

Gazi University Medical Faculty
“RATIONAL DRUG USE ”

HOUR	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
08.00-09.00		Structured Free-Study Time (Practice Time for RDU Exam)	Structured Free-Study Time (Practice Time for RDU Exam)	Structured Free-Study Time (Practice Time for RDU Exam)	
09.00-12:30	<p>Theoretical Lecture Hall Lessons PLACE: Deanship Building</p> <p>Prof. Dr. Canan Uluoğlu:</p> <ul style="list-style-type: none"> • Information about the basic principles of RDU and briefing about clerkship training practices • MAUA (Multi Attribute Utility Analysis) • P (Personal)-drug selection • Principles of Prescribing <p>Doç.Dr. Nazmi Mutlu Karakaş “Electronic Prescribing” (This course will be watched via cloud sharing system)</p>	<p>Practice of Essential Hypertension (Continued)</p> <p>3) Completion of “MAUA FOR DRUGS OF SAME CLASS” forms</p> <p>4) Completion of “MAUA FOR DRUGS BETWEEN CLASSES” forms</p> <p>5) Preparation of the P-Drug list</p> <p>6) Discussion of “good choices” for pregnancy and other special situations</p>	<p>Practice of Type 2 Diabetes Mellitus (DM)</p> <p>1) Discussion of drug and non-drug therapies for the diagnosis of Type 2 DM, in accordance with treatment guidelines. Evaluation of the “efficacy, safety, appropriateness and cost” parameters for oral antidiabetic drugs and indicating percentage rates on the MAUA form accordingly.</p> <p>2) Beginning filling of “MAUA FOR DRUGS OF SAME CLASS” forms</p>	<p>Practice of Type 2 Diabetes Mellitus (DM) (Continued)</p> <p>4) Completion of “MAUA FOR DRUGS BETWEEN CLASSES” forms</p> <p>5) Preparation of the P-Drug list</p> <p>6) Discussion of “good choices” for pregnancy and other special situations</p>	<p><u>Clerkship Examination:</u></p> <ul style="list-style-type: none"> • PRACTICAL EXAM (EXAM THRESHOLD): Evaluation of the filled-out clerkship sheet • OSCE (Objective Structured Clinical Examination) <p>PLACE: PBL (Problem Based Learning) Rooms</p>
12.30-13.30	LUNCH BREAK				
13:30-16:30	<p>Practice of Essential Hypertension</p> <p>1) Discussion of drug and non-drug therapies for the diagnosis of essential hypertension, in accordance with treatment guidelines. Evaluation of the “efficacy, safety, appropriateness and cost” parameters for essential hypertension drugs and indicating percentage rates on the MAUA form accordingly</p> <p>2) Beginning filling of “MAUA FOR DRUGS OF SAME CLASS” forms</p>	<p>SIMULATED PATIENT PRACTICES FOR ESSENTIAL HYPERTENSION</p> <p>Prescribing Practices</p>	<p>Practice of Type 2 Diabetes Mellitus (DM) (Continued)</p> <p>3) Completion of “MAUA FOR DRUGS OF SAME CLASS” forms</p>	<p>SIMULATED PATIENT PRACTICES FOR DM</p> <p>Prescribing Practices</p>	<p><u>Clerkship Examination:</u></p> <p>THEORETICAL EXAM: Multiple choice test</p> <p>PLACE: Lecture Halls of Phase I-II-III Students</p>
16.30-17.30	Structured Free-Study Time (Reading antihypertensive medications)	Structured Free-Study Time (Reading DM Treatment Guide)	Structured Free-Study Time (Reading DM Medications)	Structured Free-Study Time (Practice Time for RDU Exam)	

RATIONAL DRUG USE

PATIENT MANAGEMENT

You have made your P-drug choices based on medical evidence, and using the criteria *efficacy*, *safety*, *suitability* and *cost*. When providing patient care, we kindly request to take those recommendations into consideration, and check whether your P-drug is suitable for individual patients.

1. Define the patient's problem

Patients may come to you with a request, a complaint or a question. It is obvious that making the right diagnosis is a crucial step in starting the correct treatment.

Through careful observation, structured history taking, physical examination and other examinations, you should try to define the patient's real problem. Your definition (your working diagnosis) may differ from how the patient perceives the problem. Choosing the appropriate treatment will depend upon this critical step. In many cases you will not need to prescribe a drug at all.

2. Specify the therapeutic objective

Before choosing a treatment it is essential to specify your therapeutic objective, that is, what you want to achieve with the treatment.

In some cases the therapeutic objective will be straightforward, but sometimes, the picture will be less clear, even misleading.

Specifying the therapeutic objective is a good way to structure your thinking as it forces you to concentrate on the real problem, which limits the number of treatment possibilities and so makes your final choice much easier.

Specifying your therapeutic objective will prevent a lot of unnecessary drug use. It should stop you from treating two diseases at the same time if you cannot choose between them, like prescribing antifungal and corticosteroid skin ointment when you cannot choose between a fungus and eczema.

Specifying your therapeutic objective will also help you avoid unnecessary prophylactic prescribing, for example, the use of antibiotics to prevent wound infection, which is a very common cause of irrational drug use.

It is a good idea to discuss your therapeutic objective with the patient before you start the treatment. This may reveal that (s) he has quite different views about illness causation, diagnosis and treatment. It also makes the patient an informed partner in the therapy and improves adherence to treatment.

3. Verify the suitability of your P-drug

You have chosen your P-drugs for a standard patient, and this 'first-choice' treatment will not be suitable for every individual patient. Verifying whether your P-drug is also suitable for the individual patient in front of you is probably the most important step in the process of rational prescribing. In daily practice, adapting the dosage schedule to the individual patient is probably the most common change that you will make. It also applies if you are working with essential drugs lists, formularies and standard treatment guidelines.

4. Write a prescription

A prescription is an instruction from a prescriber to a dispenser. Every country has its own standards for the minimum information required for a prescription, and its own laws and

regulations to define which drugs require a prescription and who is entitled to write it. However, usually, doctors are legally obliged to write, and a prescription would include:

- (1) Name, address, telephone of prescriber
- (2) Date
- (3) (Generic) name of the drug, strength
- (4) Dosage form, total amount
- (5) Label: instructions, warnings
- (6) Name, address, age of patient
- (7) Signature (and/or registration number) of prescriber

5. Give information, instructions and warnings

In average, 50% of patients do not take prescribed drugs correctly; take them irregularly, or not at all. The most common reasons are that symptoms have ceased, side effects have occurred, the drug is not perceived as effective, or the dosage schedule is complicated for patients, particularly the elderly.

Patient adherence to treatment can be improved in three ways: prescribe a well-chosen drug treatment; create a good doctor-patient relationship; take time to give the necessary information, instructions and warnings.

- (1) Effects of the drug: Which symptoms will disappear; and when; how important is it to take the drug; what happens if it is not taken;
- (2) Side effects: Which side effects may occur; how to recognize them; how long will they remain; how serious they are; what to do if they occur;
- (3) Instructions: When to take; how to take; how to store; how long to continue the treatment; what to do in case of problems;
- (4) Warnings: What not to do (driving, machinery); maximum dose (toxic drugs); need to continue treatment (antibiotics);
- (5) Next appointment: When to come back (or not); when to come earlier; what to do with left-over drugs; what information will be needed;
- (6) Everything clear?: Everything understood; repeat the information; any more questions.

6. Monitoring Drug Therapy

Monitoring the treatment enables you to determine whether it has been successful or whether additional action is needed. You chose the treatment on the basis of efficacy, safety, suitability and cost, and you should use the same criteria to monitor the effect. In practice, these criteria can be condensed into two questions: is the treatment effective? Are there any side effects? Answering these questions will allow you to decide on continuing, altering or stopping the treatment.

Passive monitoring means that you explain to the patient what to do if the treatment is not effective, is inconvenient or if too many side effects occur. In this case monitoring is done by the patient.

Active monitoring means that you make an appointment to determine yourself whether the treatment has been effective. You will need to determine a monitoring interval, which depends on the type of illness, the duration of treatment, and the maximum quantity of drugs to prescribe. At the start of treatment the interval is usually short; it may gradually become longer, if needed. Three months should be the maximum for any patient on long-term drug therapy.

OSCE

OBJECTIVE STRUCTURED CLINICAL EXAMINATION

CHECKLIST

EXAMINEE:

SCORER:

I PROBLEM SOLVING STEPS

SCORE poor=1, excellent=5

1. Define the problem (Diagnose) and take your P-drug and/or treatment

0 1 2 3 4 5

2. Control the suitability of your P-drug for this Patient

a. Contraindications

0 1 2 3 4 5

b. Interactions

0 1 2 3 4 5

c. Convenience

0 1 2 3 4 5

3. Identify the Definite (Pharmaco) therapy Choice

a. drug

0 1 2 3 4 5

b. Administrative Form

0 1 2 3 4 5

c. Dosage

0 1 2 3 4 5

d. Length of Treatment

0 1 2 3 4 5

e. Non-drug Treatment

0 1 2 3 4 5

4. Write the full prescription

0 1 2 3 4 5

(name/address of physician, date, generic name, concentration/strength administrative form, total amount, dosage, instructions, warnings, signature, name/address of patient)

5. Information, Instructions, Warnings

a. Drug effect (which effect, when effect occurs, how long it last)

0 1 2 3 4 5

b. Side effects (which, what to do)

0 1 2 3 4 5

c. Instructions (intake/use, dosage, intake interval, how long, points of care)

0 1 2 3 4 5

d. Warnings (maximum dose, interactions, adverse reactions, stopping the drug)

0 1 2 3 4 5

e. Next appointment (time, when earlier)

0 1 2 3 4 5

II COMMUNICATION STYLE

a. Clear and understandable

0 1 2 3 4 5

b. Structure of the conversation

0 1 2 3 4 5

c. Giving space to the patient (and/or spouse) to express him/herself and to ask questions

0 1 2 3 4 5

d. Ensure the patient (and/or spouse) understands the instructions

0 1 2 3 4 5

e. Makes the patient (and/or spouse) repeat the instructions

0 1 2 3 4 5

Total (max.100):

Percentage (max. 100):

Prescription Evaluation Form

RECIPE SECTION	POINTS	RECIPE SECTION	POINTS
Patient Name	4	Rp	5
Patient Ages	4	Drug No	5
Patient Sex	4	Drug Name	10
Patients Diagnosed	4	Mg Of The Drug	5
Patients Address	4	Dosage Form	5
Doctors Name	5	Box Number	5
Registration Number/ Diploma No	5	Instructions	10
Signature	5	Legibility	10
Date	5	Pencils	-10
		Non-compliance with prescription writing format	-10
Total			100

WORKSHOP NOTES

HYPERTENSION CLINIC

MODULE 1: P-DRUG SELECTION FOR HYPERTENSION

This workshop will reinforce the P-drug selection skills you have acquired, by using another indication. It also puts an emphasis on the application of P-drugs to the patients.

Choose a set of P-drugs for essential hypertension.

1. Define the patient's problem
2. Specify the therapeutic objectives –*What do you want to achieve with the treatment?*
3. Make a comparison table of effective drug groups
4. Select a drug according to the "criteria" –*Which drug group is effective, safe, suitable, and cost-effective?*
5. Choose a P-drug using criteria(p-drug list)
6. Think of important categories of patients or risk factors, which differ from the “normal” patient population (pregnancy, elderly, co-morbidity) –*Are your P-drug (group) choices different for these patients?*

MODULE 1: LEARNING OBJECTIVES

By the end of this workshop, all participants should be able to:

1. Describe the P-drugs concept, understand its advantages and disadvantages;
2. Actively experience step-by-step choosing a P-drug for a given indication, by making use of the criteria; *efficacy, safety, suitability and cost.*
3. Link the diagnosis to therapeutic objectives, and the therapeutic objectives to relevant P-drugs

MODULE 1: WORKSHEETS

Following worksheets are included in the coming pages:

1. Multi-Attribute Utility Analysis sheet for P-drugs comparisons that each group
2. Pharmaceutical preparations cost comparison table
3. Multi-Attribute Utility Analysis sheet for individual drug comparisons
4. P-Drug list

READING MATERIAL

- *Guide to Good Prescribing*
- BNF
- *Rasyonel Tedavi Yönünden Tıbbi Farmakoloji, S. O. Kayaalp,*
- *2018 ESH/ESC Guidelines for the management of arterial hypertension*
- *Goodman&Gilman's: The Pharmacological Basis of Therapeutics; J.G. Hardman, L.E. Limbird et al*
- *Hipertansiyon uzlaşı raporu, 2019*

Indication : ESSENTIAL HYPERTENSION

MULTI-ATTRIBUTE UTILITY ANALYSIS SHEET

IN-GROUP DRUGS	<i>Efficacy</i> (..... %)	<i>Safety</i> (..... %)	<i>Suitability</i> (..... %)	<i>Cost</i> (..... %)	<i>Total</i> (100%)
-----------------------	-------------------------------	-----------------------------	----------------------------------	---------------------------	------------------------

Indication : ESSENTIAL HYPERTENSION

MULTI-ATTRIBUTE UTILITY ANALYSIS SHEET

IN-GROUP DRUGS	<i>Efficacy</i> (..... %)	<i>Safety</i> (..... %)	<i>Suitability</i> (..... %)	<i>Cost</i> (..... %)	<i>Total</i> (100%)
-----------------------	-------------------------------	-----------------------------	----------------------------------	---------------------------	------------------------

Indication : ESSENTIAL HYPERTENSION

MULTI-ATTRIBUTE UTILITY ANALYSIS SHEET

IN-GROUP DRUGS	<i>Efficacy</i> (..... %)	<i>Safety</i> (..... %)	<i>Suitability</i> (..... %)	<i>Cost</i> (..... %)	<i>Total</i> (100%)
-----------------------	-------------------------------	-----------------------------	----------------------------------	---------------------------	------------------------

Indication : ESSENTIAL HYPERTENSION

MULTI-ATTRIBUTE UTILITY ANALYSIS SHEET

IN-GROUP DRUGS	<i>Efficacy</i> (..... %)	<i>Safety</i> (..... %)	<i>Suitability</i> (..... %)	<i>Cost</i> (..... %)	<i>Total</i> (100%)
-----------------------	-------------------------------	-----------------------------	----------------------------------	---------------------------	------------------------

Indication : ESSENTIAL HYPERTENSION

MULTI-ATTRIBUTE UTILITY ANALYSIS SHEET

IN-GROUP DRUGS	<i>Efficacy</i> (..... %)	<i>Safety</i> (..... %)	<i>Suitability</i> (..... %)	<i>Cost</i> (..... %)	<i>Total</i> (100%)
-----------------------	-------------------------------	-----------------------------	----------------------------------	---------------------------	------------------------

Indication : ESSENTIAL HYPERTENSION

MULTI-ATTRIBUTE UTILITY ANALYSIS SHEET

IN-GROUP DRUGS	<i>Efficacy</i> (..... %)	<i>Safety</i> (..... %)	<i>Suitability</i> (..... %)	<i>Cost</i> (..... %)	<i>Total</i> (100%)
-----------------------	-------------------------------	-----------------------------	----------------------------------	---------------------------	------------------------

Indication : ESSENTIAL HYPERTENSION

MULTI-ATTRIBUTE UTILITY ANALYSIS SHEET

IN-GROUP DRUGS	<i>Efficacy</i> (..... %)	<i>Safety</i> (..... %)	<i>Suitability</i> (..... %)	<i>Cost</i> (..... %)	<i>Total</i> (100%)
-----------------------	-------------------------------	-----------------------------	----------------------------------	---------------------------	------------------------

Indication : ESSENTIAL HYPERTENSION

MULTI-ATTRIBUTE UTILITY ANALYSIS SHEET

FOR MEDICATION GROUPS (LAST TABLE)	<i>etkililik</i> (%.....)	<i>Güvenlilik</i> (%.....)	<i>Uygunluk</i> (%.....)	<i>Maliyet</i> (%.....)	<i>Toplam</i> (% 100)
---	------------------------------	-------------------------------	-----------------------------	----------------------------	--------------------------

P-DRUG FORM

Indication :

P-DRUG 1

Name :

Dosage Form :

Dosage Schedule :

Duration :

Cost of treatment :

Adverse Effects :

Contraindications :

Drug Interactions:.....

P-DRUG 2

Name :

Dosage Form :

Dosage Schedule :

Duration :

Cost of treatment :

Adverse Effects :

Contraindications :

Drug Interactions:.....

:

P-DRUG 3

Name :

Dosage Form :

Dosage Schedule :

Duration :

Cost of treatment :

Adverse Effects :

Contraindications :

Drug Interactions:.....

P-DRUG 4

Name :

Dosage Form :

Dosage Schedule :

Duration :

Cost of treatment :

Adverse Effects :

Contraindications :

Drug Interactions:.....

Duration :

P-DRUG 5

Name :

Dosage Form :

Dosage Schedule :

Duration :

Cost of treatment :

Adverse Effects :

Contraindications :

Drug Interactions:.....

P-DRUG FORM FOR SPECIAL SITUATIONS

P-DRUG 6 (PREGNANT)

Name :

Name :

Dosage Form :

Dosage Schedule :

Duration :

Cost of treatment :

Adverse Effects :

Contraindications :

Drug Interactions:.....

:

WORKSHOP NOTES

TYPE 2 DIABETES (NON-INSULIN DEPENDENT DIABETES) P-DRUG SELECTION

This workshop will reinforce the P-drug selection skills you have acquired, by using another indication. It also puts an emphasis on the application of P-drugs to the patients.

Similar to the ht, please choose a set of P-drugs for acute bacterial sinusitis.

1. Define the patient's problem
2. Specify the therapeutic objectives –*What do you want to achieve with the treatment?*
3. Make a comparison table of effective drug groups
4. Select a drug according to the "criteria" –*Which drug group is effective, safe, suitable, and cost-effective?*
5. Choose a P-drug using criteria
6. Think of important categories of patients or risk factors, which differ from the “normal” patient population (pregnancy, elderly, co-morbidity) –*Are your P-drug (group) choices different for these patients?*

LEARNING OBJECTIVES

By the end of this workshop, all participants should be able to:

1. Describe the P-drugs concept, understand its advantages and disadvantages;
2. Actively experience step-by-step choosing a P-drug for a given indication, by making use of the criteria; *efficacy, safety, suitability and cost.*
3. Link the diagnosis to therapeutic objectives, and the therapeutic objectives to relevant P-drugs

FORMS

Following worksheets are included in the coming pages:

1. Multi-Attribute Utility Analysis sheet for P-drugs comparisons that each group
2. Multi-Attribute Utility Analysis sheet for individual drug comparisons
3. P-Drug list

READING MATERIAL

1. ADA, American Diabetes Assoc (<https://diabetes.org>)
2. TEMD, Türkiye Endokrin ve Metabolizma Derneği Kılavuzu (https://file.temd.org.tr/Uploads/publications/guides/documents/diabetes-mellitus_2022.pdf)
3. https://diabetesjournals.org/care/issue/45/Supplement_1
4. <https://www.guidelinecentral.com/guideline/21645/>
5. https://www.turkdiab.org/admin/PICS/webfiles/Diyabet_Tani_ve_Tedavi_Rehberi_2021.pdf

Indication : TYPE-2 DM

MULTI-ATTRIBUTE UTILITY ANALYSIS SHEET

IN-GROUP DRUGS	<i>Efficacy</i> (..... %)	<i>Safety</i> (..... %)	<i>Suitability</i> (..... %)	<i>Cost</i> (..... %)	<i>Total</i> (100%)
-----------------------	-------------------------------	-----------------------------	----------------------------------	---------------------------	------------------------

Indication : TYPE-2 DM

MULTI-ATTRIBUTE UTILITY ANALYSIS SHEET

IN-GROUP DRUGS	<i>Efficacy</i> (..... %)	<i>Safety</i> (..... %)	<i>Suitability</i> (..... %)	<i>Cost</i> (..... %)	<i>Total</i> (100%)
-----------------------	-------------------------------	-----------------------------	----------------------------------	---------------------------	------------------------

Indication : TYPE-2 DM

MULTI-ATTRIBUTE UTILITY ANALYSIS SHEET

IN-GROUP DRUGS	<i>Efficacy</i> (..... %)	<i>Safety</i> (..... %)	<i>Suitability</i> (..... %)	<i>Cost</i> (..... %)	<i>Total</i> (100%)
-----------------------	-------------------------------	-----------------------------	----------------------------------	---------------------------	------------------------

Indication : TYPE-2 DM

MULTI-ATTRIBUTE UTILITY ANALYSIS SHEET

IN-GROUP DRUGS	<i>Efficacy</i> (..... %)	<i>Safety</i> (..... %)	<i>Suitability</i> (..... %)	<i>Cost</i> (..... %)	<i>Total</i> (100%)
-----------------------	-------------------------------	-----------------------------	----------------------------------	---------------------------	------------------------

Indication : TYPE-2 DM

MULTI-ATTRIBUTE UTILITY ANALYSIS SHEET

IN-GROUP DRUGS	<i>Efficacy</i> (..... %)	<i>Safety</i> (..... %)	<i>Suitability</i> (..... %)	<i>Cost</i> (..... %)	<i>Total</i> (100%)
-----------------------	-------------------------------	-----------------------------	----------------------------------	---------------------------	------------------------

Indication : TYPE-2 DM

MULTI-ATTRIBUTE UTILITY ANALYSIS SHEET

IN-GROUP DRUGS	<i>Efficacy</i> (..... %)	<i>Safety</i> (..... %)	<i>Suitability</i> (..... %)	<i>Cost</i> (..... %)	<i>Total</i> (100%)
-----------------------	-------------------------------	-----------------------------	----------------------------------	---------------------------	------------------------

Indication : TYPE-2 DM

MULTI-ATTRIBUTE UTILITY ANALYSIS SHEET

IN-GROUP DRUGS	<i>Efficacy</i> (..... %)	<i>Safety</i> (..... %)	<i>Suitability</i> (..... %)	<i>Cost</i> (..... %)	<i>Total</i> (100%)
-----------------------	-------------------------------	-----------------------------	----------------------------------	---------------------------	------------------------

Indication : TYPE-2 DM

MULTI-ATTRIBUTE UTILITY ANALYSIS SHEET

IN-GROUP DRUGS	<i>Efficacy</i> (..... %)	<i>Safety</i> (..... %)	<i>Suitability</i> (..... %)	<i>Cost</i> (..... %)	<i>Total</i> (100%)
-----------------------	-------------------------------	-----------------------------	----------------------------------	---------------------------	------------------------

Indication : TYPE-2 DM

MULTI-ATTRIBUTE UTILITY ANALYSIS SHEET

FOR MEDICATION GROUPS (LAST TABLE)	<i>etkililik</i> (%.....)	<i>Güvenlilik</i> (%.....)	<i>Uygunluk</i> (%.....)	<i>Maliyet</i> (%.....)	<i>Toplam</i> (% 100)
---	------------------------------	-------------------------------	-----------------------------	----------------------------	--------------------------

P-DRUG FORM

Indication :

P-DRUG 1

Name :

Dosage Form :

Dosage Schedule :

Duration :

Cost of treatment :

Adverse Effects :

Contraindications :

Drug Interactions:.....

P-DRUG 2

Name :

Dosage Form :

Dosage Schedule :

Duration :

Cost of treatment :

Adverse Effects :

Contraindications :

Drug Interactions:.....

:

P-DRUG 3

Name :

Dosage Form :

Dosage Schedule :

Duration :

Cost of treatment :

Adverse Effects :

Contraindications :

Drug Interactions:.....

P-DRUG 4

Name :

Dosage Form :

Dosage Schedule :

Duration :

Cost of treatment :

Adverse Effects :

Contraindications :

Drug Interactions:.....

Duration :

P-DRUG 5

Name :

Dosage Form :

Dosage Schedule :

Duration :

Cost of treatment :

Adverse Effects :

Contraindications :

Drug Interactions:.....

P-DRUG 6

Name :

Dosage Form :

Dosage Schedule :

Duration :

Cost of treatment :

Adverse Effects :

Contraindications :

Drug Interactions:.....

P-DRUG 7

Name :

Dosage Form :

Dosage Schedule :

Duration :

Cost of treatment :

Adverse Effects :

Contraindications :

Drug Interactions:.....

P-DRUG 8

Name :

Dosage Form :

Dosage Schedule :

Duration :

Cost of treatment :

Adverse Effects :

Contraindications :

Drug Interactions:.....

COMBINED PREPARATIONS:

1.

Name :
Dosage Form :
Dosage Schedule :
Duration :
Cost of treatment :
Adverse Effects :
Contraindications :
Drug Interactions:.....

2.

Name :
Dosage Form :
Dosage Schedule :
Duration :
Cost of treatment :
Adverse Effects :
Contraindications :
Drug Interactions:.....

3.

Name :
Dosage Form :
Dosage Schedule :
Duration :
Cost of treatment :
Adverse Effects :
Contraindications :
Drug Interactions:.....

4.

Name :
Dosage Form :
Dosage Schedule :
Duration :
Cost of treatment :
Adverse Effects :
Contraindications :
Drug Interactions:.....

CASE -1

NOTS

.....
.....

CASE

PHARMACOTHERAPY RECORD

Patient's Name :

1. Diagnosis and Therapeutic Objective

Diagnosis :

Therapeutic. Objective :

2. Record of Arguments against using the P-drug

P-drug :

a. *Contraindications (Specific P-drug related contraindications, and general patient-factors)*

.....
.....
.....

Interactions

.....
.....

c. *Convenience*

.....
.....

3. Definite Treatment Plan

a. *Drug* :

b. *Administrative Form* :

c. *Dosage* :

d. *Length of Treatment* :

e. *Non-drug Treatment:*

4. The Full Prescription (Use the standard prescription on the previous page)

- a. Name and address of the physician
- b. Date
- c. of the prescribed drug: *generic name, concentration/strength, administrative form, total amount, dosage*; Instructions and warnings
- d. Signature, ID number of the physician
- e. Name and address of the patient

5. Information, Instructions, Warnings for the Patient

- a. Effect of the Drug (what, when, how long)

.....
.....
.....

- b. Side Effects (what, when, how long, what to do)

.....
.....
.....

- c. Instructions (administration/use, dosage, intervals, how long, important points)

.....
.....
.....

- d. Warnings (maximum dosage, possible interactions, adverse reactions, (not) terminating therapy)

.....
.....
.....

- e. Appointment (following appointment, when to come earlier)

.....
.....
.....

GAZI UNIVERSITY
TRAINING AND RESEARCH HOSPITALS

Patient Name :.....
Ankara :..... / / 2021
Diagnosis :.....

R/

Physician's Name :
Diploma No :
Department :
Signature :

NOTS

.....
.....

CASE

PHARMACOTHERAPY RECORD

Patient's Name :

1. Diagnosis and Therapeutic Objective

Diagnosis :

Therapeutic Objective :

2. Record of Arguments against using the P-drug

P-drug :

a. *Contraindications (Specific P-drug related contraindications, and general patient-factors)*

.....
.....
.....b.

Interactions

.....
.....

c. *Convenience*

.....
.....

3. Definite Treatment Plan

a. *Drug* :

b. *Administrative Form* :

c. *Dosage* :

d. *Length of Treatment* :

e. *Non-drug Treatment:*

4. The Full Prescription (Use the standard prescription on the previous page)

f. Name and address of the physician

g. Date

- h. of the prescribed drug: *generic name, concentration/strength, administrative form, total amount, dosage*; Instructions and warnings
- i. Signature, ID number of the physician
- j. Name and address of the patient

5. Information, Instructions, Warnings for the Patient

a. Effect of the Drug (what, when, how long)

.....

b. Side Effects (what, when, how long, what to do)

.....

c. Instructions (administration/use, dosage, intervals, how long, important points)

.....

d. Warnings (maximum dosage, possible interactions, adverse reactions, (not) terminating therapy)

.....

e. Appointment (following appointment, when to come earlier)

.....

GAZI UNIVERSITY

TRAINING AND RESEARCH HOSPITALS

Patient Name :.....
 Ankara :..... / / 2021
 Diagnosis :.....

R/

Physician's Name :
 Diploma No :
 Department :
 Signature :

NOTS

.....
.....

CASE

PHARMACOTHERAPY RECORD

Patient's Name :

1. Diagnosis and Therapeutic Objective

Diagnosis :

Therapeutic Objective :

2. Record of Arguments against using the P-drug

P-drug :

a. *Contraindications (Specific P-drug related contraindications, and general patient-factors)*

.....
.....

.....b.

Interactions

.....
.....

c. *Convenience*

.....
.....

3. Definite Treatment Plan

a. *Drug* :

b. *Administrative Form* :

c. *Dosage* :

d. *Length of Treatment* :

e. *Non-drug Treatment*:

4. The Full Prescription (Use the standard prescription on the previous page)

k. Name and address of the physician

l. Date

- m. of the prescribed drug: *generic name, concentration/strength, administrative form, total amount, dosage*; Instructions and warnings
- n. Signature, ID number of the physician
- o. Name and address of the patient

5. Information, Instructions, Warnings for the Patient

a. Effect of the Drug (what, when, how long)

.....

b. Side Effects (what, when, how long, what to do)

.....

c. Instructions (administration/use, dosage, intervals, how long, important points)

.....

d. Warnings (maximum dosage, possible interactions, adverse reactions, (not) terminating therapy)

.....

e. Appointment (following appointment, when to come earlier)

.....

GAZI UNIVERSITY

TRAINING AND RESEARCH HOSPITALS

Patient Name :.....
 Ankara :..... / / 2021
 Diagnosis :.....

R/

Physician's Name :
 Diploma No :
 Department :
 Signature :

NOTS

.....
.....

CASE

PHARMACOTHERAPY RECORD

Patient's Name :

1. Diagnosis and Therapeutic Objective

Diagnosis :

Therapeutic. Objective :

2. Record of Arguments against using the P-drug

P-drug :

a. *Contraindications (Specific P-drug related contraindications, and general patient-factors)*

.....
.....
.....b.

Interactions

.....
.....

c. *Convenience*

.....
.....

3. Definite Treatment Plan

a. *Drug* :

b. *Administrative Form* :

c. *Dosage* :

d. *Length of Treatment* :

e. *Non-drug Treatment:*

4. The Full Prescription (Use the standard prescription on the previous page)

p. Name and address of the physician

q. Date

- r. of the prescribed drug: *generic name, concentration/strength, administrative form, total amount, dosage*; Instructions and warnings
- s. Signature, ID number of the physician
- t. Name and address of the patient

5. Information, Instructions, Warnings for the Patient

a. Effect of the Drug (what, when, how long)

.....

b. Side Effects (what, when, how long, what to do)

.....

c. Instructions (administration/use, dosage, intervals, how long, important points)

.....

d. Warnings (maximum dosage, possible interactions, adverse reactions, (not) terminating therapy)

.....

e. Appointment (following appointment, when to come earlier)

.....

GAZI UNIVERSITY

TRAINING AND RESEARCH HOSPITALS

Patient Name :.....
 Ankara :..... / / 2021
 Diagnosis :.....

R/

Physician's Name :
 Diploma No :
 Department :
 Signature :

NOTS

.....
.....

CASE

PHARMACOTHERAPY RECORD

Patient's Name :

1. Diagnosis and Therapeutic Objective

Diagnosis :

Therapeutic Objective :

2. Record of Arguments against using the P-drug

P-drug :

a. *Contraindications (Specific P-drug related contraindications, and general patient-factors)*

.....
.....
.....b.

Interactions

.....
.....

c. *Convenience*

.....
.....

3. Definite Treatment Plan

a. *Drug* :

b. *Administrative Form* :

c. *Dosage* :

d. *Length of Treatment* :

e. *Non-drug Treatment:*

4. The Full Prescription (Use the standard prescription on the previous page)

u. Name and address of the physician

v. Date

- w. of the prescribed drug: *generic name, concentration/strength, administrative form, total amount, dosage*; Instructions and warnings
- x. Signature, ID number of the physician
- y. Name and address of the patient

5. Information, Instructions, Warnings for the Patient

a. Effect of the Drug (what, when, how long)

.....

b. Side Effects (what, when, how long, what to do)

.....

c. Instructions (administration/use, dosage, intervals, how long, important points)

.....

d. Warnings (maximum dosage, possible interactions, adverse reactions, (not) terminating therapy)

.....

e. Appointment (following appointment, when to come earlier)

.....

GAZI UNIVERSITY

TRAINING AND RESEARCH HOSPITALS

Patient Name :.....
 Ankara :..... / / 2021
 Diagnosis :.....

R/

Physician's Name :
 Diploma No :
 Department :
 Signature :

NOTS

.....
.....

CASE

PHARMACOTHERAPY RECORD

Patient's Name :

1. Diagnosis and Therapeutic Objective

Diagnosis :

Therapeutic Objective :

2. Record of Arguments against using the P-drug

P-drug :

a. *Contraindications (Specific P-drug related contraindications, and general patient-factors)*

.....
.....
.....

b. *Interactions*

.....
.....

c. *Convenience*

.....
.....

3. Definite Treatment Plan

a. *Drug* :

b. *Administrative Form* :

c. *Dosage* :

d. *Length of Treatment* :

e. *Non-drug Treatment:*

4. The Full Prescription (Use the standard prescription on the previous page)

z. Name and address of the physician

aa. Date

- bb. of the prescribed drug: *generic name, concentration/strength, administrative form, total amount, dosage*; Instructions and warnings
- cc. Signature, ID number of the physician
- dd. Name and address of the patient

5. Information, Instructions, Warnings for the Patient

a. Effect of the Drug (what, when, how long)

.....

b. Side Effects (what, when, how long, what to do)

.....

c. Instructions (administration/use, dosage, intervals, how long, important points)

.....

d. Warnings (maximum dosage, possible interactions, adverse reactions, (not) terminating therapy)

.....

e. Appointment (following appointment, when to come earlier)

.....

GAZI UNIVERSITY

TRAINING AND RESEARCH HOSPITALS

Patient Name :.....
 Ankara :..... / / 2021
 Diagnosis :.....

R/

Physician's Name :
 Diploma No :
 Department :
 Signature :

NOTS

.....
.....

CASE

PHARMACOTHERAPY RECORD

Patient's Name :

1. Diagnosis and Therapeutic Objective

Diagnosis :

Therapeutic. Objective :

2. Record of Arguments against using the P-drug

P-drug :

a. *Contraindications (Specific P-drug related contraindications, and general patient-factors)*

.....
.....
.....b.

Interactions

.....
.....

c. *Convenience*

.....
.....

3. Definite Treatment Plan

a. *Drug* :

b. *Administrative Form* :

c. *Dosage* :

d. *Length of Treatment* :

e. *Non-drug Treatment:*

4. The Full Prescription (Use the standard prescription on the previous page)

ee. Name and address of the physician

ff. Date

- gg. of the prescribed drug: *generic name, concentration/strength, administrative form, total amount, dosage*; Instructions and warnings
- hh. Signature, ID number of the physician
- ii. Name and address of the patient

5. Information, Instructions, Warnings for the Patient

a. Effect of the Drug (what, when, how long)

.....

b. Side Effects (what, when, how long, what to do)

.....

c. Instructions (administration/use, dosage, intervals, how long, important points)

.....

d. Warnings (maximum dosage, possible interactions, adverse reactions, (not) terminating therapy)

.....

e. Appointment (following appointment, when to come earlier)

.....

GAZI UNIVERSITY
 TRAINING AND RESEARCH HOSPITALS

Patient Name :.....
 Ankara :..... / / 2021
 Diagnosis :.....

R/

Physician's Name :
 Diploma No :
 Department :
 Signature :

NOTS

.....
.....

CASE

PHARMACOTHERAPY RECORD

Patient's Name :

1. Diagnosis and Therapeutic Objective

Diagnosis :

Therapeutic Objective :

2. Record of Arguments against using the P-drug

P-drug :

a. *Contraindications (Specific P-drug related contraindications, and general patient-factors)*

.....
.....
.....

b. *Interactions*

.....
.....

c. *Convenience*

.....
.....

3. Definite Treatment Plan

a. *Drug* :

b. *Administrative Form* :

c. *Dosage* :

d. *Length of Treatment* :

e. *Non-drug Treatment*:

4. The Full Prescription (Use the standard prescription on the previous page)

jj. Name and address of the physician

kk. Date

- ll. of the prescribed drug: *generic name, concentration/strength, administrative form, total amount, dosage*; Instructions and warnings
- mm. Signature, ID number of the physician
- nn. Name and address of the patient

5. Information, Instructions, Warnings for the Patient

a. Effect of the Drug (what, when, how long)

.....

b. Side Effects (what, when, how long, what to do)

.....

c. Instructions (administration/use, dosage, intervals, how long, important points)

.....

d. Warnings (maximum dosage, possible interactions, adverse reactions, (not) terminating therapy)

.....

e. Appointment (following appointment, when to come earlier)

.....

GAZI UNIVERSITY

TRAINING AND RESEARCH HOSPITALS

Patient Name :.....
 Ankara :..... / / 2021
 Diagnosis :.....

R/

Physician's Name :
 Diploma No :
 Department :
 Signature :

NOTS

.....
.....

CASE

PHARMACOTHERAPY RECORD

Patient's Name :

1. Diagnosis and Therapeutic Objective

Diagnosis :

Therapeutic. Objective :

2. Record of Arguments against using the P-drug

P-drug :

a. *Contraindications (Specific P-drug related contraindications, and general patient-factors)*

.....
.....

.....b.

Interactions

.....
.....

c. *Convenience*

.....
.....

3. Definite Treatment Plan

a. *Drug* :

b. *Administrative Form* :

c. *Dosage* :

d. *Length of Treatment* :

e. *Non-drug Treatment:*

4. The Full Prescription (Use the standard prescription on the previous page)

- oo. Name and address of the physician
- pp. Date
- qq. of the prescribed drug: *generic name, concentration/strength, administrative form, total amount, dosage*; Instructions and warnings
- rr. Signature, ID number of the physician
- ss. Name and address of the patient

5. Information, Instructions, Warnings for the Patient

a. Effect of the Drug (what, when, how long)

.....

b. Side Effects (what, when, how long, what to do)

.....

c. Instructions (administration/use, dosage, intervals, how long, important points)

.....

d. Warnings (maximum dosage, possible interactions, adverse reactions, (not) terminating therapy)

.....

e. Appointment (following appointment, when to come earlier)

.....

GAZI UNIVERSITY
 TRAINING AND RESEARCH HOSPITALS

Patient Name :.....
 Ankara :..... / / 2021
 Diagnosis :.....

R/

Physician's Name :
 Diploma No :
 Department :
 Signature :

NOTS

.....
.....

CASE

PHARMACOTHERAPY RECORD

Patient's Name :

1. Diagnosis and Therapeutic Objective

Diagnosis :

Therapeutic. Objective :

2. Record of Arguments against using the P-drug

P-drug :

a. *Contraindications (Specific P-drug related contraindications, and general patient-factors)*

.....
.....
.....b.

Interactions

.....
.....

c. *Convenience*

.....
.....

3. Definite Treatment Plan

a. *Drug* :

b. *Administrative Form* :

c. *Dosage* :

d. *Length of Treatment* :

e. *Non-drug Treatment:*

4. The Full Prescription (Use the standard prescription on the previous page)

tt. Name and address of the physician

uu. Date

- vv. of the prescribed drug: *generic name, concentration/strength, administrative form, total amount, dosage*; Instructions and warnings
- ww. Signature, ID number of the physician
- xx. Name and address of the patient

5. Information, Instructions, Warnings for the Patient

a. Effect of the Drug (what, when, how long)

.....

b. Side Effects (what, when, how long, what to do)

.....

c. Instructions (administration/use, dosage, intervals, how long, important points)

.....

d. Warnings (maximum dosage, possible interactions, adverse reactions, (not) terminating therapy)

.....

e. Appointment (following appointment, when to come earlier)

.....

GAZI UNIVERSITY

TRAINING AND RESEARCH HOSPITALS

Patient Name :.....
 Ankara :..... / / 2021
 Diagnosis :.....

R/

Physician's Name :
 Diploma No :
 Department :
 Signature :

NOTS

.....
.....

CASE

PHARMACOTHERAPY RECORD

Patient's Name :

1. Diagnosis and Therapeutic Objective

Diagnosis :

Therapeutic. Objective :

2. Record of Arguments against using the P-drug

P-drug :

a. *Contraindications (Specific P-drug related contraindications, and general patient-factors)*

.....
.....
.....

b. *Interactions*

.....
.....

c. *Convenience*

.....
.....

3. Definite Treatment Plan

a. *Drug* :

b. *Administrative Form* :

c. *Dosage* :

d. *Length of Treatment* :

e. *Non-drug Treatment:*

4. The Full Prescription (Use the standard prescription on the previous page)

yy. Name and address of the physician

zz. Date

- aaa. of the prescribed drug: *generic name, concentration/strength, administrative form, total amount, dosage*; Instructions and warnings
- bbb. Signature, ID number of the physician
- ccc. Name and address of the patient

5. Information, Instructions, Warnings for the Patient

a. Effect of the Drug (what, when, how long)

.....

b. Side Effects (what, when, how long, what to do)

.....

c. Instructions (administration/use, dosage, intervals, how long, important points)

.....

d. Warnings (maximum dosage, possible interactions, adverse reactions, (not) terminating therapy)

.....

e. Appointment (following appointment, when to come earlier)

.....

GAZI UNIVERSITY

TRAINING AND RESEARCH HOSPITALS

Patient Name :.....
 Ankara :..... / / 2021
 Diagnosis :.....

R/

Physician's Name :
 Diploma No :
 Department :
 Signature :

NOTS

.....
.....

CASE

PHARMACOTHERAPY RECORD

Patient's Name :

1. Diagnosis and Therapeutic Objective

Diagnosis :

Therapeutic. Objective :

2. Record of Arguments against using the P-drug

P-drug :

a. *Contraindications (Specific P-drug related contraindications, and general patient-factors)*

.....
.....
.....

Interactions

.....
.....

c. *Convenience*

.....
.....

3. Definite Treatment Plan

a. *Drug* :

b. *Administrative Form* :

c. *Dosage* :

d. *Length of Treatment* :

e. *Non-drug Treatment:*

4. The Full Prescription (Use the standard prescription on the previous page)

ddd. Name and address of the physician

eee. Date

- fff. of the prescribed drug: *generic name, concentration/strength, administrative form, total amount, dosage*; Instructions and warnings
- ggg. Signature, ID number of the physician
- hhh. Name and address of the patient

5. Information, Instructions, Warnings for the Patient

a. Effect of the Drug (what, when, how long)

.....

b. Side Effects (what, when, how long, what to do)

.....

c. Instructions (administration/use, dosage, intervals, how long, important points)

.....

d. Warnings (maximum dosage, possible interactions, adverse reactions, (not) terminating therapy)

.....

e. Appointment (following appointment, when to come earlier)

.....

GAZI UNIVERSITY
 TRAINING AND RESEARCH HOSPITALS

Patient Name :.....
 Ankara :..... / / 2021
 Diagnosis :.....

R/

Physician's Name :
 Diploma No :
 Department :
 Signature :

NOTS

.....
.....

CASE

PHARMACOTHERAPY RECORD

Patient's Name :

1. Diagnosis and Therapeutic Objective

Diagnosis :

Therapeutic. Objective :

2. Record of Arguments against using the P-drug

P-drug :

a. *Contraindications (Specific P-drug related contraindications, and general patient-factors)*

.....
.....
.....

Interactions

.....
.....

c. *Convenience*

.....
.....

3. Definite Treatment Plan

a. *Drug* :

b. *Administrative Form* :

c. *Dosage* :

d. *Length of Treatment* :

e. *Non-drug Treatment:*

4. The Full Prescription (Use the standard prescription on the previous page)

iii. Name and address of the physician

jjj. Date

kkk. of the prescribed drug: *generic name, concentration/strength, administrative form, total amount, dosage*; Instructions and warnings

lll. Signature, ID number of the physician

mmm. Name and address of the patient

5. Information, Instructions, Warnings for the Patient

a. Effect of the Drug (what, when, how long)

.....
.....
.....

b. Side Effects (what, when, how long, what to do)

.....
.....
.....

c. Instructions (administration/use, dosage, intervals, how long, important points)

.....
.....
.....

d. Warnings (maximum dosage, possible interactions, adverse reactions, (not) terminating therapy)

.....
.....
.....

e. Appointment (following appointment, when to come earlier)

.....
.....
.....

GAZI UNIVERSITY

TRAINING AND RESEARCH HOSPITALS

Patient Name :.....
Ankara :..... / / 2021
Diagnosis :.....

R/

Physician's Name :
Diploma No :
Department :
Signature :