

The Netherlands



Pharmaceutical Assistant's and Technician's **Work Placements**

Kellebeek College



Education and Culture DG

Lifelong Learning Programme

This handbook for students has been produced within Leonardo da Vinci programme as a transfer of innovation project "Learning Materials for Pharmaceutical Assistant's and Technician's Foreign Work Placements", acronym PHARLEMA (2011-1-F11-LEO05-06161) during 01.10.2011–30.09.2013. The publication has been co-funded by the European Commission. The Commission accepts no responsibility for the contents of the publication.

Pharmaceutical Assistant's and Technician's Work Placements in the Netherlands

Content

1. Introduction

2

2. Educational System

2.1. Dutch Education System

2.2. Pharmaceutical Education

2.3. Pharmaceutical Assistant Qualification

5

3. Structure of Pharmaceutical Sector in the Netherlands

3.1. Health Care in the Netherlands

9

4. Definition of Professions

4.1. Public Pharmacy

4.2. The Pharmacy as Business

4.3. Hospital Pharmacy

11

5. Legislation

23

6. References

25

7. Glossary

26

Appendix:

Training and courses for pharmacy assistants in the Netherlands

27

1. Introduction

Dear Student

◆ *This information package is designed to give you an overall view of vocational education and work in the pharmaceutical sector in the Netherlands, together with some useful background information related to legislation on and dispensing of pharmaceuticals. We hope that the package will help you in preparing for your period of practical training in our country. On reading this material package you may find both differences and similarities in pharmaceutical work in comparison to your country. However, due to your position as a foreign student at your placement address your duties may be limited to those you would be allowed to carry out in your own country.*

From a learning viewpoint it might be beneficial for you to go through both your own country's material package and that of your destination country and to compare the two.

Chapter 3 gives an overview of the structure of the pharmaceutical sector and how it is organised.

Chapter 4 defines how pharmaceutical professions are defined and their core expectations. This chapter focuses on the services that are available for foreign

students as placement opportunities in our country. The sub-chapters also include descriptions of daily work which are intended to assist you in defining the work you will encounter during your practical training period. These “snap shot” descriptions have been written by students during their practical training periods.

Chapter 5 describes the most relevant legislation governing the pharmaceutical sector in the Netherlands.

Chapter 6 has some links to help you with search for more detailed information.

Chapter 7 describes some specific terms and acronyms.

We hope you will find this information package useful and we wish you every success with your practical training period in our country!

A very warm welcome to the Netherlands!

◆ We are delighted you have chosen to come here for your practical training. We sincerely hope you will have a worthwhile and interesting time.

Using this handbook will help you prepare for your international practical training. It will provide useful background information on pharmacies in the Netherlands. Every effort has been made to provide you with up-to-date information. Nevertheless, it is possible you could be made aware of and introduced to new legislation, policies and practices during your practical training, which may have been implemented after the publication of this handbook. If you are unsure about certain aspects regarding your job or job description, the staff at your hosting institute will be happy to support you and help you find relevant information.

In this handbook, you will find a lot of information that will be useful in order to prepare yourself for your stay here. We also hope it will be a useful manual during your practical training. We wish you a pleasant stay in the Netherlands and hope you will have a successful practical training.

The Netherlands

The Netherlands is a country that's part of the Kingdom of the Netherlands. The

capital of the Netherlands is Amsterdam; it's seat of government is The Hague. The Caribbean islands of Bonaire, Sint Eustatius and Saba are special municipalities within the kingdom.

The Netherlands has a population of 16.730.632 which, in combination with its surface area of 41.526 km², results in a very high population density. Over 18% of the surface area is water and a large part of the country lies beneath sea level. The country is protected from the water by a system of dikes and waterworks. On an administrative level the country consists of twelve provinces.

Nowadays, the Netherlands is one of the most developed countries in the world and it's ranked as the seventh economy in the world. The Dutch economy flourishes mainly by the highly developed agricultural and horticultural sectors, service industry and international trade and the transit of goods to Germany in particular.

The Netherlands has been a parliamentary democracy, a form of government in which the monarch, ministers and parliament share the power, since 1848. The Netherlands was co-founder of the European Union, NATO and World Trade

Organization. The country forms the Benelux with Belgium and Luxembourg. The Netherlands has a moderate climate of mild winters and cool summers. This is due to its geographic position near the North Sea, which causes temperatures to be moderate throughout the year, with slightly higher fluctuations on daily and yearly temperatures in the eastern part of the country.

Education is compulsory from the first day of the month after a child has turned five years old, until the end of the school year in which a child turns sixteen. However, most children start school from the age of four. When a child turns seventeen, there's still partial compulsory education and the child needs to attend school for at least two days a week. When a school has made educational agreements with certain companies, the child can work there four days a week and attend classes on the fifth.

On average around 10 to 11 million tourists visit the Netherlands on a yearly basis. Among the main attractions are historic cities like Amsterdam, the "Deltawerken" and the polder-like landscape.

The Dutch cities are the main tourist destinations. The capital, Amsterdam, is particularly popular among foreign tourists. The canals with their historic buildings and the big museums are the most important attractions. By welcoming 4,9 million tourists a year, Amsterdam is the fifth most visited tourist destination in Europe and the seventh largest conference city in the world.

The other three large cities have their own specific trademarks. Rotterdam has its impressive skyline and harbor, The Hague has the "Ridderzaal", "Madurodam" and Scheveningen beach and Utrecht is known for its Dom Tower. Besides these cities there are many more sights worth seeing. Historic cities like Gouda, Delft, Alkmaar, Middelburg, Veere and Maastricht and folkloric towns like Volendam, Marken and Zaanse Schans. Many larger and medium towns, like Eindhoven, Groningen, Breda, 's-Hertogenbosch, Leeuwarden, Leiden en Nijmegen, also each have their own characteristics.

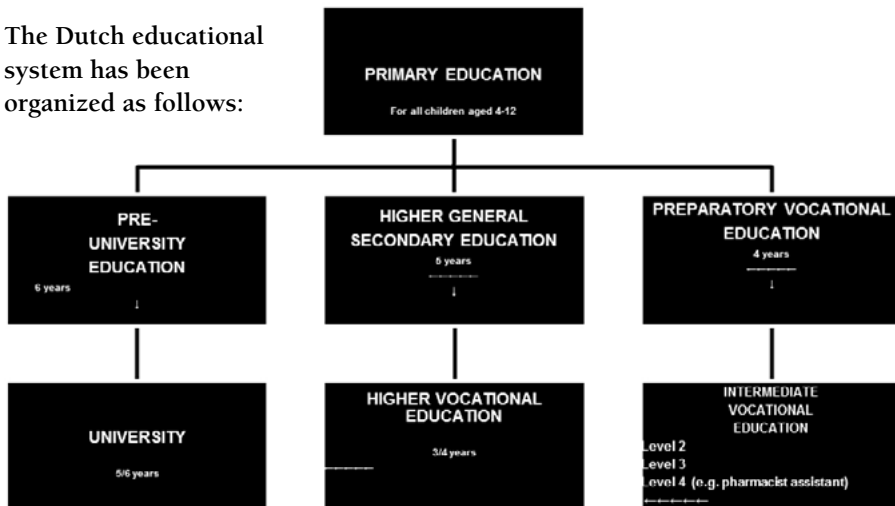
And then there are theme parks like Efteling, Duinrell, Walibi Holland and the miniature city of Madurodam and several zoos like Artis and Diergaarde Blijdorp.

2. Educational System

2.1. Dutch Education System

General education

The Dutch educational system has been organized as follows:



Education prepares you for participation in society, which is why schooling is compulsory for children from the age of 5. However, most children start attending school at an earlier age. Primary education prepares children for secondary education. After 8 years of primary school, pupils can choose between secondary general education, preparatory vocational education or pre-university education.

After having obtained a diploma in secondary education, young adults need to take the next step. What this step will be is determined by the subjects they graduated in and the level at which they've graduated.

At the age of 17 or 18, adolescents face making a decision on what direction they will take from there, which can be quite difficult. The possibilities are numerous, varying from many different forms of vocational education at intermediate or higher levels, to an ever increasing number of university courses.

Everyone aged 18 or over can also attend adult education. Schools are free to independently compile the content of their courses, under the supervision of the education inspectorate. The schools are to account for their policy by means of long-term plans.

2.2. Pharmaceutical Education

Training for pharmacy assistants

Training for pharmacy assistants comes in the form of a course at Intermediate Vocational Education, level 4. This means that it will be possible for students to move on to Higher Vocational Education after obtaining their diploma.

In the Netherlands, you can become a pharmacy assistant in 2 ways. First, through a 3-year theoretical course which includes internships at various pharmacies? These practical trainings make up for about 30% of the course.

Second, there's the so called apprenticeship. Students aged 18 or over will work in a pharmacy for at least 24 hours a week. They will also attend school 2 evenings a week, in order to become a professional pharmacy assistant.



In brief, these students earn their diploma by combining practical and theoretical education.

2.3. Pharmaceutical Assistant Qualification

Core tasks

On an educational level we can distinguish 3 professional core tasks for pharmacy assistants. These tasks consist of signature activities and frequent duties.

Core task 1:

Offer pharmaceutical patient care

Involves:

– *listening to the needs of the patients*

Competences:

- Giving attention and showing understanding
- Acting in an ethical way and showing integrity
- Being able to handle pressure and deal with setbacks

– *monitoring medication*

Competences:

- Working in a team and consulting colleagues

- b) Applying expertise
- **preparing medication**

Competences:

- a) Applying expertise
- b) Delivering quality products
- c) Following instructions and procedures

- **meeting the needs of patients**

Competences:

- a) Acting in an ethical way and showing integrity
- b) Applying expertise
- c) Analysing
- d) Aiming at the needs and expectations of clients

- **giving advice and information**

Competences:

- a) Working in a team and consulting colleagues
- b) Presenting information
- c) Using materials and means
- d) Aiming at the needs and expectations of clients

Core task 2: Compounding ingredients for medication

Involves:

- **compounding medication from raw materials**

Competences:

- a) Applying expertise
- b) Using materials and means
- c) Planning and organizing
- d) Delivering quality products
- e) Following instructions and procedures

- **customizing main medication**

Competences:

- a) Working in a team and consulting colleagues

- b) Using materials and means
- c) Delivering quality products
- d) Following instructions and procedures

Core task 3: Carrying out organizational and professional tasks

Involves:

- **improving your skills and maintaining professionalism**

Competence:

- a) Applying expertise

- **improving and monitoring the quality of care**

Competence:

- a) Following instructions and procedures

- **carrying out stock control**

Competences:

- a) Working in a team and consulting colleagues
- b) Building a network
- c) Using materials and means
- d) Acting in a professional manner

- **carrying out administrative duties**

Competences:

- a) Formulating and reporting
- b) Following instructions and procedures

The core tasks are integrated in work and training. A pharmacy assistant has to take on many different roles and responsibilities that will be further explained in the next chapter.

Pharmacy assistant training
Full-time training to become a pharmacy assistant requires a 3 year course of 4800 study hours.



Layout of practical placement

Year 1: In the third period of the first year, the student will begin with 2 weeks of full-time practical training. After that, there will be 6 weeks with 2 days of practical training each and another full-time week at the end of the school year, all of which will take place at the same pharmacy.

Year 2: After the summer holidays, the students will kick off by doing 2 weeks of full-time practical training, followed by another 12 weeks with 2 days of practical training each. After that, students move on to a different location

for another 10 weeks of practical training (3 days a week) of which the first and last week will be full-time.

Year 3: After the summer holidays students start by doing 2 weeks of full-time practical training, followed by 12 weeks in which they will be at the same pharmacy 2 days a week. The next period of practical training takes 10 weeks. The first and last 2 weeks of which are full-time, the other 6 weeks there will be 2 days of practical training.

The total number hours for practical training in this course is 1393 hours.

3. Structure of Pharmaceutical Sector in the Netherlands

◆ Few people can afford all the medical care they need. Therefore, health care used to be a privilege of the rich. After World War II, the Netherlands became a welfare state. With solidarity at its basis, a system was developed that made it possible for everyone to claim care from the cradle to the grave. And medical care played an important role in this.

For years, the funding of this care was based on a distinction between private insurances and insurances provided by the Dutch National Health Service. This distinction was based on the height of income. People with higher salary, paid more money for care. So they contribute, in caring for people with lower income.

The Netherlands have a new health care system since 2006. Within this new system, every Dutch citizen is required to have a basic health insurance. There's no longer a distinction between private insurances and insurances provided by the Dutch National Health Service. The basic health insurance covers many basic things like GPs and hospital care. A lot of medication is also covered by the basic health insurance. However, the Dutch insurance does have an own risk policy of 350 Euros a year. This means that every insured person has to pay any costs up to 350 Euros himself, on top of the premium. Pharmaceutical

care is also included in a patient's own risk. The average basic health insurance costs about 1100 Euros a year. If a person wants extra insurance for dental care, certain medication or physiotherapy for example, he can opt for an additional insurance.

The demand for health care will rise significantly in the next few years because of the aging Dutch society. It's expected that the costs for health care will rise significantly as well. This means that the government will start economizing. As a result, certain medication will no longer be (partially) compensated.

Pharmacy in the Netherlands can be divided in 3 (large) categories:

- public pharmacy
- hospital pharmacy
- pharmaceutical industry

The two first categories are the most important for a pharmacy assistant. Therefore, these 2 categories will be explained in more detail.

3.1. Health Care in the Netherlands

Primary and secondary health care

Patients who need care can visit primary health care: health care close to their homes. This is the field in which general professionals work: general practitioners, dentists, pharmacists and their assistants, midwives, physiotherapists and social workers. Patients can contact general practitioners, physiotherapists, dentists, midwives and social workers without a referral letter being needed. A patient will only be referred to secondary health care when he's in need of specialist care.

Cure and care

In healthcare a distinction is made between cure and care. Health professionals and organizations that deal with recovery and cure are part of the cure sector. Long-term health care and support to improve the quality of life are part of the care sector. Nursing homes, institutions for mentally deficient people and certain elements of homecare are part of the care sector.

4. Definition of Professions

4.1. Public Pharmacy

◆ Public pharmacies are open to anyone who needs medication that is prescribed by a GP or doctor or for self-medication for which no prescription is required.

There are about 1980 public pharmacies in the Netherlands of which about two-thirds are owned by independent pharmacists. The rest is part of a national chain of pharmacies.

The compound of medication used to be an important part of the work done in a public pharmacy. Today, this craft is in decline because more and more products can be bought ready-made and the preparation is done more centralized in specialized pharmacies.

In most pharmacies we can distinguish the following jobs:

Pharmacist

A pharmacist is the person supervising the pharmacy and the person who has the final responsibility for all tasks executed in a pharmacy. The main tasks of a pharmacist are checking the incoming prescriptions, supervising the preparation of medication, checking the monitoring signals, executing the financial administration, administering stocks and contacting prescribers and health care insurers. The pharmacist will also help carrying

out daily tasks like assisting at the counter.

Pharmacy assistant

A pharmacy assistant is responsible for most of the daily tasks at a pharmacy.

The main tasks of an assistant are:

– *processing prescriptions*

When a doctor prescribes certain medication this prescription will be sent to a pharmacy. The assistant makes sure this prescription is processed in the right way. It will be entered in the database of the pharmacy information system with the data of the corresponding patient. It's important that the assistant chooses the right patient, the right medication and the right dosage. Any interactions with other medications should be checked. Processing the prescription ends by printing the labels.

– *preparing medication for a patient*

When the prescriptions are processed the medication needs to be prepared. The prescription needs to be matched with the right medication. It's important to take in account the dosage prescribed by the doctor so that the right number of packages are given to a patient. The printed information, the medication leaflet, needs to be checked. The label that was printed after the processing needs to be applied to the package as



well as labels with extra information; for example 'not for internal use' or 'keep refrigerated'. It is also the moment to double check the previous step, the processing of the prescription: is this the right medication for the right patient in the right dosage?

– helping and informing patients at the counter

When a patient visits the pharmacy he might require a prescribed medicine or advice on self-medication.

In case he needs a prescribed medicine, the patient should be informed about the medication he's about to use. This includes information about the way the medication works and its side effects. Any changes in medication need to be explained to the patient. The dosage of

medication might be changed by the GP and this needs to be explained clearly to the patient by the pharmacy assistant.

When a patient enters the pharmacy with a question about a certain illness for which no prescription is needed, it's important that the assistant gives him the right advice. This is when the WHAM- questions are used:

1. **Who** needs the medication?
2. For **How** long has the patient had these complaints?
2. Has the patient tried **Anything** else?
4. Does the patient use other **Medication**?

By asking these questions, the assistant will be able to give the right advice to treat the illness without overlooking anything.

– *processing orders*

A pharmacy provides many drugs to many patients on a daily basis. To restock the pharmacy certain items need to be ordered. These orders are delivered to the pharmacy's wholesale retailer at night so they can be processed the next morning.

The pharmacy information system uses parameters for ordering medication. As soon as a certain type of medicine reaches a certain minimum in stock, it will be ordered automatically. When installing these parameters the costs and turnover of the medication are taken into account. When the medication is brought in, it needs to be checked for the best before date, appearance and whether it's the right amount. After all these aspects are checked, the medication is stored away at the right location.

– *compounding medication*

Some medication is compounded at the pharmacy, for example ointments, creams, potions, capsules and suppositories. When a prescription for a compound medicine comes in, the pharmacist will first put up a preparation protocol. This is a detailed description of the steps needed to prepare the product and of how this process can be monitored.

The preparation will be done by the assistant in a room designated for this purpose. After the preparation, the product will be checked by the

pharmacist before it's delivered to the patient.

Assistants often also have certain a specific specialization in certain diseases. For example: diabetes, asthma/COPD or diseases of the heart or vessels. Or they are specialized in monitoring best before dates, checking medication, supervising the quality management system or a specialization in drug legislation.

Pharmaceutical consultant

The pharmaceutical consultant is responsible for controlling and supervising certain projects in a pharmacy, for example: a project that informs pregnant women about the use of folic acid. Furthermore, a pharmacist can choose to delegate some of his tasks to a pharmaceutical consultant. Like making work schedules and administering holiday entitlements. Being a pharmaceutical consultant is a relatively new function and only a small number of pharmacies have one. In the Netherlands, one can be educated as a pharmaceutical consultant by higher vocational education. The pharmaceutical consultant is the pharmacist's right-hand assistant.

Deliverer

The task of a deliverer is delivering medication. All pharmacies deliver medication at home when patients are unable to come and pick it up themselves. Medication is also delivered to GP health centers. The

delivery is a free service offered by the pharmacy.

Safety of employees

Preparing medication in a pharmacy means dealing with (possibly) dangerous substances. The employee carrying out the preparations might be exposed to these substances and put his or her health at risk. A combination of these two factors (toxicity and exposure) determines the health risk.

Exposure to dangerous substances should be avoided as much as possible. In order to do so, the following measures can be taken:

- minimizing exposure through local ventilation (safe workbenches, adequate laboratory ventilation)
- respiratory protection, gloves and safety glasses
- replacing certain substances. Can the prescribed medication be replaced by a ready-made product?



4.2. The Pharmacy as Business

◆ A pharmacy has 2 sources of income: through the so-called prescription rule and the discount on medication.

The prescription rule is a financial contribution a pharmacy receives for

executing the proceedings of every prescription. However, this contribution has always been too low to cover the costs. In the 80's the State Secretary at that time decided that this financial gap should be filled by the pharmacies

themselves through a discount on medication.

These discounts have been under pressure since 2008 due to the so-called preference policy introduced by health care insurers to limit costs. In short it means that pharmacies can no longer independently decide on what medicine they buy, because of national contracts for different generic medicines. The drug that's lowest in price is preferred by the health care insurer which causes competition. As a result, the costs of many generic medicines have dropped vigorously (sometimes even by 80%). The downside of these contracts is that many pharmacies get into financial problems because the prescription rule can no longer be supplemented by the discount on medication.

4.3. Hospital pharmacy

◆ Every hospital has a pharmacy that provides patients admitted to the hospital with medication. Besides regular treatments a hospital pharmacy often also deals with more specialized medication.

The assistants working here need to prepare the medication for the patients in the hospital, process the prescriptions and compound medication.

This means that in the future, the focus of many pharmacies will move from business to care. Pharmacies will get paid for the health care they offer and no longer for trading in medication. In the next few years, pharmacies and insurers will make arrangements about this, with pharmacies having to meet certain goals.

Among other measures, pharmacies will be allowed to declare a certain amount of money when they give travel advice, review the medication of a chronic patient or give patients extra advice.

Most pharmacies are closed at the weekends, but patients can visit a so-called service pharmacy. This is the result of a, often regional, partnership between pharmacies that makes sure that patients can get their medication at the weekends without all pharmacies having to open their doors 7 days a week.

One of the main differences with a public pharmacy is that a pharmacy assistant working at a hospital has little contact with the patients, whereas assistants in public pharmacies deal with a lot of patients. In many hospitals this is changing though, so pharmacy assistants do have more contact with the patients.

This mainly happens when a patient is admitted to or discharged from

a hospital. The pharmacy lists any changes in medication and communicates this to the public pharmacy, so the staff there can check if no mistakes were made during the process of discharging the patient and whether the pharmacy has a full medical report on the patient.

Hospital pharmacies also deal with the compound of medication more often. Especially more specialized medication like antineoplastic drugs or gavage. In order to be able to properly compound these types of medication, pharmacy assistants are further educated within the hospital.

CODE OF CONDUCT

1. Principles of profession

- 1.1 As a pharmacy assistant I'm personally responsible for the way I work in the pharmacy and provide pharmaceutical care to patients.
- 1.2 As a pharmacy assistant I will make sure to maintain the knowledge and skills belonging to my profession.
- 1.3 As a pharmacy assistant I will only conduct practices that are within my professional competence.
- 1.4 As a pharmacy assistant I will contribute to safe pharmaceutical health care.
- 1.5 As a pharmacy assistant I will support and initiate activities that improve the quality of pharmaceutical care and stimulate the enhancement of my profession.
- 1.6 As a pharmacy assistant I will support interns and help them increase their knowledge and professionalism as pharmacy assistants.
- 1.7 As a pharmacy assistant I will adapt my clothing, jewellery and body art to the specific demands of my profession.
- 1.8 As a pharmacy assistant I will contribute to a responsible way of dealing with the available materials and means.

2. The pharmacy assistant and the consumer

- 2.1 As a pharmacy assistant my goal is to make sure that every consumer gets proper pharmaceutical care.
- 2.2 As a pharmacy assistant, my focus is on pharmaceutical care and the interests of the consumer.
- 2.3 As a pharmacy assistant I will provide pharmaceutical care while paying due respect to the needs, norms and values, cultural and philosophical beliefs of the consumer.
- 2.4 As a pharmacy assistant I will provide a trusting health care relation with the consumer (or his/her representative).

- 2.5 As a pharmacy assistant I will acknowledge and respect consumers as partners in health care.
- 2.6 As a pharmacy assistant I will provide the consumer with the required information.
- 2.7 As a pharmacy assistant I will deal with the consumer's data in the pharmacy information system in a responsible and confidential manner.
- 2.8 As a pharmacy assistant I'm aware of the consumer's rights regarding his data in the pharmacy information system and I will deal with them responsibly.
- 2.9 As a pharmacy assistant I will treat information about consumers confidentially.
- 2.10 As a pharmacy assistant I will respect and protect the consumer's privacy.
- 2.11 As a pharmacy assistant I will respect the professional boundaries between the consumer and myself.
- 2.12 As a pharmacy assistant I have the right to refuse certain pharmaceutical activities based on personal conscientious objections.

3. The pharmacy assistant and other care-givers

- 3.1 As a pharmacy assistant I will work with other care-givers in order to give the consumer the required pharmaceutical care.
- 3.2 As a pharmacy assistant I respect the expertise, experience and contributions of other care-givers.
- 3.3 As a pharmacy assistant I will supervise and guard the pharmaceutical care concerning the consumer.
- 3.4 As a pharmacy assistant I will supervise the quality of pharmaceutical care, even after delegating certain tasks to other care-givers.
- 3.5 As a pharmacy assistant I will respect the professional boundaries in my relation to other care-givers.
- 3.6 As a pharmacy assistant I will protect the consumer against unethical, incompetent, unsafe or otherwise inadequate pharmaceutical care by other care-givers.
- 3.7 As a pharmacy assistant I will support other care-givers who encounter problems when acting according to the code of conduct.
- 3.8 As a pharmacy assistant I contribute to the development, implementation and evaluation of the (quality) policy of the pharmacy or organization I work for.

The “BIG” law (B= Beroepen (professions) I= Individueel (individual) G=Gezondheidszorg (health): protection of health and care professions and titles

The protection of health care professions and titles means:

- That certain professions are regulated by the government
- The working field of these professions is regulated
- That the studies for these professions have to meet certain legal demands
- That diplomas obtained through these studies give the owner the right to use the title of that given profession if he or she registers to “BIG” after graduation.



The “BIG” law contains rules and regulations for executing hazardous procedures. As consumers, people have to be able to rely on the caregiver to execute these operations in a liable way and as required. This means that pharmacy assistants are not allowed to decide to execute certain regulated procedures. They always need permission from a doctor or a pharmacist first.

There's a disciplinary board to regulate high quality health care. An assistant can never be called to the disciplinary board after making a mistake, as it is the pharmacist who will be held responsible.

Student's description of the job
A day in the life of a pharmacy assistant

As a pharmacy assistant you can work in different working environments: in a public pharmacy, a hospital pharmacy or in pharmaceutical industry.

What does a pharmacy assistant do on a working day? That depends on the type of pharmacy you're working at. And a lot has changed in the pharmacies. The compound of medication is something that a lot of pharmacies don't do anymore. And many things have been automated, with the help of a robot or computer.

Below, you will find a report on an average working day. I work in a

pharmacy from 8.30 AM until 5.30 PM. The pharmacy is open from 8.00 AM to 6.00 PM.

During my practical training in the pharmacy, I experienced that everyone has a different task every day.

My day started by looking up what my task of that day would be. In some pharmacies it can be busier than in others. That's why the distribution of tasks can differ. In one pharmacy you will answer the phone while you're processing the prescriptions. But in another pharmacies the phone would ring constantly so they had an employee to answer phone calls only. Otherwise there would be no time to process the prescriptions.

8.30 AM

Today I start by checking and clearing away an order. I check whether everything we ordered has been brought in, if anything has been damaged and the best before dates on the items. Once all this has been checked, the items can be stored at the right place. We usually do this with a few assistants. Items we need for prescriptions are put with that particular prescription.

Today's order was complete and there was nothing wrong with it.

9.30 AM

Next I will help processing the prescriptions. This task involves administering the prescriptions that have been brought in in the morning or

put in the mailbox by patients. I check the prescriptions to see if the dosages are right and if certain medication can be combined with other medicines. To do so, I use the pharmacy information system. I search for a particular patient and administer his prescription. In case there's an interaction with other medication, I will deal with that as well and discuss it with the pharmacist if necessary.

As a pharmacy assistant you will be doing this most mornings and move on to another task in the afternoon.

10.00–10.15 AM

Break

10.15 AM–12.00 PM

After the break I take a shift at the counter. Most of the times, there will be 2 or more assistants helping patients at the counter. This depends on how busy the pharmacy is.

When working at the counter, you will help patients with their medication. You inform and advise them and explain how certain medication works. Working at the counter means you need to be friendly, careful and precise. But this goes for pretty much everything a pharmacy assistant does. It's also important you're good at co-operating and communicating to prevent misunderstandings.

A lot of patients stop by the pharmacy after a visit to the GP. In that case, you

have to administer the prescription first, before handing over the medication.

Today, a couple of patients complimented me on my service which was really nice of course. But I also had to deal with an angry patient, because his medication would not be financially compensated. I tried to explain the situation to him as well as I could but he still wasn't very happy about it. Eventually, he did pay for his medication.

12.00–13.00 PM

Lunch break.

13.00–15.00 PM

After lunch, I start preparing packages. I take medication from a drawer, count the right amount and label it. I check if everything is registered in the patient information system. I check the dosage on the prescription as well as on the label, and of course if it's for the right patient and from the right doctor.

15.00–15.15 PM

Break

15.15–17.30 PM

In this particular pharmacy, they also prepare and compound medication. This takes a lot more than just mixing some ingredients. There are certain rules and you need to follow a strict protocol to make sure your preparation will be approved. You need the authorization of the pharmacist before starting the compound. There are days

that there are none or not that many compound medicines needed. In that case, that particular assistant will help patients at the counter or help processing or preparing prescriptions.

Today, I had to make a few ointments which were all approved by the pharmacist.

17.30 PM

End of working day.

A day in the life of a pharmacy assistant

The pharmacy was easy to reach by bus. My working day would start at 8.45 AM and end at 17.15 PM.

8:45–10:30 AM

At 8.45 I started by clearing away the orders. I had to take the medicines out of trays. First I took out the medication for prescriptions that had been brought in earlier. I scanned them and checked the paperwork from the distributor, after which I brought the medication to the pharmacy. I matched the medicines with the right prescriptions. Another pharmacy assistant started making packages for the prescriptions.

I continued clearing away the orders. I used to scan the incontinence products first so I could clear away the big boxes. Then I continued with the regular products that needed to be put in drawers. Another pharmacy assistant and I checked the orders. Sometimes I encounter medication that wasn't

ordered and find something that was ordered missing. In that case, I used to contact the distributor and give them the code of the order and the name of our pharmacy. They would normally tell me the right medication would arrive the next day. After that, I could clear away the paperwork and start storing the products that were delivered.

While I was clearing away the orders, the first group of pharmacy assistants was allowed to take a break. If necessary, I would put what I was doing on hold to go and help patients at the counter.

10:30–10:45 AM
Break.

10:45–13:00
If I hadn't been able to clear the entire order away before my break I would finish that first. After that, I started packing the prescriptions. I scanned the medication that matched the prescriptions and put labels on the boxes. Before putting everything in packages, my work needs to be checked first. Once the prescriptions that were brought in earlier were ready, I started working on other prescriptions. I took medicines from the drawers and match them with the right prescription. I scanned them and labeled them. After a while, I was allowed to enter the prescriptions in Pharmacom, the pharmacy information system. The medication would be

added to the data of a particular patient and I would immediately check if it these medicines were right.

13:00–13:30 PM
Lunch break

13:30–15:30 PM
After the lunch break I was allowed to help patients at the counter. Some patients came to collect a prescription that was brought in earlier, while others had a prescription from the doctor with them. In that case, I needed to enter the data in Pharmacom and prepare the prescription. When a patient received medication he'd never used before I would explain the use of the product and its main properties. There were clients who wanted to buy products from the pharmacy's store. For example there was a lady who came in to buy nasal spray. I recommended Xylometazoline to her. I explained to this lady how to use the product and sold it to her.

15:30–15:45 PM
Break.

15:45–17:15 PM
After my coffee break I checked what necessary things there were left to do in the pharmacy. Meanwhile I checked the products in the drawers for their expiration date. After having done two rows I had to go and prepare prescriptions. I did this until 17.15 PM when my working day ended and I was allowed to go home.

A day at internship

09.00 AM

I start my working day by putting on pharmacist attire. The order has already been unpacked by an assistant and I put everything in the drawers.

09.45 AM

After the order has been cleared away, I start working on deliveries. I take the box that lies with the prescription or take medication from a drawer and scan it at the computer. When an opiate needs to be delivered, I include a letter that needs to be signed by the recipient. I check the name, address and date of birth and get a bag. I label the box and the bag. This will later be checked by an assistant. I start with these prescriptions as they need to be ready before noon so they can be delivered.

10.30 AM

Coffee break

10.45 AM

After the break I continue preparing the deliveries.

11.30 AM

After finishing the deliveries, I start with the prescriptions that have been ordered in advance. This is pretty much the same as working on deliveries except for the fact that they don't need address labels and opiate letters.

13.00 PM

Lunch break.

13.30 PM

After lunch, I continue preparing the ordered prescriptions. After that I start with the prescriptions that came in today. These prescriptions aren't put together yet and the medications are put in a tray. These medications haven't been put in boxes yet so I need to get the right boxes for the prescriptions from a drawer. The rest is the same as with the other prescriptions.

15.30 PM

Coffee break

15.45 PM

After the last break I'm allowed to work at the counter with a supervisor. When clients come in, I ask them how I can help them. Some clients have prescriptions with them; others come in for medication that doesn't require a prescription. Some come in to pick up the medication they ordered. When they only need a pre-ordered medication, I ask for the name and address of the patient and pick their prescription from a tray. This prescription comes in a bag with a location on it. This location tells me where I can find the medication. I check the name, date of birth and address. At the counter, I tell the patient which medication I'm giving him. If the patient has no further questions, he can take the medication home.

When a client comes in with a prescription, I will put that data into the computer system. The system

checks if he has used this medication before and if it can be combined with other medicines. When everything is checked, I can go on and prepare the prescription. Then I hand the medication to the patient at the counter. If the patient is using the medication for the first time, I will explain its use and properties first. If the patient has used it before, I will only inform him about which medication I'm giving him.

If a patient does not have a prescription, I look in the computer system to see if he's used this medication before. If

so, I check if the medication can be handed out again. If so, I will prepare the prescription. If not, the patient will have to go and get a prescription from the doctor.

All this time an assistant will be checking on me. I can always ask her if I am doing something wrong. In that case she will correct me.

17.00 PM

This is the end of my working day and I'm allowed to go home.

5. Legislation

Legislation affecting Pharmacy practice in the Netherlands

The Medical Treatment Contracts Act (Wet Geneeskundige Behandelingsovereenkomst - WGBO) was created to get more grip on medical treatments. According to this law, a patient needs to agree to a treatment first. Naturally, this also applies to treatments involving medication.

Treatment Contract

When a patient authorises a treatment this is considered as an agreement. In most cases this agreement stands for a longer period in time and a patient will not have to authorise every new prescription. Information about patients are filed in the patient's dossier. In a pharmacy, most treatment contracts are

closed by pharmacy assistants who act on behalf of the pharmacist.

There's a possibility that the treatment contract is registered. Patients that hand in prescriptions or ask for advice or medication at a pharmacy will automatically authorise an agreement.

Rights and obligations

Rights of the patient

1. Right to information
 - About possible side-effects
 - About possible alternatives
 - On when the medication will start working
2. Right to adequate treatment
 - The pharmacist does everything he can to choose the right medication for a patient

3. Right to privacy

4. Right to secrecy

- Information about a patient, obtained by the pharmacy assistant or a pharmacy, can not be shared. The patient's dossier is open to doctors and pharmacists only, if authorised by the patient.

5. Right to view own medical files

Obligations of the patient

The patient is obliged to inform the pharmacist about everything that could be beneficial to the treatment.

For example: – Allergies, use of other medication, etcetera

The patient is also obliged to pay for the treatment. Most expenses are covered by health insurance but in some cases the patient will have to pay for medication that is not paid for by the insurance company.

Obligations of the pharmacist

1. To provide information

- About possible alternatives
- About possible side-effects
- About how the medication works
- On when the effect of the medication can be noticed

2. To ask the patient to consent to the treatment, as noticed above

3. To maintain the patient's medical files (all files will be saved for 15 years)

4. To guard the privacy of the patient

Rights of the pharmacist

The pharmacist is allowed to break an agreement for compelling reasons. In

that case, the patient should be referred to an other pharmacy.

The BIG law and the pharmacist

A pharmacist is only allowed to carry this title after graduating as a pharmacist and being registered in the BIG register. The law on Professions in Individual Healthcare (Beroepen in de Individuele Gezondheidszorg - BIG) protects patients from improper and careless actions by people working in healthcare.

Inspection on Healthcare Services (Inspectie voor de GezondheidsZorg – IGZ)

The IGZ supervises the quality of medication and healthcare provided by pharmacies, GPs offering pharmacy services and hospital pharmacies. This supervision is aimed at maintaining legal provisions, promoting medication safety and at the quality of treatments for illnesses and diseases using medication.

OHS legislation (Occupational Health and Safety)

Employers are obliged to abide OHS legislation, so employees can work safely and in a healthy environment. Potential risks in a pharmacist's working culture are:

- Physical risks
- Fall hazards and bump hazards
- Psychological and social stress
- Preparing medication

Supervising the quality and hazards of medication (pharmacovigilance)

Sometimes medication can impose a health risk. It's the task of the Dutch ministry of Public Health, Welfare and Sports (VWS in Dutch) to guarantee the quality and safety of medication.

Before a manufacturer can bring a medicine on to the market, it will be tested on its effectiveness, quality and potential risks. The Medicines Evaluation Board (College ter Beoordeling van Geneesmiddelen - CBG) will monitor which medicines can be launched on to the market. Sometimes, medication doesn't show

its side-effects until it's actually in use. A national, as well as a European monitoring system registers and researches unknown and unsuspected interactions between medicines. In the Netherlands this is done by Lareb Pharmacovigilance Centre. Lareb informs CBG about side-effects. CBG will supervise any further research.

Dutch Medicines Act

The Dutch Medicines Act (2007) contains regulations to stimulate the safe use of medication. Doctors and pharmacists are obliged to report severe side-effects and there are rules for prescribing medication over the Internet.

6. References

www.arbo-apotheek.nl

www.rijksoverheid.nl

www.apotheek.nl

www.knmp.nl

www.igz.nl

www.optimafarma.nl

7. Glossary

Primary education (primary school): obligatory for all children from the age of 5-12. Most children start attending school at the age of 4

Secondary education (secondary school): Different levels of education for children (12 and up)

DNHS: Dutch National Health Service

WHAM questions:

Who needs the medication

For How long has the patient had these complaints

Has the patient tried Anything else

Does the patient use other Medication

COPD: Chronic Obstructive Pulmonary Disease

BIG (law): Beroepen (professions) Individueel (individual) Gezondheidszorg (health) = protection of health and care professionals and their titles

IGZ: Inspectie voor de Gezondheidszorg = health care inspectorate

VWS: Ministerie Volksgezondheid Welzijn en Sport = ministry of health care, social welfare and sport

CBG: College ter Beoordeling van Geneesmiddelen = evaluation of medicines

Lareb =The Netherlands Pharmacovigilance Centre Lareb collects and analyses reports of adverse reactions of medicines and vaccines

Appendix:

Training and courses for pharmacy assistants in the Netherlands

Kellebeek College	Etten-Leur
Arcus College	Heerlen
ROC Gilde Opleidingen	Venlo
ROC School voor de zorgsector	Eindhoven
Koning Willem 1 College's	Hertogenbosch
ROC Zeeland	Goes
Da Vinci College	Dordrecht
Albeda College	Rotterdam
ROC Zadkine	Rotterdam
ROC Mondriaan	Den-Haag
ID College	Leiden
ROC NOVA College	Haarlem
ROC van Amsterdam	Amsterdam
Regio College Zaanstreek	Zaandam
ROC Horizon College	Purmerend
Horizon College	Alkmaar
ROC Midden Nederland	Utrecht
ROC ASA	Amersfoort
ROC Nijmegen	Nijmegen
Rijn IJssel College	Arnhem
ROC Flevoland	Lelystad
ROC Aventus	Deventer
ROC van Twente	Hengelo
ROC van Twente	Almelo
Deltion College	Zwolle
Alfa College	Hoogeveen
ROC Friese Poort	Leeuwarden
Noordepoort College	Groning

Acknowledgements

This handbook has been produced by Mrs. Angela Deelen and Mrs. Gerda van der Meer, who offer grateful thanks to the following for their guidance, support, donation of appropriate materials and proof reading for accuracy of this package of information.

• Students of Kellebeek College

Mr. Samir Madjidzada, Ms. Fleur Toonders, Ms. Milou Melis, Ms. Indy Stornebrink, Ms. Özge Cekic, Ms. Macy Verhappen, Ms. Sharon Hazelhoff, Ms. Pebbles Geldtmeijer, Ms. Britte Rood, Ms. Jasmijn van Ginkel, Ms. Risha Adolph, Ms. Kristel Elst, Ms. Ghislan El Mokhtari, Ms. Anissa Peemen, Ms. Wies Kleemans, Ms. Eefje Huijtker and Ms. Marieke van Vugt

• ROC Aventus

Apeldoorn-Deventer-Zutphen

Mrs Erica van den Buijs
Mrs Anneke Bongers

• Da Vinci College Dordrecht

Mrs Arlette Barlochie
Mr Jeffrey Hogendorp

• Pharmacists

Mr Frank Jochems
Mr Klaas Bos

• Birmingham Metropolitan College

Mr Robert Biggs
Mrs Deborah Cooper
Mrs Karen Socci

• Helsinki Vocational College, Welfare Section

Mr Matti Remsu
Mrs Asta Lehtinen
Mrs Kirsi Rosenqvist
Students of HVC: Ms. Heidi Kontiainen and Suvi Lahtinen

• Srednja šola za farmacijo, kozmetiko in zdravstvo

Mrs. Ljubica Gabrovsek
Mrs. Katarina Vrhovnik
Students of SŠFKZ: Mr. Marko Koželj and Mr. Rok Žnidaršič
St. John's Central College
Mrs. Sarah Magner
Mrs Majella O'Driscoll
Students of SJCC: Ms. Julia Schade, Ms. Yvonne O'Brien and Ms. Crystal McCarthy

• Tallinn Tervishoiu Kõrgkool

Mrs. Merle Kiloman and Mr. Alar Sepp
Students of TTK: Ms. Kristi Lemmik, Ms. Liis Märss and Ms. Karolin Nömm

• Coordination of the project:

Mr. Matti Remsu, Helsinki Vocational College

• Editing and layout: Rhinoceros Ltd

All materials of the project are downloadable for free from partner colleges' websites:

- www.bmetc.ac.uk/home.aspx
- <http://hesotenet.edu.hel.fi/english/etm2/pharlema/index.htm>
- www.kellebeek.nl
- www.ssfkz.si
- <http://www2.stjohnscollege.ie/>
- www.ttk.ee

Copyright is the property of all partnership colleges represented by Kellebeek College, the Netherlands. Altering of the materials is prohibited without permission from the partnership group represented by Kellebeek College.