

# Comparing communication in face-to-face and telephone epilepsy consultations

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## Background

Covid-19 has seen the widespread adoption of telephone consultations for epilepsy. Although interview studies have shown high patient and provider satisfaction with such consultations<sup>1</sup>, there have been no prior empirical comparisons of neurologist-patient communication in face-to-face and telephone consultations. Studies from other areas of medicine suggests that such comparisons can be made on three levels of increasing detail.



## Methods

We recorded 34 telephone consultations in a seizure clinic between June and November 2021. These were compared to 56 face-to-face consultations recorded in 2012 as part of an earlier project.<sup>2</sup> All recordings were transcribed verbatim.

**Duration** was calculated based on both the length of the recordings and the total number of words in the verbatim transcripts. The **distribution** of talk was calculated by dividing the number of words spoken by the neurologist by the number of words spoken by the patient/companion (the 'verbal dominance ratio'<sup>3</sup>). The **number of questions** was identified using the verbatim transcripts.

## Results

	Face-to-face average	Telephone average	Significant (Mann-Whitney U)
Duration (time)	16.5 minutes	16.2 minutes	NS
Duration (words)	2896	2681	NS
Dominance ratio	1.32	1.25	NS
Patient and companion questions per consultation	3	1	p < 0.05

## Discussion

In their broad strokes, face-to-face and telephone consultations are similar, lasting for about the same amount of time with a comparable distribution of talk. This is not surprising because epilepsy consultations are overwhelmingly conducted verbally. Our findings match earlier work on the distribution of talk in face-to-face consultations.<sup>4</sup>

However, when we compare the details of neurologist-patient interaction, we start to see striking disparities between the two modalities. Given that doctor-patient communication can have an impact on patient outcomes, it is important to compare these details as well as the broad aspects in understanding the differences between face-to-face and telephone consultations.

**Abstract level**  
Comparing the duration of face-to-face and telephone consultations.

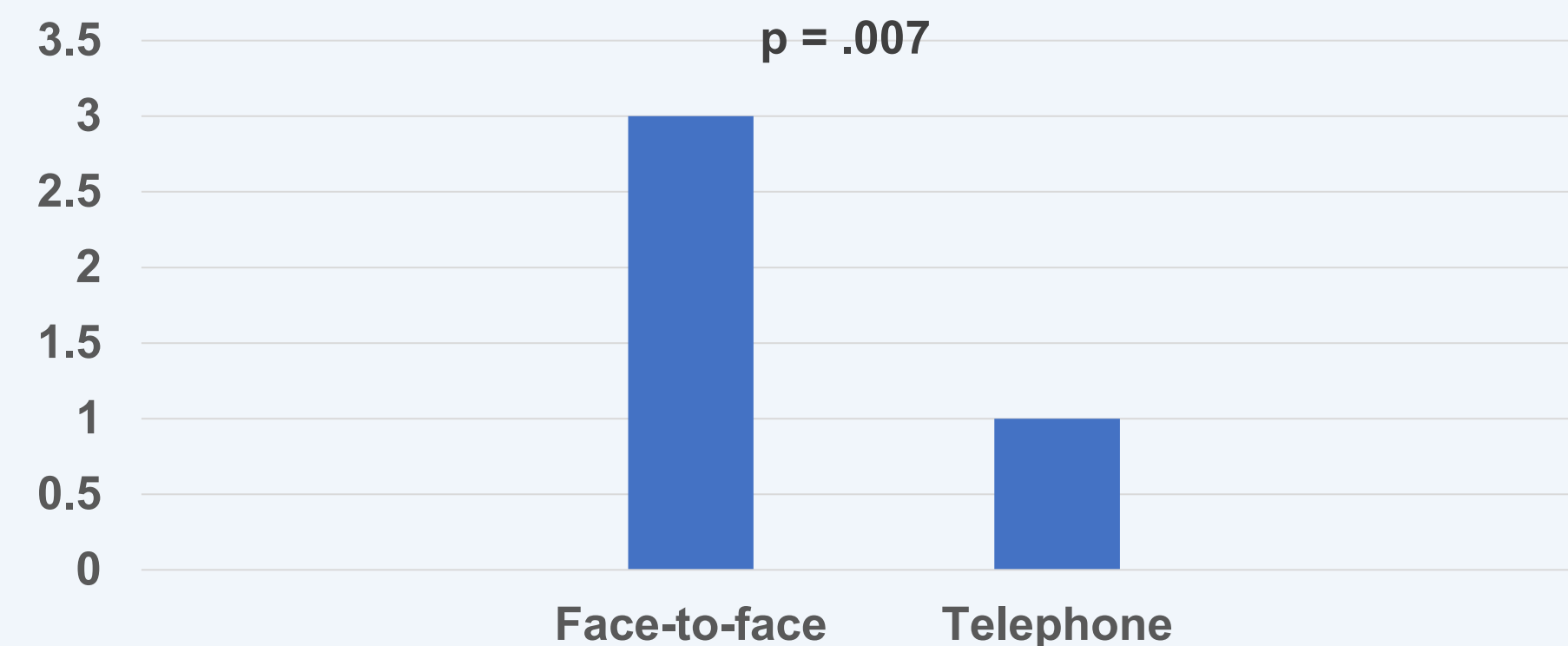
**Structural level**  
Comparing the distribution of speaking time.

**Detailed level**  
Comparing what is said and how it is said.

## Aim

To compare communication in face-to-face and telephone epilepsy consultations based on their **duration**, **structure**, and a specific detail: the **number of questions** asked by patients and companions.

Patient/companion questions per consultation



## References

1. Banks et al. (2021). LoVE in a time of Covid: Clinician and patient experience using telemedicine for chronic epilepsy management. *Epilepsy and Behavior*, 115.
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3. Agha et al. (2009). An evaluation of patient—physician communication style during telemedicine consultations. *Journal of Medical Internet Research*, 11(3), e36.
4. Robson et al. (2016). The role of companions in outpatient seizure clinic interactions: A pilot study. *Epilepsy and Behavior*, 60, 86-93.

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