Telemedicine in Tunisia: Evaluation of Knowledge Attitudes and Practices of Tunisian Doctors

Dear Confreres, as part of a research work, we invite you to answer this online questionnaire which aims to assess the knowledge, attitude and practice of Tunisian Doctors (General Practitioners/ Family Doctors/ Specialists/University Hospital) towards telemedicine in Tunisia.
It should be noted that the practice of telemedicine is now regulated in Tunisia following the publication of Presidential Decree No. 318/2022 of 8 April 2022, setting the general conditions for the practice of telemedicine and its fields of application, which was published in the Officiel Journal of the Republic of Tunisia on 12 April 2022.
https://www.pist.tn/collection/DecretPre?ln=fr

This study concerns only doctors practicing in the Tunisian territory; whether in the public or private sector.
If you are a physician in training (intern or resident) or a physician practising abroad, please do not complete this questionnaire.
This study was approved by an ethics committee.
Your participation is purely based on your will. You have the right to choose not to participate in this study and you have the right to stop at any time. All information will be recorded anonymously.
By answering this questionnaire, you give your consent to participate in this study.

Thank you for your time and valuable collaboration!

*Obligatory

1. You are ? *

Only one possible answer.

- ◯ Female
- ◯ Male

2. How old are you? (in years)*

_____

3. How many years have you been practicing? *
(from graduation, years of internship and residency excluded)

_____

4. In which sector do you practice ?*

Only one possible answer.

- ◯ Public
- ◯ Private

5. You are ? *

Only one possible answer.

- ◯ Specialist
- ◯ General practitioner/Family Doctor

If you are a specialist: are you a hospital-university doctor?

Only one possible answer.

- ◯ Yes
- ◯ No

6. If you are a specialist: your specialty is:

Only one possible answer.

- ◯ Medical
- ◯ Surgical
- ◯ Biology and fundamental disciplines

7. Do you practice in an area? *

Only one possible answer.

- Rural
- Urban

8. You estimate that your weekly working time is:*

Only one possible answer.

- Less than 30h
- Between 31 and 40h
- Between 41 and 50h
- Between 51 et 60h
- More than 60h

9. Do you think that the connection at your place of exercise is of good quality? *

Only one possible answer.

- Yes
- No

10. Do you have a room or location in your place of exercise that can Used for telemedicine practice?*

Only one possible answer.

- Yes
- No

11. Your level of Computer Competence (knowledge) (ability to use a computer) is:*

0=Null (incompetent) 1=Beginner 2= Medium 3=Advanced (professional)

Only one possible answer.

- 0
- 1
- 2
- 3

12. Are the following computer tools available to you in your place of practice:*

Only one answer possible per line.

	Yes	No
Computer		
micro headset		
Camera		
Good internet speed		

13. Knowledge Score*

Only one answer possible per line.

	Yes	No
* Have you ever heard about telemedicine?*	◯	◯
Do you know the different acts performed and fields of application of telemedicine?	◯	◯
Do you know the definition of Teleconsultation?	◯	◯
Do you know the definition of Teleexpertise?	◯	◯
Do you know the definition of Telesurveillance?	◯	◯
Do you know the definition of Telecare??	◯	◯
** Have you ever heard about the Presidential Decree No. 318/2022 on the practice of telemedicine in Tunisia?**	◯	◯

Are you aware of the effect of telemedicine on quality of care? YES NO

Do you know the effect of telemedicine on medical staffing needs? YES NO

Do you know the infrastructure and technical means needed to practice telemedicine? YES NO

Are you aware of the effect of telemedicine on the time required for patient care? YES NO

14. * If yes, please specify how?

About the question " Have you ever heard about telemedicine? "

Only one possible answer.

- ◯ Media (TV, Radio, social media (Facebook...))
- ◯ Internet
- ◯ your colleagues
- ◯ Medical journals
- ◯ your patients
- ◯ other answer: _____

15. ** If yes, please specify how?

About the question " Have you ever heard about the Presidential Decree No. 318/2022 on the practice of telemedicine in Tunisia?"

Only one possible answer.

- ◯ Media (TV, Radio, social media (Facebook...))
- ◯ Internet
- ◯ your colleagues
- ◯ Medical journals
- ◯ your patients
- ◯ other answer: _____

16. ** If yes, do you know the regulations of telemedicine in Tunisia?

About the question " Have you ever heard about the Presidential Decree No. 318/2022 on the practice of telemedicine in Tunisia?"

2= I know well the regulations/1= I know a little bit the regulations /0= I know nothing about the content of the decree

Only one possible answer..

17. Attitude Score: Benefits/Compatibility *

I think telemedicine….

Only one answer possible per line.

	strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
Is an interesting (useful) practice for the patient	⬭	⬭	⬭	⬭	⬭
Is an interesting practice (Useful) for the practitioner	⬭	⬭	⬭	⬭	⬭
Is an interesting practice (Useful) for the Tunisian health system	⬭	⬭	⬭	⬭	⬭
Improves access to care	⬭	⬭	⬭	⬭	⬭
Reduces the risk of medical error	⬭	⬭	⬭	⬭	⬭
Facilitates diagnosis and management	⬭	⬭	⬭	⬭	⬭
Facilitates communication between healthcare professionals	⬭	⬭	⬭	⬭	⬭
Is compatible with all aspects of my clinical practice	⬭	⬭	⬭	⬭	⬭

Is compatible with my current employment situation					
Telemedicine would be more useful for monitoring the elderly and for chronic diseases					

18. Attitude Score: Ability/willingness to try telemedicine *

Only one answer possible per line.

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
Would you like to train in this practice?					
Do you think it is necessary or useful to use telemedicine in your daily practice?					
Do you think trying a telemedicine application is an opportunity ?					
Do you think simply trying a telemedicine application is enough to evaluate it?					
Would you like to try a telemedicine application (exercise) before using it?					
Are you open (accepting) the use of telemedicine?					

Are you open (accepting) the use of telemedicine?

Strongly agree Agree Neither agree or disagree Disagree Strongly disagree

Do you agree on the need and usefulness of creating a structure dedicated to telemedicine practice in each hospital?

Strongly agree Agree Neither agree or disagree Disagree Strongly disagree

19. Attitude Score: Threats / Complexity / Cons *

The use of telemedicine

Only one answer possible per line.

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
Requires too much mental effort					
Would be hard for me to learn					
Would be difficult for me to apply and use					
Increases workload					
Engages the medico-legal liability of the physician who is not covered by a law that protects his rights					
Is a threat to patient privacy and privacy					

20. In your opinion, telemedicine is more compatible with: *

Only one possible answer.

- ◯ The field of medical specialties
- ◯ The field of Surgical specialties
- ◯ The field of fundamental specialties
- ◯ All specialties
- ◯ I don't know

21. to you, telemedicine is:*

Only one answer possible per line.

	Yes	No
The future	◯	◯
A necessity	◯	◯
A hope	◯	◯
A matter of specialists	◯	◯
Science fiction	◯	◯
I'm not concerned	◯	◯

For you, what will be the main benefit in your practice to perform telemedicine acts?

Only one possible answer.

- ◯ Benefits for patients: Bringing the patient closer to a hospital structure (contact with specialists) saving time and less travel
- ◯ to combat medical desertification in rural areas
- ◯ the exchange of opinions between doctors (teleexpertise)
- ◯ Allows you to remotely assist one of your colleagues during a medical or surgical procedure (tele-assistance)
- ◯ Enables telesurveillance: remotely interpret clinical or biological data collected by the patient or a healthcare professional
- ◯ Other answers : _____

22. What is (are) the main obstacle (s) in your opinion, to be able to use Telemedicine?

Only one answer possible per line.

	Yes	Non
Organizational obstacle (restructuring to implement such a technique)	◯	◯
Economic obstacle (financing for development, remuneration still unclear)	◯	◯
Lack of motivation	◯	◯
Lack of time (fear of wasting time with such a practice compared to already busy days)	◯	◯
Lack of credibility with patients	◯	◯
Forensic aspect	◯	◯
Incomplete examination of the patient	◯	◯
Other obstacles	◯	◯

23. Do you envisage the use of this technology in the future? *

Only one possible answer.

- ◯ Yes
- ◯ No
- ◯ I don’t know

24. If YES, how quickly do you plan to use this technology?

Only one possible answer.

- ◯ Regularly
- ◯ Sometimes
- ◯ rarely

25. Have you ever practiced a telemedicine act? *

Only one possible answer.

- ◯ Yes
- ◯ No

26. If Yes, how frequently?

Une seule réponse possible.

- ◯ Only once
- ◯ > 2 times
- ◯ Regularly

27. If yes, by what means did you perform telemedicine

Only one answer per line.

	Yes	No
Phone Call	◯	◯
social networks (Facebook for example)	◯	◯
telemedicine platform	◯	◯
other means	◯	◯

Thank you very much for your participation.

Google Forms