



Faculty of Health and Medical Sciences



# **The antibiotic knowledge, attitudes and behaviors of patients, doctors and pharmacists - a qualitative, comparative analysis of the culture of antibiotic use in the Northwest Russia**

Going through the research protocol

The exact purpose :

- Going through the protocol-themes – aligning understanding - adjustments?
- Relation to interview-guide – aligning understanding - adjustments?
- The situation on the regions
- Recruitment – whom and how?
- Issues of getting a good interview
  
- Final adjustments



# Aim of study

- Document examples of existing practices/ behavior
- Seek reasons behind behavior
- Knowledge, attitudes
- Experiences, expectations, norms



to investigate AB practices, knowledge and attitudes of health care professionals and patients in five regions in Northwest Russia thereby getting an understanding of the reasons underlying the current use of antibiotics by conducting a qualitative investigation



## Areas to be covered

- The process of diagnosis,
- Decision to prescribe,
- Why a specific AB was selected,
- Where and how was AB purchased,
- Use of AB,
- Satisfaction with AB purchase process,
- AB Knowledge, and
- AB attitudes
- Use of guidelines

**Research  
questions  
RRS**

**Questions in  
interview guides**



# Interview structure

- Recruiting – informing about project
- Informed consent / introducing the project
- Leaving time to think of three special situations (HCP)
- Easy start questions
- AB practices last time (within last week HCP)
- Satisfaction,
- AB practices in general
- Knowledge, attitudes, use of guidelines
- Ending the interview



## You are to conduct interviews with

- 5 patients (adults) who have had a face-to-face consultation with a physician which resulted in a prescription for one of the above mentioned specific types of ABs for URTI
- 5 patients (adults) who have purchased one of the same types of ABs in a community pharmacy without a prescription for URTI
- 5 physicians who have prescribed one of the above mentioned specific ABs in 3 different situations for adults for URTI
- 5 pharmacists who have sold one of the specific ABs without a prescription in 3 different situations for adults for URTI



# The process of diagnosis

- Why did the patient seek the physician? (medical history: which symptoms - how long – how you respond to such a situation? (when do they seek GPs: virus>< bacteria, which symptoms for how long before seeking professional help? Norms?))
- What did the patient want from the consultation?/ what did the patient expect from the consultation? (perceptions of role of health care system, experiences, pressure on GP? – is a prescription thought to be written automatically)
- Was the patient examined by the physician? If yes, how? (include both tests + telling about symptoms – part of how to GP set a diagnosis)



## Last time

- When was the last time you got a prescription for a respiratory tract infection (should be within the last 3 months)
- What was the situation – why did you seek a doctor?
- *What were the symptoms – for how long?*
- *Did you have any idea what kind of disease you were suffering from?*
- *Was it your own initiative or were you encouraged by family, colleagues or friends?*
- How did you seek the doctor?
- What did you want from the doctor?
- What did you expect from the doctor? (*were you sure you were going to get it?*)
- What doctor did you seek – why him or her?
- How did the consultation go? What happened? What was said – by whom?
- Did the doctor make the diagnosis/ examine you? If so, how and do you know what was your diagnosis?

## In general

- Have you had AB prescribed before? If yes, approximately how many times? When did it take place?
- *What were the symptoms – for how long?*
- *Did you have any idea what kind of disease you were suffering from?*
- *Was it your own initiative or were you encouraged by family, colleagues or friends?*
- *Did you before suffer from any of these symptoms without seeking a GP? If so, why did you at these times think it was not necessary to seek a GP?*
- Did the consultations you had with your doctor at these times resemble the last time you had a prescription written? (*for example did you also receive a prescription at these times*)
- Were the diagnosis carried out before the same way as the last time you got an AB consultation? If no, please describe how it usually took place?



# Why a specific AB was selected

- If an examination was carried out: Who chose to use an AB? Who chose the specific AB with regard to: brand name or generic - form of drug - strength of drug? (why and how is it decided whether and if to use which type of AB – broad/ narrow spectrum)
- What was the involvement of the patient in this process? (who decides? “Power” relationship between patient/ provider: negotiation/ discussion/ agreement?)
- What was the rationale of the physician, patient or both for selecting this specific AB (if known by the patient!!; what are the professional practices - RUD: guidelines, clinical experience? Habits? price? demand from industry/ patient?)?



## Last time

- Who chose to use an AB?
- Were you involved in this decision?
- If the doctor solemnly made the decision – was any explanation given why to use an AB?
- What AB was chosen? (with regard to both active substance, form and strength)
- What was your rationale for making this decision? Did you follow guidelines when choosing to use an AB? If yes, which one? If not, why so? *In this case how do you make a decision?*
- Were you yourself involved in the decision of what AB to use? If yes, please describe how.
- If the doctor chose the AB, did he/she explain why to use this specific AB?

## In general

- Was the way the AB was chosen before similar to the last time you has an AB prescription?
- If no, please describe how it usually took place?
- Are these three situations you have been describing typical or untypical to situations where you usually prescribe AB for respiratory tract infections? In which ways were the three cases typical or untypical with regard to your usual way of diagnosing, choosing specific AB, involvement of patient and instructions on AB use regarding respiratory tract infections?

# Why a specific AB was selected

- If no examination was carried out: Who chose to use an AB? Who chose the specific AB with regard to: brand name or generic - form of drug - strength of drug? What was the involvement of the patient in this process?
- What was the rationale by physician, patient or both for selecting this specific AB (if known by the patient: professional practices - RUD)?
- What (if any) instructions were given from the physician to the patient on how to use AB?(for example on dosage regime?) (in general how did the consultation proceed? How did the GP try to ensure RUD)



**Last time**

- Did the doctor make the diagnosis/ examine you? If so, how and do you know what was your diagnosis?
- Who chose to use an AB?
- Were you involved in this decision?
- Etc.
- Did the doctor give any instructions on how to use the AB? If yes – which ones?

**In general**

- Did the consultations you had with your doctor at these times resemble the last time you had a prescription written? ( for example did you also receive a prescription at these times)
- Were the diagnosis carried out before the same way as the last time you got an AB consultation? If no, please describe how it usually took place?
- Was the way the AB was chosen before similar to the last time you has an AB prescription? If no, please describe how it usually took place?
- Did the doctor give similar instructions about how to use AB compared to the last time you had an AB prescription? If no, please describe how it usually took place?

# Where and how was AB purchased (both with and without prescription)

- Where was the AB purchased and why here? (former experiences for example being able to get AB without prescription and questioning?)
- What conversation took place during purchase? (the influence and taken on responsibility by pharmacist)
- What (if any) questions were asked by the pharmacist?
- What (if any) instructions on use were given by the pharmacist? (for example on dosage regime?)
- Was there any challenges regarding the purchase of the specific AB? (did the patient get the AB he/she wanted? Any practical problems not influenced by the pharmacist influencing consumption: availability: too high price?, out of store?, etc.)



## Last time

- Where did you purchase the prescription?
- Why did you choose this place?
- Please describe how the purchase went about? What happened? What was said – by whom?
- Were you yourself involved in what specific AB was purchased? (due to generic substitution or drug in store/ not in store, etc.) If yes, please describe how
- If you carried out a diagnosis, how did you do this? What was your rationale for diagnosing this way?
- If you made a diagnosis – which AB to use did you select (active substance, strength and from). Why did you choose this specific drug? Was the patient involved in the decision making regarding which AB to use? If yes, why and how was the patient involved in the decision?
- Did the pharmacist give any instructions on how to use the AB? If yes – which ones? Were these instructions similar to the ones provided by the doctor?
- Were there any challenges with regard to the purchase in terms of price, was the drug in store, etc.?

## In general

- Did the visits where you formerly purchased your prescribed AB resemble the way you purchased the AB the last time?
- Were you formerly involved yourself in what AB was purchased the same way as the last time you purchased an AB? (due to distinction between brand drug/ generic drug, in store/ not in store, etc.) If no, please describe how it usually took place?
- Did the former health care workers give instructions about AB use the same way as the last time you purchased an AB? If no, please describe how it usually took place?

# Use of AB

- How was the AB used by the patient and why used in this way? (patient practices? former experiences? knowlegde about time period etc.? RUD?)
- Did the treatment alleviate the symptom? (Did the symptom return later - indicator of RUD?)



Last time	In general
<ul style="list-style-type: none"><li>• How did you use the AB when coming home? (How many tablet/ dosages per day for how long?)</li><li>• Did this use correspond the instruction given by doctor or health care worker? If yes, why? If no, why not?</li><li>• Did the AB alleviate or cure your symptoms? If yes, please explain how and how quickly?</li></ul>	<ul style="list-style-type: none"><li>• <i>The way you took your AB treatment – does this resemble how you have taken AB before (number of days, compliance with advice of GP or pharmacist, etc.)</i></li></ul>





# Satisfaction with AB purchase process

- Was there satisfaction with the way the specific AB was prescribed and purchased? (expectations/ norms/ former experiences HCS – outcome of visits to GP and pharmacy?)
- Are there any limitations to what is perceived as the optimal process for prescribing and purchasing AB? (from HCP - pressure to prescribe/ purchase from several stakeholders?)
- Which barriers exist to live up to best practice?



## • Last time

- Were you satisfied with the way the consultation went? If yes, why? If no, why not?
- Were you satisfied the way the purchase went? If yes, why? If no, why not?
- Do you ever feel forced to either diagnose or prescribe an AB in another way that you feel is optimal? If yes, can you please provide some examples? Why is it not possible always to carry out what is optimal?
- Do you ever feel pressure from different stakeholders (*owner of pharmacy patients, regulators, peer physicians? others?*) to diagnose or prescribe in a special way? If yes, can you please provide some examples? In which way do you feel pressured? Do you sometimes have to give in to the pressure?
- *Do you feel it's possible to live up to best practice? ? (lack of time? fulfilling patients expectations? lack of rapid tests?)*

## In general

- Do you ever feel forced to either diagnose or prescribe an AB in another way that you feel is optimal? If yes, can you please provide some examples? Why is it not possible always to carry out what is optimal?
- Do you ever feel pressure from different stakeholders (*owner of pharmacy, patients, regulators, peer physicians? others?*) to diagnose or prescribe in a special way? If yes, can you please provide some examples? In which way do you feel pressured? Do you sometimes have to give in to the pressure?

# AB Knowledge

- What is the current knowledge of AB with regard to when to use AB and possible needs of precaution? (patients: virus > < bacteria, problems with resistance, HCP: when to choose and which AB to choose)
- From where (if identified) was this knowledge derived? (culture for discussing the issues and resulting norms: discussions with peers, friends family, public campaigns etc. → do the different groups agree on these issues?)



# AB attitudes

- What is the attitude with regard to use of AB? (related to knowledge – basic for being aware of problems)
- Can it be used too much/ too little? (perceived severity of resistance problems? Taking on personal responsibility – it's the others who's the cause of the problem?)
- From where (if identified) are these attitudes derived? (culture for discussing the issues and resulting norms: discussions with peers, friends family, public campaigns etc. → do the different groups agree on these issues?)



## Patients

- Can you explain what AB does in your body? From where do you have this knowledge?
- In which situations do you think AB should be used? Why do you think that AB should be given in these situations? From where do you have this knowledge?/ *Do you ever discuss such issues with family, friends, colleagues? If so, do you all agree on these matters?*
- Are there situations in which you think AB should not be used? Which situations are those? Why do you think that AB should not be used in these situations? From where do you have this knowledge?
- *Do you think in general that ABs are used with caution in society? Have you been in situations where you received an AB even so this might not be optimal in terms of the risk of resistance?*
- Have you ever seen public campaign addressing AB use? If yes, what can you remember from these campaigns? Did the campaigns affect you in any way? If yes, in which way? If no, why not?



## HCP

- For which type of indications do you think ABs should be prescribed? Why do you think that AB should be prescribed for these indications?
- Are there indications for which you think AB should not be prescribed? Which indications are those? Why do you think that AB should not be used in these situations?
- Do you think that AB resistance is a problem in your country? If yes, why?
- *Did you ever make decisions adding to the risk of resistance? What were the circumstances forcing you to do this act?*
- From where do you have your basic knowledge about AB diagnosis, choice of specific AB as well as how to use specific AB?
- How do you keep yourself updated in these matters?
- Have you ever seen public campaign addressing AB use? If yes, what can you remember from these campaigns? Did the campaigns affect you in any way?
- When did you the last time receive sales representatives by the medicine industry? Are these visits helpful in obtaining good prescribing practices?



# Use of guidelines

- According to the physicians/ pharmacists – do national guidelines exist and if so, how do they themselves think they comply with it? (current knowledge check - catch discrepancy with your knowledge)
- If no guidelines exist – what is believed to be the best practice for prescribing the specific ABs (which elements is included?)



## Use of guidelines

See above

- Did you follow guidelines when choosing the drug? If yes, which ones? If no, why not?
- *If not guidelines exist – how do you then make decisions about AB? Which handbook, etc. do you follow?*
- *What is according to your knowledge the best way to treat X?*





# Recruitment

- Disease area + drug – inclusion criteria (HCP – 3 different AB or could they be the same – usual prescription/ purchase pattern for URTI?)
- Expected variation between sub-groups? (age, gender, ethnicity, type of GP practice, type of pharmacy, etc., location)
- Typical cases?
- How to approach?
- Patients: brand name?
- HCP: general theme but no details in stead 10 minutes first to recall examples?
- Expected difficulties? Pharmacies sell without prescription?



# Recruitment

- 3 patients who have had a face-to-face consultation with a physician which resulted in a prescription on one of the specific types of AB (did you have a prescription on x for either ... – can you tell me about it)
- 3 patients who have purchased one of the same types of AB in a community pharmacy without a prescription
- 3 physicians who has prescribed one of the specific ABs in 3 different situations (did you prescribe x for ...during the last week – tell me about this situation)
- 3 pharmacists who has sold one of the specific ABs without a prescription in 3 different situations (did you sell x during the last week for ...– tell me about this situation)



# Recruitment

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# Role of interviewer

How do they perceive you (who will be the interviewer?):

- *Patients*
- *Pharmacist*
- *GPs*

Challenges in relation to obtain truthful answers?  
(admitting breaking the law or not following guidelines)

