QUESTIONNAIRE OF THE USE OF ANTIBIOTICS IN MEDICINE:

The aim of this questionnaire is to evaluate the level of knowledge about the use of antibiotics acquired during the degrees of Medicine and Pharmacy and to analyze the perception of the students about the global impact of the use of these drugs in the health area.

This questionnaire is the basis of the End of Degree Thesis of Nerea Moreno supported by a project called CAREME (Control of Antibiotic Resistance in the Mediterranean Area: Global Solutions to a Global Threat”. We intend to hand it out to students attending the 2nd and/or 6th courses of the corresponding degrees from the following institutions:

- University of the Basque Country UPV/EHU

- University of Bourdeaux

- Arab Academy for Science Technology & Maritime Transport (Alexandría, Egypt)

- Cairo University (Cairo, Egypt)

- If you consider appropiate, Democritus University of Thrace (Greece)

Section 1: **PERSONAL DATA**

**1. To which university do you belong to?:**

1. Alexandria
2. Bourdeaux
3. Cairo University
4. Democritus University of Thrace
5. University of the Basque Country UPV/EHU

**2. Your age is:**

1. 18-25
2. 25-35
3. 35-50
4. <50

**2. Your sex is:**

1. Female
2. Male
3. Other

**3. Current academic year:**

1. 2º
2. 6º

**4. When was the last time that you took antibiotics?**

1. Never
2. > 6 months ago
3. < 6 months ago
4. Recently (in the last 15 days)

SECTION 2: **ANTIBIOTICS**:

**5. If you are feeling sick and you consider that you should take antibiotics, what will you do? (You can choose more than one option)**

1. Go to the doctor
2. Ask in the pharmacy
3. Take other drugs (not antibiotics) to relieve symptoms
4. Take some antibiotics that I have at home from other times that I have had the same symptoms, because I already know what I should take
5. Ask for advice and prescription of antibiotics to someone that I know (friends, family…)

**6. Say for which of the following diseases we shouldn’t take antibiotics in the first place:**

1. A cold
2. Tuberculosis
3. Gastroenteritis
4. Urinary tract infection
5. Malaria

**7. From 1 to 10 how important is to follow the exact instructions of when and how to take antibiotics (to respect the number of days and the exact hours at which they must be taken)**

1-2-3-4-5-6-7-8-9-10

1- Not important

10- Very important

**8. When I have taken antibiotics… I have stopped taking them when my symptoms have improved (fever, pain…)**

1. Never
2. Sometimes
3. Usually
4. Always

**9. Do you think that the differences between sexes must be taken into account when antibiotics are prescripted?** (This meaning to administer different doses between men and women)

1. Yes
2. No
3. I don’t know

**10. Have you ever bought antibiotics in the pharmacy WITHOUT prescription? (Creams, pills… )**

1. Yes
2. No
3. I don’t know

**11. Say which of the following drugs can lose their effectiveness when they are combined with antibiotics:**

1. Oral contraceptives
2. Proton pump inhibitors (IBPs)
3. Antacids
4. Iron salts

**12. Which one of the following options do you consider to be the best for an proper hand hygiene:**

1. Soap and water
2. Hydroalcoholic solutions
3. Alcohol for medical use
4. Other

**13. I think that the wrong management of antibiotics represents a problem CURRENTLY:**

1-2-3-4-5-6-7-8-9-10

1- No

10- Yes

SECTION 3: **RESISTANCES**:

**14. Where have you heard about antibiotic resistances?**

1. University lessons
2. The news
3. Internet
4. Someone that I know
5. I have suffered one
6. Other (write it)

**15. Which level of risk do you think you have of having an infection by a resistant microorganism?**

1. No risk
2. Low risk
3. Intermediate risk
4. High risk
5. I don’t know

**16. Of the following ones, say which ones do you think that contribute to the increase of the antibiotic resistances:**

1. Prolonged hospital stays
2. Indiscriminate use of the antibiotics by the healthcare staff
3. Self-medication of the patients
4. Excessive use of antibiotics in livestock farming
5. Population’s lack of knowledge about the antibiotic resistances

**17. Do you think that developing new effective antibiotics against the resistant bacteria: (choose the one(s) that you think that are true)**

1. It’s easy and won’t be a problem
2. It’s difficult and will be a problem
3. It’s profitable economically
4. It’s not profitable economically
5. Currently it’s being done often
6. Currently there are very little investigations going on in this field

**18. Do you think that antibiotic resistances could CURRENTLY be considered as a pandemic?**

1. Yes
2. No
3. I don’t know

SECTION 4: **As a future healthcare professional…**

**19. You consider that to educate the population about antibiotic resistances is… Consideras concienciar a la población sobre las resistencias a los antibióticos…**

1. Not important
2. A little bit important
3. Quite important
4. Very important

**20. Of the following statements mark the ones that you consider as true:**

1. There are people dying in developed countries from infections that used to be easy to cure and currently have developed resistances
2. Many times the prescripted antibiotics have a bigger spectrum than the one really needed
3. In hospitals and healthcare centers there is a very strict control regarding to the use of antibiotics
4. It’s possible to buy certain types of antibiotics without prescription in some pharmacies, even if the wrapping indicates that the drug can only be acquired with a medical prescription.
5. Sometimes antibiotics are prescripted in order to avoid lawsuits to the healthcare staff

**21. For you, which would be the best strategy in order to promote the correct use of antibiotics among the population? (You can mark 1, 2 or 3 answers)**

1. Personalized advice coming from doctors/pharmacists to the patients
2. Information leaflets
3. Information sharing via social media
4. Educational campaigns in press and TV
5. Involving of popular people in the information sharing
6. Other (write it down)

**22. How do you think that affects the work clothes (scrubs, robes…) affect in the transmission of microorganisms (resistant bacteria included)**

1. It’s not a source of transmission
2. It has a low importance in the transmission
3. It has a high importance in the transmission

SECTION 5: **Current panorama after the SARS-CoV-2 pandemic**

**23. During the pandemic it 's possible that antibiotics have been prescripted…**

1. Less than the usual
2. Same as usual
3. More than usual

**24. Do you think that antibiotic resistances have risen during the pandemic?**

1. Yes
2. No
3. I don’t know

SECTION 6: **Regarding your professional formation…**

**25. The importance that you think it’s given to the proper use of antibiotics in THE CLINICAL PRACTICE (when you have gone to a doctor as a patient, when you have accompanied someone to the doctor, when you have been in medical school clinics as a student…)**

1-2-3-4-5-6-7-8-9-10

1- Little importance

10- High importance

**26. The importance that you think it’s given to the proper use of antibiotics in THE UNIVERSITY TEACHING that you have received until now (lessons at university)**

1-2-3-4-5-6-7-8-9-10

1- Little importance

10- High importance