|   |
| ON WHAT DAY OF THE MENSTRUAL CYCLE DOES OVULATION USUALLY OCCUR?        |
|   |

#### CONTRACEPTION

WHAT WOULD WE ADVISE A WOMAN TO DO IF SHE TELLS US SHE MISSED THE FIRST OF HER PILLS IN HER COMBINED PILL PACKET?

LIST THE DIFFERENT TYPES OF CONTRACEPTION AVAILABLE, IN ORDER OF THEIR EFFECTIVENESS:



| SEXUAL HEALTH   |
|---|
| A WOMAN COMES IN COMPLAINING OF UNUSUAL BLEEDING PATTERN AND A OFFENSIVE DISCHARGE, WHAT WOULD YOU DO?                        |
|   |
|   |
| A 15-YEAR-OLD BOY/GIRL ATTENDS TO ASK FOR CONDOMS, WHAT IS THE LOCAL POLICY AND WHAT FURTHER QUESTIONS WOULD YOU LIKE TO ASK? |
|   |
|   |
| WHAT IS PID AND WHAT ARE THE IMPLICATIONS IF UNTREATED?   |
|   |
|   |
| WHAT ARE THE MOST COMMON STI'S (WE LIKE TO CALL THEM SSI'S SEXUALLY SHARED INFECTION) IN YOUR AREA?                           |
|   |
|   |

## **ASTHMA AND COPD CLINICS**

Listed below are questions to help you think about the purpose of an Asthma clinic in General Practice.

BTS/SIGN guideline on the management of asthma:

<u>Asthma | British Thoracic Society | Better lung health for all (brit-thoracic.org.uk)</u>

**ASTHMA UK | HOMEPAGE** 

| WHAT IS ASTHMA?                                      |
|--|
|  |
|  |
|  |
|  |
| WHAT ARE THE SIGNS AND SYMPTOMS OF ASTHMA?           |
|  |
|  |
|  |
|  |
| WHAT DIAGNOSTIC TOOLS CAN WE USE TO DIAGNOSE ASTHMA? |
|  |
|  |
|  |
|  |

| GIVE             | 3 EX | AMPL | ES OF | "TRIGG  | ERS"  |        |    |       |       |       |      |     |
|------------------|------|------|-------|---------|-------|--------|----|-------|-------|-------|------|-----|
| 1.               |      |      |       |         |       |        |    |       |       |       |      |     |
| 2.               |      |      |       |         |       |        |    |       |       |       |      |     |
| 3.               |      |      |       |         |       |        |    |       |       |       |      |     |
| WHA <sup>-</sup> | ΓISA | RELI | EVER? | GIVE A  | N EXA | MPLE   |    |       |       |       |      |     |
|                  |      |      |       |         |       |        |    |       |       |       |      |     |
|                  |      |      |       |         |       |        |    |       |       |       |      |     |
|                  |      |      |       |         |       |        |    |       |       |       |      |     |
| WHA <sup>-</sup> | ΓISA | PRE  | /ENTE | R? GIVE | AN EX | AMPLE  |    |       |       |       |      |     |
|                  |      |      |       |         |       |        |    |       |       |       |      |     |
|                  |      |      |       |         |       |        |    |       |       |       |      |     |
|                  |      |      |       |         |       |        |    |       |       |       |      |     |
| WHA <sup>-</sup> | ΓARE | THE  | SIGNS | OF SO   | MEONE | HAVING | AN | ACUTE | ASTHM | 1ATIC | ATTA | CK? |
|                  |      |      |       |         |       |        |    |       |       |       |      |     |
|                  |      |      |       |         |       |        |    |       |       |       |      |     |
|                  |      |      |       |         |       |        |    |       |       |       |      |     |

| HOW ARE ACUTE ATTACKS TREATED IN GENERAL PRACTICE?                                      |          |
|---|----------|
|   |          |
|   |          |
| WHY IS INDIVIDUALISED ASTHMA CARE SO IMPORTANT?   |          |
|   |          |
| COPD  |          |
| Below are questions to help you think about the workings of a COPI in General Practice. | ) Clinic |
| WHAT IS COPD?   |          |
|   |          |
| WHAT ARE THE SIGNS AND SYMPTOMS OF COPD?  |          |
|   |          |
|   |          |
|   |          |

| HOW IS COPD DIAGNOSED?                    |
|---|
|   |
| WHAT MEDICATIONS ARE USED TO MANAGE COPD? |
|   |
| WHY IS SMOKING CESSATION SO IMPORTANT?    |
|   |
| WHAT IS PULMONARY REHABILITATION?         |
|   |

|   | WHAT ARE RESCUE PACKS AND WHEN ARE THEY USED?   |
|---|---|
|   |   |
|   |   |
|   |   |
|   |   |
| ٧ | ASCULAR RISK  |
|   | hose who have hypertension and those who have experienced an MI,CVA r have heart failure require on-going monitoring.         |
| Н | ELPFUL WEBSITES:  |
| • | BRITISH HYPERTENSION SOCIETY (BHS) <u>WWW.BHSOC.ORG</u>   |
| • | <ul> <li>BRITISH HEART FOUNDATION (BHF) <u>WWW.BHF.ORG.UK</u></li> <li>NICE GUIDELINES FOR HYPERTENSION MANAGEMENT</li> </ul> |
|   | NICE GUIDELINES FOR HYPERIENSION MANAGEMENT   |
| В | RITISH NATIONAL FORMULARY:  |
| W | HAT ARE THE KEY LIFESTYLE FACTORS THAT CAUSE HYPERTENSION?  |
|   |   |
|   |   |
|   |   |
|   |   |
|   | HAT ARE THE KEY FACTORS REQUIRED FOR OBTAINING AN ACCURATE BP EASUREMENT IN CLINIC?   |
|   |   |
|   |   |
|   |   |

| EXPLAIN            | I WHAT  | AMBULAT  | ORY BL  | OOD PR  | ESSURE | IS AND  | WHY I  | T IS US | ED? |
|--------------------|---------|----------|---------|---------|--------|---------|--------|---------|-----|
|                    |         |          |         |         |        |         |        |         |     |
|                    |         |          |         |         |        |         |        |         |     |
| EXPLAIN<br>KIDNEYS |         | IMPACT F | IYPERTE | NSION   | CAN HA | VE ON T | HE HE  | ART ANI | THE |
|                    |         |          |         |         |        |         |        |         |     |
|                    |         |          |         |         |        |         |        |         |     |
|                    |         |          |         |         |        |         |        |         |     |
| IDENTIF            | Y THE F | OLLOWIN  | G ABBR  | EVIATIO | NS AND | WHAT    | THEY N | 1EAN:   |     |
| • MI               |         |          |         |         |        |         |        |         |     |
|                    |         |          |         |         |        |         |        |         |     |
| • NS               | TEMI    |          |         |         |        |         |        |         |     |
| • CV               | A       |          |         |         |        |         |        |         |     |
|                    |         |          |         |         |        |         |        |         |     |
| • TIA              |         |          |         |         |        |         |        |         |     |
| • AF               |         |          |         |         |        |         |        |         |     |
| - 71               |         |          |         |         |        |         |        |         |     |
| • VF               |         |          |         |         |        |         |        |         |     |

A gentleman comes in with a Blood pressure of 152/89. He hasn't visited the practice in a long time. He smokes 5 cigarettes a day, drinks 2 units of alcohol a day and is in a sedentary job. He has no other past medical history.

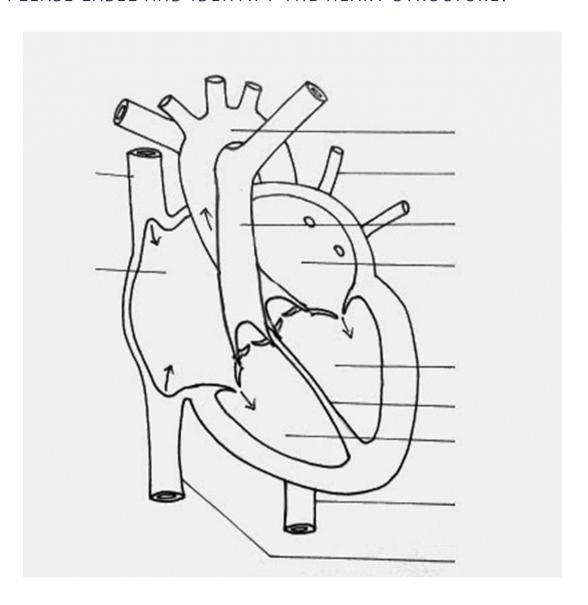
| WHAT LIFESTYLE ADVICE CAN WE GIVE THIS MAN?            |
|--|
|  |
| HOW WILL WE MANAGE HIS ELEVATED BLOOD PRESSURE?        |
|  |
| WHAT OTHER INVESTIGATIONS MIGHT WE WANT TO DO FOR HIM? |
|  |

A lady with known hypertension comes in for a blood pressure check. It is 187/102 today. She tells you she has taken all her medications (Amlodipine 10mg).

| WHAT WILL WE DO FOR HER TODAY?  |
|---|
|   |
| WHAT IS THE RECOMMENDED PATHWAY FOR MANAGING HER  |
| HYPERTENSION? (WHAT MEDICATIONS MIGHT WE WANT TO INITIATE?) LOOK UP LATEST NICE GUIDELINES. |
|   |
| WHAT OTHER INVESTIGATIONS MIGHT WE WANT TO DO FOR HER AT THIS TIME?                         |
|   |

THE HEART

PLEASE LABEL AND IDENTIFY THE HEART STRUCTURE:



| _ | <br>_            |   | <br>_ |    | _ | <br> |
|---|------------------|---|-------|----|---|------|
| _ | <br>$\mathbf{n}$ |   | <br>_ |    |   |      |
|   | <br>ĸ            | _ | <br>• | CI |   |      |
|   |                  |   |       |    |   |      |

Listed below are some questions to help you think about the purpose of a Diabetic Clinic in General Practice.

| Diabetic Clinic in General Fractice.  |
|---|
| WHAT IS THE DIFFERENCE BETWEEN TYPE 1 AND TYPE 2 DIABETES?                          |
|   |
| DESCRIBE WHAT FACTORS MAY INCREASE THE RISK OF A PERSON DEVELOPING TYPE 2 DIABETES. |
|   |
| DESCRIBE THE SYMPTOMS WHICH WOULD SUGGEST A DIAGNOSIS OF DIABETES.                  |
|   |
| GIVE EXAMPLES OF EACH OF THE COMMONLY USED THERAPIES LISTED BELOW.                  |
| • ORAL -  |
| • INSULIN -   |

• OTHER INJECTABLE MEDICATIONS -

| DIABETES.  |
|--|
|  |
| WHY ARE THE FOLLOWING TESTS CARRIED OUT ANNUALLY FOR DIABETICS, WHAT WOULD A STANDARD TARGET LEVEL BE FOR EACH TEST?  NHS RIGHTCARE PATHWAY DIABETES |
| • HBA1C/FRUCTOSAMIN  |
| • LIPIDS   |
| • KIDNEY FUNCTION  |
| • URINE TEST- ALBUMIN/CREATININE RATIO   |
| • BLOOD PRESSURE   |
| • WEIGHT/BMI   |

| • FOOT CHECK            |  |
|-------------------------|--|
| • SMOKING STATUS        |  |
| • RETINAL SCREENING     |  |
| WHAT ARE THE FOLLOWING? |  |
| • DESMOND               |  |
| • DAFNE                 |  |
| • DECS                  |  |
| • CKD                   |  |
| • LIPIDS                |  |

| • MONOFILAMENT   |
|--|
| • SICK DAY RULES   |
| • KETOACIDOSIS   |
| PHARMACOLOGY   |
| Key concepts in pharmacology:  |
| 1.DEFINE THE WORD 'PHARMACOLOGY'                                       |
|  |
| 2. GIVE A DEFINITION FOR 'DRUG'  |
|  |
| 3. DEFINE 'PHARMACOKINETICS', PHARMACODYNAMICS AND 'PHARMACOGENOMICS'. |
|  |

| 4.WHAT DOES THE ABBREVIATION ADME STAND FOR? |   |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|
|  |   |  |  |  |  |  |  |  |
| PHARMACOKINETICS:                            | PHARMACOKINETICS: ABSORPTION SECTION        |  |  |  |  |  |  |  |
| 5.DESCRIBE WHAT IS                           | MEANT BY THE TERM 'DRUG ABSORPTION'.        |  |  |  |  |  |  |  |
|  |   |  |  |  |  |  |  |  |
| 6.LIST THE SITE OF A                         | BSORPTION FOR THE ROUTES SHOWN ON THE TABLE |  |  |  |  |  |  |  |
| ROUTE OF ADMINISTRATION                      | SITE OF ABSORPTION                          |  |  |  |  |  |  |  |
| ORAL,<br>SUBLINGUAL,<br>BUCCAL               |   |  |  |  |  |  |  |  |
| INTRA-OCULAR                                 |   |  |  |  |  |  |  |  |
| TOPICAL                                      |   |  |  |  |  |  |  |  |
| RECTAL                                       |   |  |  |  |  |  |  |  |

| VAGINAL   |  |  |  |  |
|---|--|--|--|--|
| RESPIRATORY<br>TRACT (INHALED)                        |  |  |  |  |
| INTRAVENOUS   |  |  |  |  |
| INTRAMUSCULAR/<br>SUBCUTANEOUS                        |  |  |  |  |
| EPIDURAL  |  |  |  |  |
| INTRATHECAL   |  |  |  |  |
| 7.DEFINE WHAT IS MEANT BY THE TERM 'BIOAVAILABILITY'. |  |  |  |  |
|   |  |  |  |  |

**8.LIST THE ABSORPTION RATES FOR THE ROUTES LISTED BELOW.** 

| ROUTE OF ADMINISTRATION  | TIME OF ABSORPTION |
|--------------------------|--------------------|
| SUBLINGUAL               |                    |
| INTRAOSSEOUS             |                    |
| TRANSDERMAL<br>(TOPICAL) |                    |
| INHALATION               |                    |
| INTRAVENOUS              |                    |
| RECTAL                   |                    |
| SUBCUTANEOUS             |                    |
| ENDOTRACHEAL             |                    |
| INGESTION (ORAL ROUTE)   |                    |
| INTRAMUSCULAR            |                    |

PHARMACOKINETICS: DISTRIBUTION SECTION

9. WHAT FACTORS INFLUENCE THE DISTRIBUTION OF A DRUG AROUND THE BODY?

| 10. WHAT IS MEANT BY THE TERM 'BLOOD BRAIN BARRIER', AIR-BLOOD BARRIER, TESTES-BLOOD BARRIER, PLACENTA-BLOOD BARRIER?  |
|--|
|  |
| 11. WHAT IS MEANT BY THE TERM 'FIRST PASS METABOLISM'?   |
|  |
| PHARMACOKINETICS: METABOLISM SECTION   |
| Everybody's metabolism is slightly different, and people respond in different ways to a drug. The dose may need to be adjusted to allow for these variations which may be due to age, weight or their general level of health. |
| 12. EXPLAIN THE TERM 'REACTION TIME'.  |
|  |
| Pharmaceutical companies design drugs so that the dose given is sufficient<br>to produce the desired or beneficial response (therapeutic response) but<br>not so great that it will cause harm (toxic response).               |
| 13. EXPLAIN THE CONCEPT OF THE THERAPEUTIC INDEX.  |

| 14. WHAT IS MEANT BY THE TERM 'STEADY STATE'?   |
|---|
|   |
|   |
| 15. EXPLAIN WHAT IS MEANT BY AN ADVERSE REACTION OR A SIDE EFFECT AND EXPLAIN WHY THIS MIGHT OCCUR.         |
|   |
|   |
| 16. PICK TWO OF THESE GROUPS AND WRITE A SIMPLE EXPLANATION WHY A DRUG MIGHT AFFECT THEM IN AN ADVERSE WAY. |
|   |
| PHARMACOKINETICS: EXCRETION SECTION   |
| 17. EXPLAIN THE TERM 'HALF-LIFE'.   |
|   |
| 18. LIST THE ROUTES OF EXCRETION FROM THE BODY.   |
|   |
|   |

#### **PHARMACODYNAMICS**

In normal health, cells function in the body under the control of 'feedback systems' to maintain healthy balance of activity. This is known as homeostasis. The overall control of these mechanism is managed by the nervous system and chemicals which can move around the body in the blood and interstitial fluid. In ill health, these homeostatic mechanisms can be altered, and the balance disturbed leading to illness. Drugs are designed to take advantage of these metabolic activities and they fall into three main groups.

#### **PHARMACOLOGY**

Below are listed some of the medications you may come across.

USING A BNF FIND OUT MORE ABOUT THEM AND FILL IN THE BOXES.

| MEDICATION    | DOSAGES | INDICATIONS | COMMON SIDE EFFECTS |
|---------------|---------|-------------|---------------------|
| AMLODIPINE    |         |             |                     |
| LERCANIDIPINE |         |             |                     |
| RAMIPRIL      |         |             |                     |
| LOSARTAN      |         |             |                     |
| BISOPROLOL    |         |             |                     |
| NEBIVOLOL     |         |             |                     |

| CLOPIDOGREL               |  |  |
|---------------------------|--|--|
| ASPIRIN                   |  |  |
| WARFARIN                  |  |  |
| APIXABAN                  |  |  |
| ATORVASTATIN              |  |  |
| SIMVASTATIN               |  |  |
| EZETIMIBE                 |  |  |
| DRONEDARONE               |  |  |
| DIGOXIN                   |  |  |
| INDAPAMIDE                |  |  |
| ISOSORBIDE<br>MONONITRATE |  |  |

| EPLERENONE     |  |  |
|----------------|--|--|
| SPIRONOLACTONE |  |  |
| FUROSEMIDE     |  |  |

To consolidate your final placement you will be expected to give a short presentation of your learning outcomes.

We recommend that you choose one long term condition (LTC) and with support from you PA/PS you choose two medication groups

Eg: Diabetes - SGLT-2 and Ace inhibitors

#### **EVALUATION**

PLEASE COMPLETE THIS EVALUATION AND RETURN TO **ELIA MONTEIRIO**- **ELIA.MONTEIRIO@NHS.NET** 

| WHICH SECTIONS OF THIS | <b>WORKBOOK DID</b> | YOU FIND MOST | <b>USEFUL?</b> |
|------------------------|---------------------|---------------|----------------|
|------------------------|---------------------|---------------|----------------|

WHICH SECTIONS NEED DEVELOPING TO BE MORE USEFUL?

|   | S THE | RE ANY | Y INFOR | MATION | WHICH M | AY HAVE  | BEEN USE | FUL TO Y | OU AND |
|---|-------|--------|---------|--------|---------|----------|----------|----------|--------|
| ( | COULD | BE IN  | CLUDED  | IN THE | WORKBOO | K FOR FU | JTURE ST | UDENTS?  |        |
|   |       |        |         |        |         |          |          |          |        |
|   |       |        |         |        |         |          |          |          |        |
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