

אימוץ של שירותים דיגיטליים ושירותי טלה-רפואה בקרב האוכלוסייה המבוגרת בישראל: האם מגפת הקורונה הביאה לשינוי כלשהו?

Adoption and Utilization of Telemedicine and Digital Health Services among Older Adults in Israel: Did the COVID-19 Pandemic Make any Difference?

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Background



- As the population ages and the prevalence of long-term diseases rises, telecare is being used increasingly frequently to aid elderly people.
- However, there are still numerous barriers to the adoption of telehealth by the elderly.

Aim

We aimed to explore the usage and adoption of 3 types of telehealth services among the senior population in Israel - prior, during, and after the COVID-19 pandemic rise in Israel.

Methods



- We explored the usage characteristics of older adults (age 65 and above) belonging to 'Clalit' in several aspects, in the use of three types of telehealth services:
 - Use of digital services for administrative tasks,
 - Use of synchronous "online visits" with the patient's personal physician during clinic business hours, and
 - Use of "afterhours" consultations during evenings, nights, and weekends when the clinics are closed.
- The data was collected and analyzed throughout three distinct time periods: before the COVID-19 pandemic in Israel, during the onset of the COVID-19 pandemic in Israel and following the COVID-19 "peak" in Israel.

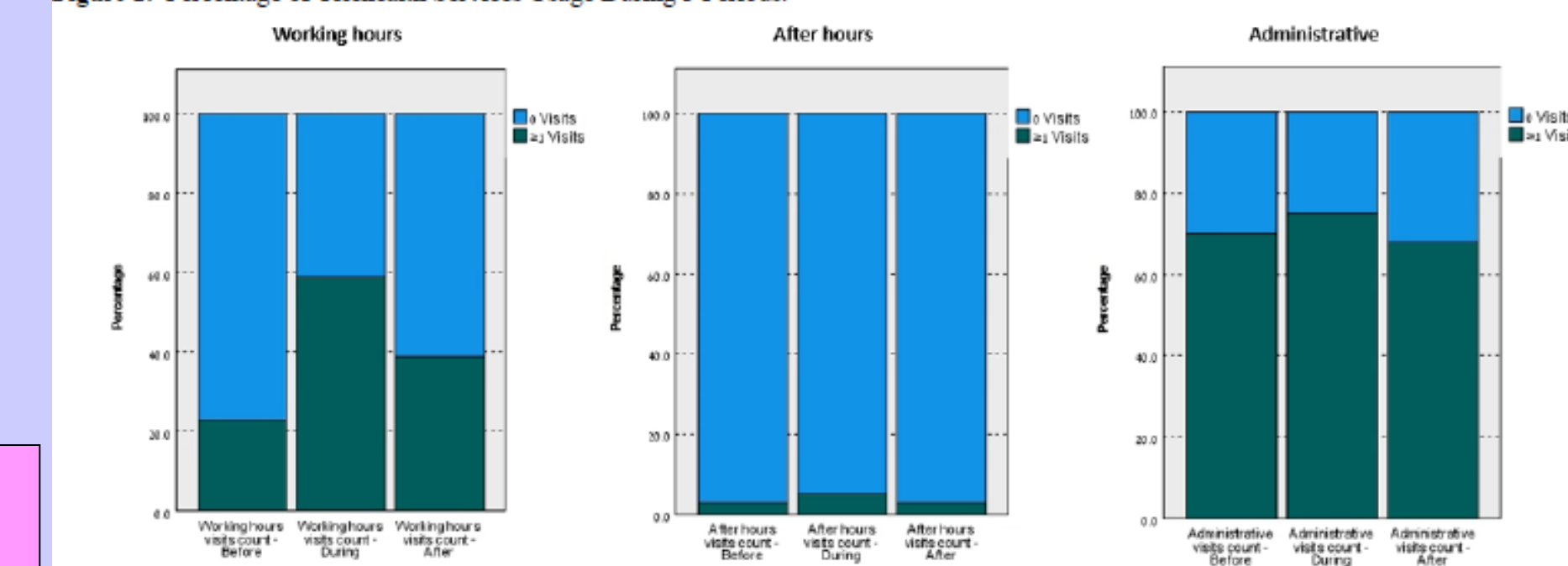
Results

- Data of 618850 patients who met the inclusion criteria was extracted.
- Telehealth services utilized for administrative purposes were the most popular.
- **The most intriguing finding was that the older population significantly increased their use of all types of telehealth services during the COVID-19 period, and in the majority of types, this usage decreased after the COVID-19 peak, but to a level that was higher than the baseline level prior to the COVID-19 period !**
- Prior to the COVID-19 period, 23.1% of the study population used "online visits", and 2.2% used "afterhours" consultations, at least once.
- The percentage of usage for these services increased during the COVID-19 period to 59.2% and 5.0%, and then decreased during the 3rd period (after the COVID-19) to 39.5% and 2.4%, respectively ($P < 0.001$).
- Multiple patient variables have been found to be associated with the use of the different telehealth services, in each time-period.

Table 3: Comparison of Telemedicine usage (at least once) at the 3 periods, results of the Cochran's Q test

Period	Online visits		Afterhours visits		Administrative	
	N (%)	p-value	N (%)	p-value	N (%)	p-value
"Before"	142,936 (23.1)	<0.001	13,837 (2.2)	<0.001	427,295 (69.0)	<0.001
"During"	366,566 (59.2)		30,777 (5.0)		459,622 (74.3)	
"After"	244,572 (39.5)		14,584 (2.4)		420,209 (67.9)	

Figure 2. Percentage of Telehealth Services Usage During 3 Periods.



Conclusions

- Despite the limitations and obstacles, the senior population uses telehealth services, and can increase their consumption, when they are needed.
- This people can learn how to use digital health services effectively and they should be given the opportunity to do so by creating suitable and straightforward telehealth solutions tailored for this population and enhancing their usability.

