KYSELYLOMAKE: FSD3471 SAIRAANHOITAJAOPISKELIJOIDEN LÄÄKEHOIDON OSAMINEN SUOMESSA JA BALTIASSA 2018-2019

QUESTIONNAIRE: FSD3471 MEDICATION MANAGEMENT SKILLS OF NURSING STUDENTS IN FINLAND AND THE BALTIC COUNTRIES 2018-2019

Tämä kyselylomake on osa yllä mainittua Yhteiskuntatieteelliseen tietoarkistoon arkistoitua tutkimusaineistoa.
Kyselylomaketta hyödyntävien tulee viitata siihen asianmukaisesti lähdeviitteellä.

This questionnaire forms a part of the above mentioned dataset, archived at the Finnish Social Science Data Archive.
If the questionnaire is used or referred to in any way, the source must be acknowledged by means of an appropriate bibliographic citation.

Detta frågeformulär utgör en del av den ovannämda datamängden, arkiverad på Finlands samhällsvetenskapliga dataarkiv.
Om frågeformuläret är utnyttjat eller refererat till måste källan anges i form av bibliografisk referens.
Medication Competence and Associated Factors (MCAF) – instrument – the Baltic adaptation_version 2

A Background (associated) factors

1. Age
   ___________ years

2. Gender
   a) male
   b) female

3. Country
   Estonia
   Finland
   Latvia
   Lithuania

4. Phase of education
   a) first year
   b) second year
   c) third year
   d) fourth year

5. Number of clinical practice periods completed

6. Work experience in health care before entering the undergraduate nursing programme
   a) nurse assistant _____ years_____months
   b) practical nurse _____years_____months
   c) no previous experience

7. Currently working as
   a) nurse assistant
   b) practical nurse
   c) substitute for registered nurse
   d) not currently working in health care

8. Grades in examination on theoretical basis of pharmacotherapy (incl. principles of pharmacology, medication administration)
   a) Excellent
   b) Good
   c) Satisfactory
   d) Mediocre
   e) not passed the exam
9. Have you passed the medication calculation exam?
   a) at least once
   b) not passed the exam

10. In the next items, we ask your perceptions of the studies related to medication management on a scale of 1 to 5 (strongly disagree – strongly agree)

The concept of “medication management” refers here to nurses’ professional activities and role in delivering medication care such as administering medicines and preparing medicines. Studies related to medication management include theoretical and practical aspects of pharmacology, pharmacy, clinical pharmacology, medication administration (incl. medication calculations), clinical decision-making, patient medication education, supporting adherence to medication care and promotion of medication safety.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1 strongly disagree</th>
<th>2 disagree</th>
<th>3 neither agree nor disagree</th>
<th>4 agree</th>
<th>5 strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am satisfied with the amount of education related to medication management at the university</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am motivated to study topics related to medication management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have actively participated in studies related to medication management at the university</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have actively studied medication management during clinical practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have actively maintained my medication competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have been active in using the eMedication Passport</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have actively practised medication calculations during clinical practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have confidence in my medication calculation skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have confidence in my medication administration skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have confidence in my decision-making skills in medication management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have confidence to take the nurse’s role in medication management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have self-confidence to represent nurses in the multidisciplinary team responsible of patients medication care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
B Clinical learning environments in learning medication management

11. In the next items, we ask your perception of learning medication management in the clinical practice. Please answer the statements based on your experiences during the nursing education.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1 strongly disagree</th>
<th>2 disagree</th>
<th>3 neither agree nor disagree</th>
<th>4 agree</th>
<th>5 strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have been introduced to the responsibilities and tasks on medication management in the beginning of the clinical practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have had enough possibilities to practise medication management in clinical practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have been able to apply my knowledge on medication care during clinical practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have been expected to have better medication competence than I actually have</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have performed too many tasks in medication care without adequate supervision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am satisfied with the supervision I have received when delivering tasks on medication care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse mentors have had an important role in how I have learned medication care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A good supervision relationship with the mentor has enhanced my learning of medication care during the clinical practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse mentors have had a positive attitude towards my supervision in medication care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have received feedback from nurse mentors on my medication competence development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The nurse teachers supervising the clinical practice have supported me in setting personal learning goals in medication care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The nurse teachers supervising the clinical practice have supported me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
C Medication competence evaluation

12. In this section, your medication competence is assessed by knowledge and medication calculation test and by solving short patient vignettes. Select the answer or statement you think is correct. There is only one correct answer in the multiple choices. You can also choose to answer “I do not know”.

### Legislation and abbreviation commonly used in medication management

**Generic medicine**

a) is the tradename of the medicine

b) contains the same active substance(s) as the reference medicine and is used at the same dose(s) to treat the same disease(s)

c) is a medicine form

d) I do not know

The government authority responsible of supervising pharmacotherapy is (this will be modified to each country)

a) National Institute of Health and Welfare

b) Ministry of Social Affairs and Health

c) Finnish Medicines Agency

d) I do not know

Based on the legislation, a registered nurse is allowed to (this need to be modified to each country)

a) change the form of the medicine given to patient

b) prescribe medicine

c) guide how to take self-care medication (non-prescription medication)

d) I do not know

In the medicine package, you find abbreviations i.v, i.o and i.t. What administration route you can use?

a) medicine can be administered into the spinal canal

b) medicine can be administered into the subcutaneous tissue

c) medicine can be administered into the muscle

d) I do not know
Generic drug substitute must have

a) same acting agent and drug form than the original drug
b) same acting agent and strength than the original drug
c) same acting agent, drug form and strength than the original drug
d) I do not know

**Pharmacology**

Drug tolerance means

a) reduced reaction to a drug following its repeated use
b) deposit of the drug in the body
c) increased reaction to a drug following its repeated use
d) I do not know

Pharmacokinetic medicine interaction means

a) the phase of synthetizing a drug formula
b) interaction of a drug and a food substance or two drugs during the phases of absorption, distribution, metabolism or excretion
c) interaction of a drug and a food substance or two drugs in the process of binding receptors, altering enzyme system, ion channels or transporters
d) I do not know

A drug that is an agonist

a) binds to a receptor and activates the receptor to produce a biological response
b) binds to a receptor and blocks the action of the agonist
c) causes an opposite reaction in the cell trough the receptor
d) I do not know

The primary site of absorption of a drug is

a) the small intestine
b) the stomach
c) the colon
d) I do not know

The rate of absorption is the fastest from a drug

a) in tablet form
b) in per rectum form
c) in oral liquid form
d) I do not know

**Medication administration**

The score line in a tablet means that

a) the tablet can be divided
b) the dose can be divided
c) the medicine can be diluted
d) I do not know

© Sulosaari 2018
An infusion concentrate

a) can be administered as a bolus injection  
   b) **is always diluted prior to administration**  
   c) can be administered with blood products  
   d) I do not know

The effect of the drug begins fastest

a) when given as an injection under the skin  
   b) when given per-orally in liquid form  
   c) **when given per oral in buccal form**  
   d) I do not know

The Z track technique in intramuscular injections

a) ensures the correct location of injection site  
   b) **decreases leakage of the medication into the subcutaneous tissue**  
   c) ensures the needle is positioned outside the vein  
   d) I do not know

Enterotablets

a) **are taken into empty stomach**  
   b) are taken with food to prevent stomach irritation  
   c) can be crushed to ease swallowing them  
   d) I do not know

**Medication calculations**

A doctor has prescribed diclofenac 60 mg i.m. for your patient for pain. The strength of the medicine is 25 mg/ml. How many millilitres will you give to the patient?

a) 0.2 ml  
   b) **2.4 ml**  
   c) 24 ml  
   d) I do not know

A doctor has prescribed your patient to receive buprenorphine 400 µ every 6 hours. You have 0.2 mg/sublingual tablets at the ward. How many sublingual tablets does the patient need in a day?

a) **8 sublingual tablets**  
   b) 4 sublingual tablets  
   c) 6 sublingual tablets  
   d) I do not know

Your patient is being administered continuous infusion for pain, containing 50 mg of morphine in 100 ml of Saline 0.9% with drop rate of 4.0 ml/h. The infusion started at 6 a.m. The peripheral cannula stopped functioning at 1 p.m. How many milligrams of morphine did the patient receive before 1 p.m.?

a) 24 mg  
   b) 2 mg  
   c) **14 mg**  
   d) I do not know
A doctor has prescribed your patient 1000 ml of Saline 0.9% in 8 hours. What is the accurate drop rate of the infusion?

a) 250 ml/h  
b) 100 ml/h  
c) 125 ml/h  
d) I do not know

A doctor has ordered your patient tailored treatment for mouth ulcers. The strength of the mouth wash concentrate is 0.2%. The instruction is to take 5 ml of the concentrate and dilute it with 5 ml of sterile Aqua. How strong (%) is the dilution you prepared?

a) 0.1%  
b) 1%  
c) 10%  
d) I do not know

Patient vignettes

The patient has fallen at home and is send to the emergency department. He has symptoms of intracerebral haemorrhage, such as confusion, headache, nausea and anxiety. Which of the following infusion fluids should be avoided or administered with caution?

a) Glucose 5%  
b) Saline 0.9%  
c) Ringer’s lactate solution (Ringer-Acetat)  
d) I do not know

You have an elderly patient at home care. She has chronic atrial fibrillation and has warfarin for prevention of embolism. What is the optimal goal for INR-level in most patients with chronic atrial fibrillation?

a) over 3.00  
b) 2.00–3.00  
c) under 2.00  
d) I do not know

You have a 84-year-old patient with coronary artery disease and cardiac insufficiency. He has forgotten to take his long-acting nitrate and diuretic medicine in the morning. You are visiting his home in the evening. What would you advise him to do with the morning medication?

a) you advise him to take a double dose in the evening  
b) you advise him not to take the morning medicines in the evening  
c) you advise him to take the diuretic medicine before going to sleep  
d) I do not know
Your patient asks your advice on her antimicrobial regimen. She will be attending a friend’s party over the weekend and she is having metronidazole antimicrobial drug for an infection. Which of the following would be correct with this medication?

a) there is a risk for the Antabuse reaction with alcohol, and therefore no alcohol should be ingested
b) she can have a couple of glasses of wine with dinner but needs to drink moderately
c) she can take a couple of days’ pause with the antimicrobial drug
d) I do not know

Thank you for your answer.