

## EPV1470

## The Impact of GLP-1 Receptor Agonists (GLP-1 RAs) on Mental Health: A Systematic Review

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**Introduction:** Glucagon-like peptide-1 receptor agonists (GLP-1 RAs) are a class of pharmacological agents that have gained significant attention and utility in managing metabolic disorders, particularly type 2 diabetes mellitus and obesity, often in combination with behavioral therapy. These agents mimic the physiological actions of GLP-1, a hormone released from the gastrointestinal tract in response to food intake, thereby stimulating insulin secretion, suppressing glucagon release, slowing gastric emptying, and promoting satiety through both peripheral and central nervous system mechanisms. Beyond their metabolic benefits, GLP-1 RAs have shown potential antidepressant and anxiolytic effects, which may be mediated through neuroprotective mechanisms, reduction of neuroinflammation, and modulation of neurotransmitter systems.

**Objectives:** This systematic review aims to synthesize existing evidence on the effects of GLP-1 RAs on mental health outcomes, including both potential therapeutic benefits across various psychiatric disorders and the risk of associated adverse mental health effects.

**Methods:** This systematic review was conducted across PubMed/MEDLINE and Web of Science. Inclusion criteria encompassed human and animal studies examining the impact of GLP-1 RAs on mental health. Data from 81 selected studies were extracted and analyzed, focusing on mental health outcomes and reported adverse effects.

**Results:** GLP-1 RAs exhibit potential beneficial effects on depressive symptoms, cognitive function, and reduced risk of suicidal ideation in animal and human models through antioxidant, anti-inflammatory mechanisms, and modulation of neurotransmitter pathways. Additionally, GLP-1 RAs were effective in reducing alcohol and substance use and binge eating behaviors. Adverse psychiatric effects associated with GLP-1 RAs, including depression, anxiety, and suicidal ideation, are noted in pharmacovigilance analyses, with variations among different GLP-1 RAs.

**Conclusions:** Our systematic review highlights the potential role of GLP-1 RAs in psychiatric care, underscoring their potential therapeutic benefits across a spectrum of mental health conditions. Animal studies consistently demonstrate positive outcomes, revealing antidepressant effects, modulation of addictive behaviors, and improvements in eating disorders through various neurobiological mechanisms. Human studies present a more nuanced landscape with conflicting evidence regarding the impact of GLP-1 RAs on depressive symptoms and other psychiatric outcomes, suggesting a need for further rigorous investigation. Despite these promising findings, significant limitations, such as study heterogeneity, funding biases, and the predominance of animal model data, temper

definitive conclusions. Longitudinal and rigorous studies are warranted to elucidate the long-term effects and safety profile of GLP-1 RAs in psychiatric contexts.

**Disclosure of Interest:** None Declared

## Promotion of Mental Health

## EPV1473

## Which factors predict the improvement perception after a Single-Session Intervention on frontline professionals during a crisis situation?

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**Introduction:** The COVID-19 pandemic set up a global health crisis, with an impact on the daily lives of the population. The effectiveness and importance of Single-Session Interventions (SSI), have increasingly been demonstrated, which also found expression during the Pandemic and remote care and has shown a significant impact in reducing symptoms, reducing relapses and hospitalizations, increasing positive attitudes, improving treatment adherence, and reducing the length of hospital stay for various mental disorders. It is considered an easy-to-access and economical tool.

The Hospital de Clínicas de Porto Alegre (HCPA) and the Brazilian Ministry of Health developed the TELEPSI. This Project aims to: provide telecare using different types of psychotherapeutic approaches to health professionals, teachers, and essential service workers during the Pandemic in Brazil.

**Objectives:** This study aims to investigate the predictors of perceived improvement after the Single Session Intervention with Enhanced Psychoeducation (SSI-EP) with support videos in frontline professionals during the Covid 19 Pandemic.

**Methods:** The COVID-19 pandemic set up a global health crisis, with an impact on the daily lives of the population. This study analyzed data from a large trial including frontline workers from April 2020 to December 2021. We included all participants randomized to SSI-EP.

**Results:** The final sample consisted of 709 subjects, 82.8% were health professionals, 87.8% health professionals. One month after the intervention, 558 (78.7%) have improved emotional symptoms. Factors associated with better outcomes were the number of videos watched by the participants and use of medications without a medical prescription. Excessive consumption of carbohydrates and fats was negatively associated with improvement.

## Image:

Table 1. Descriptive statistics of sociodemographic and clinical variables of study participants (n = 709).

Variables	Overall (n = 709)
<b>Sex</b>	
Female	621 (87.8%)
<b>Age</b>	
Mean (SD)	37.7 (10.1)
Median [Min, Max]	37.0 [19.0, 72.0]
<b>Profession</b>	
Health Professional	587 (82.8%)
Teacher	67 (9.4%)
Essential Services*	55 (7.7%)
<b>Number of videos watched (follow-up)</b>	
Mean (SD)	5.68 (2.31)
Median [Min, Max]	6.00 [1.00, 12.0]
<b>Number of absences at work</b>	
Mean (SD)	2.0 (5.70)
Median [Min, Max]	0 [0, 60.0]
<b>Perceived improvement</b>	
About the same or worse	151 (21.2%)
Better	558 (78.7%)

SD = Standard deviation, MI

\* For example: professionals with jobs that could not stop during the Pandemic as drivers, delivery men, police officers, garbage collectors.

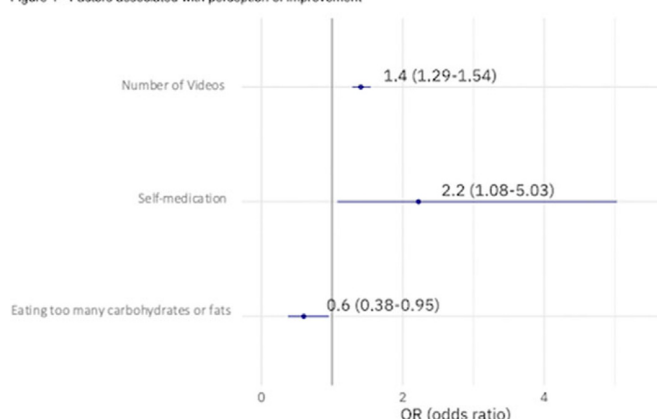
## Image 2:

Table 2. Which video in the patient's perception helped the most (n = 635).]

Videos	Overall (n = 635)
Normal and excessive anxiety	127 (20%)
Sleep hygiene	73 (11.5%)
Physical exercise	38 (6%)
Sadness and Depression	38 (6%)
Anger and Irritability	36 (5.7%)
Stress and stress reaction	30 (4.7%)
Burnout	28 (4.4%)
Healthy eating	28 (4.4%)
Taking care of children	19 (3%)
Fear of contagion	16 (2.5%)
Social support	14 (2.2%)
How to protect yourself from COVID-19	13 (2%)
Excessive exposure to the news	5 (0.8%)
Excessive use of social media	4 (0.6%)
Use of alcohol and drugs	4 (0.6%)
Caring for the Elderly	2 (0.3%)
All videos	94 (14.8%)
None	66 (10.4%)
Missing	74 (10.4%)

## Image 3:

Figure 1 - Factors associated with perception of improvement



**Conclusions:** This new TELEPSI proposal that combines online SSI based on Psychoeducation with the sending of support videos proved to be effective, as we saw in the main article in which a significant proportion of participants improved. The participant's perception of improvement, corroborates the data found on the improvement of symptom scales and some factors associated with this outcome, such as videos. This was an interesting finding and the importance of studying and exploring and studying more and more digital interventions, which can offer access to many people and have low implementation costs. We believe that in this way we will be able to better indicate such new psychotherapeutic strategies in a more personalized and adapted way. Enhanced psychoeducation is an effective and low-cost approach to improving symptoms. More research is needed to compare its effectiveness with other intervention strategies. Furthermore, its application must be explored beyond the context of the pandemic and social isolation.

**Disclosure of Interest:** None Declared

## EPV1474

### Predictors of response after single session interventions for emotional distress: using enhanced psychoeducation in crisis situations

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**Introduction:** The COVID-19 pandemic had a major impact on the world's emotional health, and knowledge is limited about the efficacy of traditional interventions in this context. The TelePSI Project, initiated by the Hospital de Clinicas de Porto Alegre in collaboration with the Brazilian Ministry of Health, aimed to provide online