



Al-Nasser University
Faculty of medical sciences
Department of Pharmacy

الجمهورية العربية السورية
وزارة التعليم العالي والبحث العلمي
جامعة الناصر



LOG-BOOK of pharmacy practice
for
PHARMACY BACHELOR STUDENTS
(Part 2)

Name of Trainee

Academic year

Supervisor Name/ Sig.



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PREFACE

Filed training, together with theoretical and practical parts, are both essential in bachelor program adopted by the pharmacy department –faculty of medical sciences, Al-Nasser university.

The filed-training log-Book is prepared with the intention to provide orientation to trainees and supervisors about various tasks to be performed and/or observed in different disciplines during the training period. The main goal of the training is to acquire the knowledge/ skills different necessary to practice pharmacy at professional fields.

Dean of faculty

Associate Professor /

Head of Pharmacy department

Assistant professor /



Field-training Specifications

Pharmacy practice

Introduction

The pharmacy practice is considered an essential part in modern pharmacy academic educational programs. This part together with the theoretical and practical parts are indispensable in pharmacy programs. It is designed to provide the student with an opportunity to integrate and apply previously acquired knowledge and technical skills in actual pharmacy field settings. With collaboration of experienced pharmacy Professionals and under supervision of the pharmacy department, the student can learn more about various tasks related to pharmacist carriers.

Learning Outcomes:

1. To describe the critical elements that are required in the production of a pharmaceutical product.
2. To explain the principles of Good Manufacturing Practice and quality assurance.
3. To emphasize the methods of counselling and interactions between patients and pharmacists as well as communication skills of a community pharmacist and to experience the roles of a community pharmacist.
4. To understand patient's medical case notes: To discuss symptoms, pathophysiology, laboratory test results, physical examinations, diagnosis, and appreciate the prognosis of acute and chronic illnesses, pharmacotherapeutic management plan.
5. To provide the basic principles and philosophy of pharmaceutical care in providing clinical pharmacy services for patients both in institutional and community settings. The main purpose is to build knowledge and skills to identify and solve drug-related and drug-use problems in patients.
6. To adopt the basic knowledge to perform clinical pharmacy practice in health institutions and community pharmacy.
- 7.



I- Trainee' responsibilities

During training period, every trainee has to demonstrate following responsibilities:

1. Demonstrate good behavior during and after practicing the training.
2. Complete all tasks of training.
3. Commit to instructions of the training supervisor.
4. Never commit cheating or lying by utilizing his/her colleague works
5. Adhere to the times of training.
6. Keep the integrity and calmness of the training field
7. Obey the directions of the field principle
8. Respect rules and policies of the field
9. Establish good working relationships with his/her colleagues and other personnel in the field.

Any trainee who fails to demonstrate any of those responsibilities as judged by the supervisor shall be considered failed in the training.



Field-training in “Hospital pharmacy”

NOTES:

- The supervisor shall categorize students into teams (each consist of 2 students)
- Each team shall bring different data for each task
- The trainee should not copy or photo-copy any document in the hospital. This is total forbidden.



I. DATA OF THE FIELD OF TRAINING

Details of the Hospital pharmacy where the training has been accomplished.

Name of the hospital :

Types of hospital : (Public - Private)

Address of the hospital : City.....

The Pharmacy Principle.....; Mobile



Task1: Identify the hospital pharmacy(Put✓ in the appropriate square)

(i) Is there a (bulk store = Medical supply store) in the hospital ?

Yes No

(ii) Number of pharmacies in the hospital

One Two More than two

(iii) Location of the hospital. pharmacy

At the center of hospital Near to the exit gate other location
(where ?)

(iv) Number of hospital pharmacists

One Two More than two

(v) Shifts of hospital pharmacists

Every 8 hours Every 12 hours Every 24 hours

(vi) Interior design of the pharmacy

- Administrative office is present Yes No
- There is a bulk store in the pharmacy Yes No
- There is a refrigerator Yes No
- Is there a locked cupboard for controlled drugs ? Yes No

(vii) Name 5 medications you find in the refrigerator? (If there is a refrigerator)

	Generic name	Trade name	Strength/ dosage form	Comp. manufacturer	Use of medication
1
2
3
4
5



Task2: Identify the management of medications in the hospital

Put √ inside the appropriate square

(i) **How do medications flow in the hospital ?**

- From supplier to bulk store to hospital pharmacy
- From supplier directly to the hospital pharmacy

(ii) **Which department does supply emergency rooms and operation rooms ?**

- The In-patient pharmacy
- The Bulk store

(iii) **How are medications requested from the supplier ?**

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(iv) **How are the medications received in the hospital pharmacy ?**

- **What should the pharmacist check in the medications upon receiving them ?**

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- **How are the IV fluids checked when received ?**

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(v) **How are medications ordered (arranged) in the pharmacy ?**

- Based on therapeutic categories (e.g. analgesics, antibiotics, etc.)
- Based on the supplier (Natco, Al-jabal, etc.)
- Based on dosage forms (capsules, vials, ampoules , etc.)



(vi) Are there medications stored outside the hospital pharmacy e.g. in emergency room, operative rooms, nurse stations ?

Yes
 No

If Yes;

a. Which department does supply medications to those sites ?

The In-patient pharmacy
 The Bulk store

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(vii) How are pharmaceutical wastes e.g. used syringes, vials and drips disposed ?

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Task3: Regulations of Dispensing and Distribution of medications in the hospital (Put√ in the appropriate square)

(i) How are Controlled drugs dispensed ?

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(ii) Give 5 examples of controlled drugs

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(iii) How are medications distributed to in-patients ?

From the pharmacy to nurses to in-patients



From pharmacy to patient attendant to nurse

(iv) Are the medications prescribed checked for drug interaction or doses?

Yes
 No

If No, what are the reasons ?

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(v) I.V. compatibility Checking

• Are the incompatibility of IV admixtures checked ?

Yes
 No

If No, what are the reasons ؟ إذا لا ما هي الاسباب لعدم القيام بذلك ؟

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• Study of IV compatibility (in prescriptions containing IV drips + drugs)

(Use a reliable reference e.g

- 1- BNF
- 2- Injectable drug guide , Alistair Gray et al., , Pharmaceutical press, UK;
(You can download PDF from the web (www.pdfdrive.com))



Study of IV compatibility (in prescriptions containing IV drips + drugs)
Prescription (1)

Prescribed Medications (The IV drip + drugs)

generic	strength	dose	Category (e.g. antiemetic; analgesic; etc.)

Possible incompatibilities

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Task4: Documentations in hospital pharmacy

Describe the contents in the following documents (if any)

1. Hospital formulary (record of all medications in the hospital)

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2. Stock record (record of in-out flow of medications in the bulk store)

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3. Medications- Receiving documents

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4. Medications issuing-documents

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5. Medications- Requesting documents

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6. Medications-administration record (In-patientst)

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Task5: Complete the following table regarding specific medications in the hospitals
 (Mention each generic name once only; Don't repeat generic names)

(i) Emergency medications (Don't mention NSAIDs)					
Generic name	Trade name, Manuf. Company, country		Strength & dosage form	Adult dose e.g. (1x3)	Contraindications
	original	Other			
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(ii) Pre-anesthetic medications (Don't mention the antibiotics)					
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(iii) IV infusions 1- I.V. fluids					
Normal saline 0.9%)	N.S ;,		500 ml
Dextrose = glucose (5%)	D.W; G.W ;,		500 ml
Normal saline dextrose 5% + N.S. 0.9%	G.N.S ;DNS;,		500 ml
Ringer lactate	R.L ;,		500 ML
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I.V. infusions (others)

Ciprofloxacin
metronidazole
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(iv) Operative medications (anesthetics and others)

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(v) Medical appliances (Medical Cotton ; gauzes; etc.)					
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Field-training

“Clinical pharmacy”

NOTES:

- The supervisor shall categorize students into teams (each consist of 2-3 students)
- If more than one team practiced at the same hospital, the supervisor should direct each team toward different departments in the hospital, so as to each team report different cases.
- Cases required to be studies should be at least 3 different cases from different departments



I. DATA OF THE FIELD OF TRAINING

Details of the Hospital where the training has been accomplished.

Name of the hospital:

Types of hospital: (Public - Private)

Departments where the training was practiced

	Name of department	Head of department	Nurse
1	Dr. ....	.....
2	Dr. ....	.....
3	Dr. ....	.....



Task 1: Case 1: In-patient at (..... department)

Attach a photo of the file title of the patients

Date when you begin to study the case

1- Patient`s data	
Sex	.....
Age	.....
Bed /Room No.	-----
Date of admission	.....

2- Case story ; What happened ? (The reasons that caused admission of the patient to the hospital)

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3- **Patient`s Medical history** (Chronic current diseases the patient suffered from before Admission to the hospital and the medications the patient used and still use for those diseases)

Diseases

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Medications

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4- **Clinical features** (symptoms and signs e.g. BP, HR, Respiratory rate)

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5- Laboratory investigation (Record only important results)	
Blood
Biochemistry (Hormones, enzymes, biochemical)
Urine	.............................................
Stool	.........................
Others	...............

For the investigation that was not conducted, just Write (NIL)



6- Instrumental investigation (Record only important results)	
X-ray	.........................
US (Ultrasound)	..... ..... .....
CT-scan	...................................
MRI	.........................
Others	...............

For the investigation that was not conducted, just Write (NIL)



7- Diagnosis by the physician

Diagnosis

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Your comments on the Physician`s diagnosis

The reasons for the diagnosis (Why did the physician diagnose the disease as such ?

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Do you agree with the physician`s diagnosis ? Give reasons

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8- Medications prescribed by the physician

Medication Name , strength dosage form	Category	Dose	Why medications was prescribed ?	Do you approve to use that medication ? If not , give reasons.
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- Category e.g. antibiotic, analgesic, antiemetic
- Why medication was used ? E.g. BP 160 ; Fever 38 ; Bleeding
- Do you approve that medication ? E.g. Yes , it is the best. No, there is contraindication , drug interaction or error in the dose or No, the drug is ineffective , etc.



9- Drug therapy monitoring (Follow up the patient case after days of treatment)

(1st Follow up); Date

Name of drug prescribed	Symptom or sign for which the medication prescribed by the physician	Check drug administration From (the medication administration record)	Therapy outcome Either (√) or (X)	If therapy outcome was (X) , give reasons why ?
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Check drug administration from (the medication administration record): Write yes if the medication was administered to the patient at given times or No if not; ; Therapeutic outcome (write (√) : if symptom relieved) or (X): if symptom was unrelieved.



9- Drug therapy monitoring (Follow up the patient case after days of treatment)

(2nd Follow up); Date

Name of drug prescribed	Symptom or sign for which the medication prescribed by the physician	Check drug administration From (the medication administration record)	Therapy outcome Either (√) or (X)	If therapy outcome was (X) , give reasons why ?
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Check drug administration from (the medication administration record): Write yes if the medication was administered to the patient at given times or No if not; ; Therapeutic outcome (write (√) : if symptom relieved) or (X): if symptom was unrelieved.



9- Drug therapy monitoring (Follow up the patient case after days of treatment)

(3rd Follow up); Date

Name of drug prescribed	Symptom or sign for which the medication prescribed by the physician	Check drug administration From (the medication administration record)	Therapy outcome Either (√) or (X)	If therapy outcome was (X) , give reasons why ?
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Check drug administration from (the medication administration record): Write yes if the medication was administered to the patient at given times or No if not; ; Therapeutic outcome (write (√) : if symptom relieved) or (X): if symptom was unrelieved.



10- Medications You may recommend to add to the therapy			
Name , strength dosage form	Category	Dose	Why would the medication be recommended ?
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11- What Non-pharmacotherapy you might recommend to the patient ? Why ?

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Note :Non-pharmacotherapy such as life style changes, cease smoking, sport, diet control etc.



Task 2: Case 2: In-patient at (..... department)

Attach a photo of the file title of the patients

Date when you begin to study the case

1- Patient`s data	
Sex	.....
Age	.....
Bed /Room No.	-----
Date of admission	.....

2- Case story ; What happened ? (The reasons that caused admission of the patient to the hospital)

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3- **Patient`s Medical history** (Chronic current diseases the patient suffered from before Admission to the hospital and the medications the patient used and still use for those diseases)

Diseases

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Medications

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4- **Clinical features** (symptoms and signs e.g. BP, HR, Respiratory rate)

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For the investigation that was not conducted, just Write (NIL)



5- Laboratory investigation (Record only important results)	
Blood	...................................
Biochemistry (Hormones, enzymes, biochemical )	..... ..... ..... ..... .....
Urine	.............................................
Stool
Others

6- Instrumental investigation (Record only important results)
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X-ray
US (Ultrasound)
CT-scan
MRI
Others

For the investigation that was not conducted, just Write (NIL)

7- Diagnosis by the physician
Diagnosis



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Your comments on the Physician`s diagnosis

The reasons for the diagnosis (Why did the physician diagnose the disease as such ?

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Do you agree with the physician`s diagnosis ? Give reasons

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8- Medications prescribed by the physician



Name , strength dosage form	Category	Dose	Why medications was prescribed ?	Do you approve to use that medication ? If not , give reasons.
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- Category e.g. antibiotic, analgesic, antiemetic
- Why medication was used ? E.g. BP 160 ; Fever 38 ; Bleeding
- Do you approve that medication ? E.g. Yes , it is the best. No, there is contraindication , drug interaction or error in the dose or No, the drug is ineffective , etc.

9- Drug therapy monitoring (Follow up the patient case after days of treatment)



(1 st Follow up); Date				
Name of drug prescribed	Symptom or sign for which the medication prescribed by the physician	Check drug administration From (the medication administration record)	Therapy outcome Either (√) or (X)	If therapy outcome was (X) , give reasons why ?
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Check drug administration from (the medication administration record): Write yes if the medication was administered to the patient at given times or No if not; ; Therapeutic outcome (write (√) : if symptom relieved) or (X): if symptom was unrelieved.

9- Drug therapy monitoring (Follow up the patient case after days of treatment)



(2 nd Follow up); Date				
Name of drug prescribed	Symptom or sign for which the medication prescribed by the physician	Check drug administration From (the medication administration record)	Therapy outcome Either (√) or (X)	If therapy outcome was (X) , give reasons why ?
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Check drug administration from (the medication administration record): Write yes if the medication was administered to the patient at given times or No if not; ; Therapeutic outcome (write (√) : if symptom relieved) or (X): if symptom was unrelieved.

9- Drug therapy monitoring (Follow up the patient case after days of treatment)



(3 rd Follow up); Date				
Name of drug prescribed	Symptom or sign for which the medication prescribed by the physician	Check drug administration From (the medication administration record)	Therapy outcome Either (√) or (X)	If therapy outcome was (X) , give reasons why ?
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Check drug administration from (the medication administration record): Write yes if the medication was administered to the patient at given times or No if not; ; Therapeutic outcome (write (√) : if symptom relieved) or (X): if symptom was unrelieved.

10- Medications You may recommend to add to the therapy



Name , strength dosage form	Category	Dose	Why would the medication be recommended ?
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11- What Non-pharmacotherapy you might recommend to the patient ? Why ?

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Note :Non-pharmacotherapy such as life style changes, cease smoking, sport, diet control etc.

Task 3: Case 3: In-patient at (..... department)



Attach a photo of the file title of the patients

Date when you begin to study the case

1- Patient`s data	
Sex	.....
Age	.....
Bed /Room No.	-----
Date of admission	.....

<p>2- Case story; What happened ? (The reasons that caused admission of the patient to the hospital)</p>
<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>



3- **Patient`s Medical history** (Chronic current diseases the patient suffered from before Admission to the hospital and the medications the patient used and still use for those diseases)

Diseases

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Medications

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4- **Clinical features** (symptoms and signs e.g. BP, HR, Respiratory rate)

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5- Laboratory investigation (Record only important results)	
Blood
Biochemistry (Hormones, enzymes, biochemical)
Urine	..... ..... ..... ..... ..... ..... ..... .....
Stool	..... ..... ..... .....
Others	..... ..... .....



For the investigation that was not conducted, just Write (NIL)

6- Instrumental investigation (Record only important results)	
X-ray	.........................
US (Ultrasound)	..... ..... .....
CT-scan	...................................
MRI	.........................
Others	...............

For the investigation that was not conducted, just Write (NIL)



7- Diagnosis by the physician

Diagnosis

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Your comments on the Physician`s diagnosis

The reasons for the diagnosis (Why did the physician diagnose the disease as such ?

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Do you agree with the physician`s diagnosis ? Give reasons

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8- Medications prescribed by the physician

Name , strength dosage form	Category	Dose	Why medications was prescribed ?	Do you approve to use that medication ? If not , give reasons.
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- Category e.g. antibiotic, analgesic, antiemetic
- Why medication was used ? E.g. BP 160 ; Fever 38 ; Bleeding
- Do you approve that medication ? E.g. Yes , it is the best. No, there is contraindication , drug interaction or error in the dose or No, the drug is ineffective , etc.

9- Drug therapy monitoring (Follow up the patient case after days of treatment)
 (1st Follow up); Date

Name of drug prescribed	Symptom or sign for which the medication prescribed by the physician	Check drug administration From (the medication administration record)	Therapy outcome Either (√) or (X)	If therapy outcome was (X) , give reasons why ?
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Check drug administration from (the medication administration record): Write yes if the medication was administered to the patient at given times or No if not; ; Therapeutic outcome (write (√) : if symptom relieved) or (X): if symptom was unrelieved.



9- Drug therapy monitoring (Follow up the patient case after days of treatment)

(2nd Follow up); Date

Name of drug prescribed	Symptom or sign for which the medication prescribed by the physician	Check drug administration From (the medication administration record)	Therapy outcome Either (√) or (X)	If therapy outcome was (X) , give reasons why ?
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Check drug administration from (the medication administration record): Write yes if the medication was administered to the patient at given times or No if not; ; Therapeutic outcome (write (√) : if symptom relieved) or (X): if symptom was unrelieved.



9- Drug therapy monitoring (Follow up the patient case after days of treatment)

(3rd Follow up); Date

Name of drug prescribed	Symptom or sign for which the medication prescribed by the physician	Check drug administration From (the medication administration record)	Therapy outcome Either (√) or (X)	If therapy outcome was (X) , give reasons why ?
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Check drug administration from (the medication administration record): Write yes if the medication was administered to the patient at given times or No if not; ; Therapeutic outcome (write (√) : if symptom relieved) or (X): if symptom was unrelieved.



10- Medications You may recommend to add to the therapy			
Name , strength dosage form	Category	Dose	Why would the medication be recommended ?
.....
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11- What Non-pharmacotherapy you might recommend to the patient ? Why ?

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Note :Non-pharmacotherapy such as life style changes, cease smoking, sport, diet control etc.

