International APPE: Vienna, Austria

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Objectives

- Describe daily activities
- Elaborate on the role of an Austrian pharmacist
- Identify the quality for measures and control
- Illustrating the workflow of a Austrian pharmacy
- Evaluating the purity of substances

Day to Day

- Inventory is upheld with the robot in both pharmacies, the pharmacies get delivery of medications four times a day (at 8:00, 11:30, ~13:30, and 17:00)
- The bulk of the time is spent on filling the robot, putting away medications in the front end of the store and filling prescriptions that were in out of stock status

Compounding

- Eye drops
- Creams
- Ointments
- Gels
- Suppositories

Homeopathic

- Granulats
- Teas

Neriforte® Salbe
VINDOBONA APOTHEKE
THROMBO ASS 35MG KPS
DIGOXIN 0,06MG KPS
Lasix 3mg Kps
NL 300819

Kamillenblüten
Eibischtee
Inhalt: 100 Gramm

COLDAN
APOTHEKE

BD Rowa Count

- Works like a CPOE (computerized physician order entry)
- Customized to automate your specific stock intake, recording, storage and order picking

Workflow

- Prescriptions are either emailed or sent by mail from the doctor to the pharmacy
  - Paper prescriptions are the main form of prescriptions

- There is a barcode label on the prescription that the patient brings, allowing the pharmacist to type the prescriber's ID/DEA/NPI number to be put into the patient's profile

- For valid prescriptions to be reimbursed by insurance and for the pharmacy to be paid:
  - the patient's insurance, patient's name, patient's social security number, list of active ingredients of the compounded medication, prescriber's stamp, and the stamp of pharmacy with the date that it was prepared in have to be present

Role of the Pharmacist

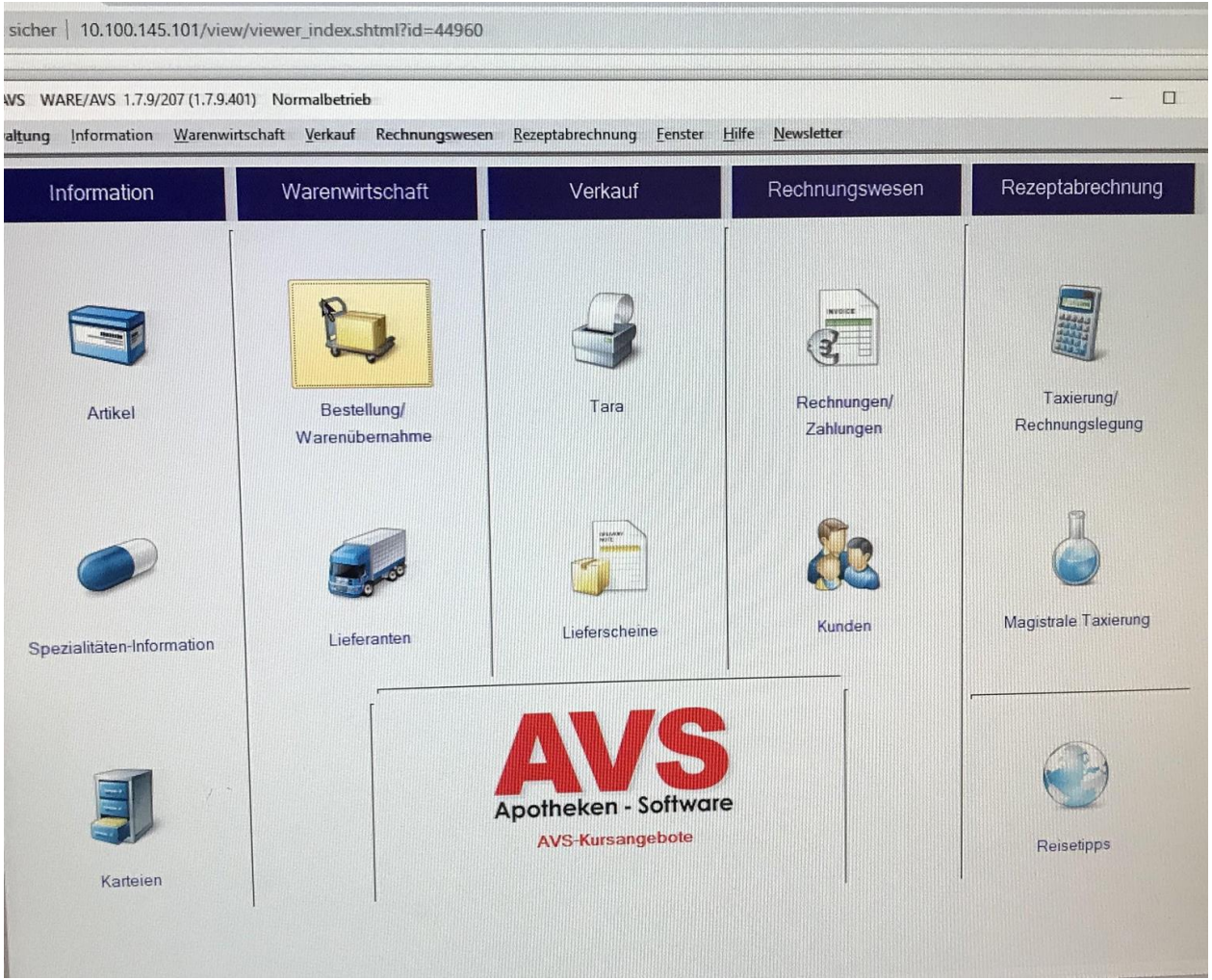
- *Counseling* and fostering a *professional relationship* with patients is key!
- Recommending proper over the counter medications for patients (don't forget counseling!)
- Reviewing previous prescriptions done for reimbursement
- Compounding various patient specific formulations daily
- Looking up the uncommon uses of certain active ingredients

Pharmacy Reimbursement

- At the end of the month, the pharmacy manager brings all the prescriptions to the Austrian Pharmacy Federation
- In 1-2 weeks, the insurance company will pay the Austrian Pharmacy Federation on the basis of the sent prescriptions (if they are up to par with the following requirements mentioned in the previous slide)
- The Austrian Pharmacy Federation then pays the pharmacist and the pharmacy
- Prescriptions with copays that cost less than six euros are not sent to insurance for reimbursement.

Pharmacy Software

- Ordering
- Patient demographics
- Drug information
- Patient purchase history



Standards of Quality Control

- Once a month, ten products are checked
  - Dosage of the product
  - Drug information given to the patient
  - Expiration date
  - Batch number (that should match with the blister),
  - Initials of the person who prepared and dispensed it

Standards of Quality Control

- All substances that come in to the pharmacy is recorded in a book
  - When it was delivered
  - Who the wholesaler is
  - Quantity being ordered
  - Price
  - Batch number
  - Expiration date

- There are tests that are done to see if the product shipped is what it says it is, which includes checking if the core melting point matches, the color of the substance when it is being burned and etc.

Quality of Measures

- Must be kept up with (every store has to have a laminar flow machine when preparing eye drops for sterility)
- Pharmacies have to be 51% owned by pharmacists and 49% by anyone else
- Every pharmacy compounds many different formulations of medications
- Set up for compounding creams, ointments, syrups, and suspensions is made in a setting where patients are aware of the service that the pharmacy is providing while maintaining a closed space for the pharmacist

Inspection

- Done every 5 years

- The pharmacies follow a specific checklist to make sure that everything is up to par; We translated the German version to English!

- Specific measures that have to be followed, for example:
  - the acids that are stored with the controlled substances have to be no more than 1.5 meters above the ground
  - flammable liquids need to be encased within a tray stored on the floor
  - the utilization of tools like ladders and stools are only permitted if the pharmacy has a certificate for its use

Austrian Pharmacy Operations Guidelines

Storage of flammable liquids (According to the regulations of combustible liquids); (safety container, possible safety cabinet)	
No groceries	
No floor storage	

Service Room

	Check
Bed	
Washing facilities and shower nearby (Mandated since March 2010)	
Telephone, intercom and service bell	

Sanitary Facilities

	Check
Toilet with washbowl	
Cold-Warm water, soap dispenser, paper dispenser and trash can	
Ventilation (natural/automatic)	
Anteroom	

External Appearance

	Check
Marking the pharmacy (easily recognizable; lighting)	
Opening hours	
Emergency services	
Night service	
Service bell	
Intercom	
Burglary protection (alarm system, mechanical security)	
Facade	
Expenses (care condition, price tagging, no prescriptions)	

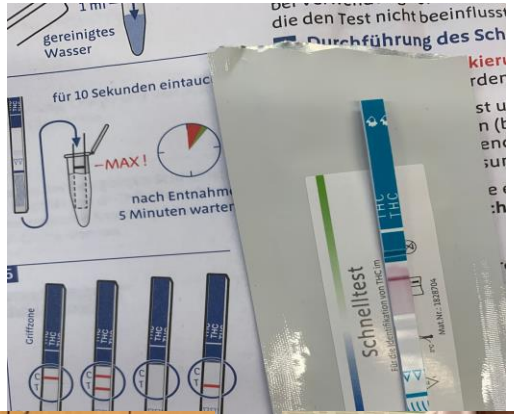
Operating System

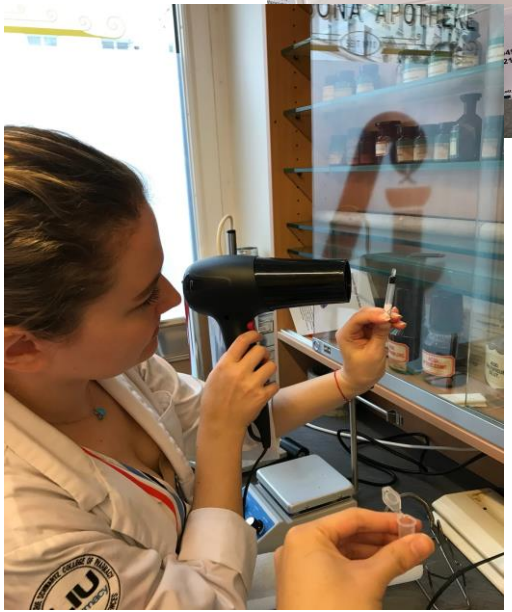
	Check
Overall impression (pharmacy, side assortment should not be overestimated)	
Telephone, fax, network independent radio receiver (mandatory from 09.03.2006)	
Barrier-free accessibility (from March 2010, see 78 (5) ABO	

Assessment of Purity (Dronabinol)

- To test the purity of the drobinabol concentrate that was ordered
  - One drop of the drobinabol concentrate
  - Mix a single drop of drobinabol concentrate with 9 drops of ethanol, and add the remaining with water inside the applicator that has a line marked at the 1 mL mark
  - Shake the mixture until everything is mixed and diluted
  - Use the test strip provided, dipped it in the solution for 10 seconds and wait for the results
  - If a single red line shows, that means the drobinabol concentrate is pure

Dronabinol
aus Cannabisextrakt
Bionorica ethics
Bionorica
ethics
Dronabinol
DAC-Qualität


gereinigtes Wasser
für 10 Sekunden eintauc
MAX!
nach Entnahm
5 Minuten warten
Schnelltest
THC



nie nach Dr. Schüßler

A big thank you to the Vindobona-Apotheke family!