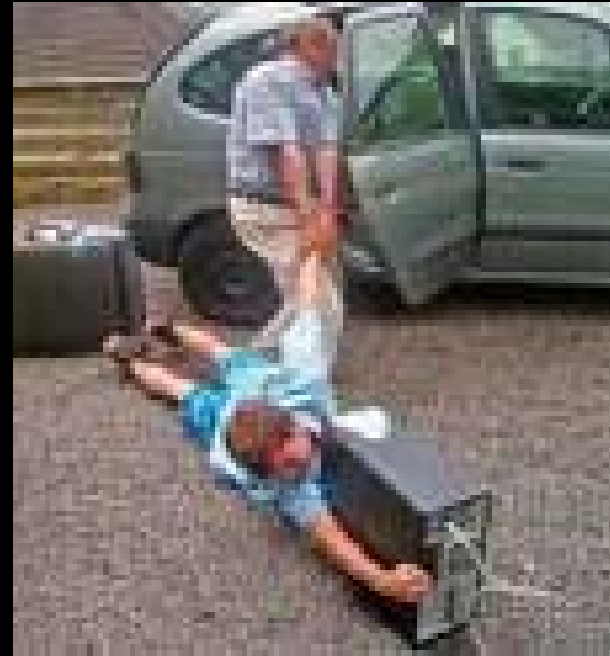


# Evaluation of internet addiction



# and depression by telepsychiatry



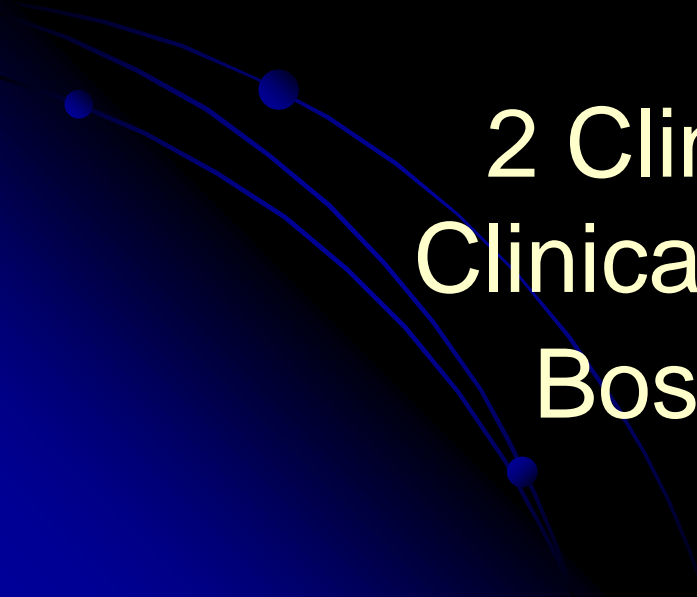
# **Evaluation of internet addiction and depression by telepsychiatry**



# Milan Stojakovic <sup>1,2</sup>

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### *Abstract:*

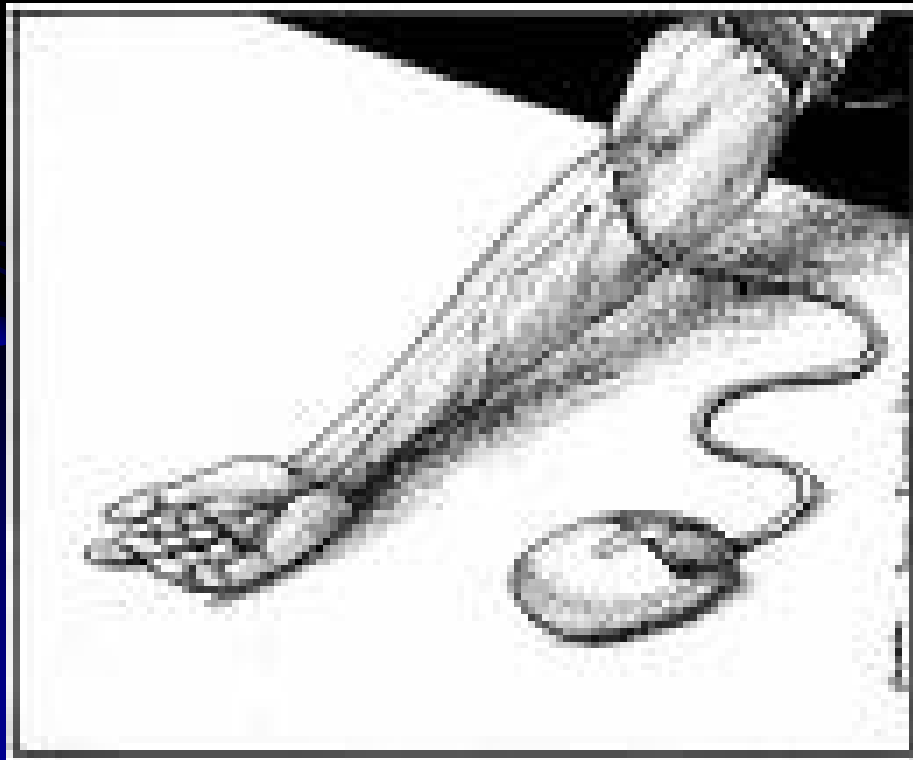
**BACKGROUND:** The aim of the study was to evaluate the relationship between depression and Internet addiction(IA) by Telepsychiatry service.

**METHODS:** A total of 80 Bosnian clients were studied. Internet Addiction Test (IAT), Beck Depression Inventory (BDI), and the Zung Depression Inventory (ZDI) was used, by Telepsychiatry service, to assess state measures of symptom severity. First, they were evaluated for their severity of Internet addiction with consideration of their behavioral characteristics and their primary purpose for computer use by IAT. Second, we investigated Depression by Telepsychiatry service with BDI and ZDI scale. Third, we investigated correlations between depression and Internet addiction.

**RESULTS:** The symptoms of IA had been founded at 47(58,75%) and 33(41,25 %) of patients had no IA. Symptoms of depression had been found at 36(45,00 %) patients. Internet addiction was significantly associated with depressive symptoms; IA and depression had been found at 33(41,25 %) patients ( $P<0.01$ ).

**CONCLUSIONS:** This study reveals a significant association between Internet addiction and depressive symptoms. The data suggest the necessity of the continued examination, evaluation and follow-up evolution of IA by Telepsychiatry service of the potential underlying depression in the treatment of IA.

# BACKGROUND



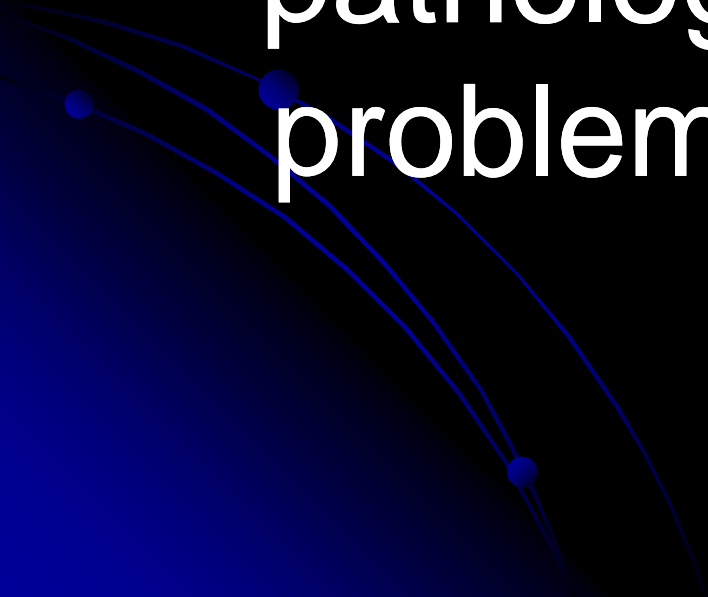
## BACKGROUND

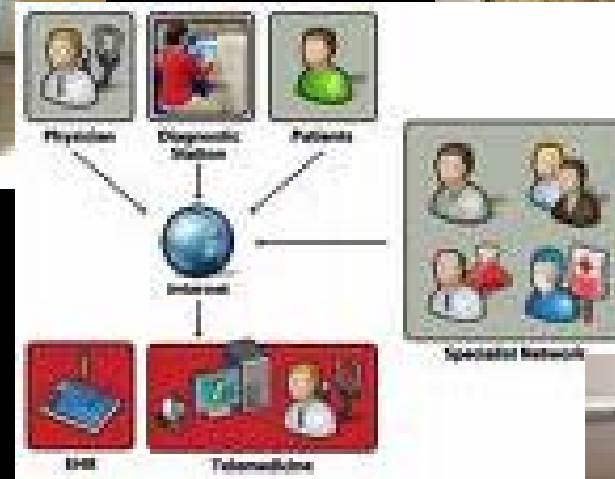
With the growing importance of the Internet in everyday life, more and more people are accessing various on-line resources each day.

The World Wide Web is informative, convenient, resourceful, fun, but also potentially a way for internet addiction.

## **BACKGROUND**

This behavior has variously  
been called  
Internet addiction,  
pathological Internet use,  
problematic Internet use,  
etc.



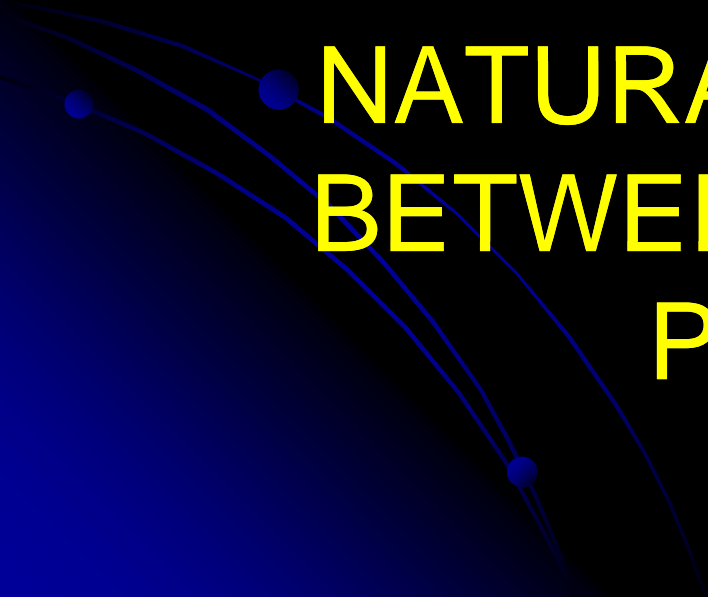


# Introduction :





**TELEPSYCHIATRY AND E-  
MENTAL HEALTH SERVICES  
PRIMARILY INVOLVE  
VIDEOCONFERENCING OVER  
HIGH SPEED (BROADBAND)  
NETWORKS TO ENABLE  
• NATURAL INTERACTIONS  
• BETWEEN PATIENTS AND  
• PROVIDERS.**






THE TERM  
“TELEPSYCHIATRY” REFERS  
TO THE USE OF  
TELECOMMUNICATION  
TECHNOLOGIES WITH THE  
AIM OF PROVIDING  
PSYCHIATRIC SERVICES  
FROM A DISTANCE.

Telepsychiatry connects patients and mental health professionals, **permitting effective diagnosis, treatment, education, transfer of medical data and other activities related to mental health care.**

Traditionally, this has required leasing specialized high speed telephone line for videoconferencing.


TODAY, THE EQUIPMENT  
NECESSARY FOR  
HIGH QUALITY LIVE TWO-WAY  
VIDEO-TELECONFERENCING  
IS AVAILABLE  
IN A LAPTOP COMPUTER,



# SERVICES FOR TELEPSYCHIATRY

provided include:

Mental health Consultation services,  
Medication Review,  
Follow-Up Visits to Monitor Patient Progress,  
Individual and Family Therapy,  
Emergency Consultation,  
Patient Care,  
Medication management without travel,  
Employee Assistance Program.



Telepsychiatry offers professional medication management for depression, anxiety, addiction, and other forms of mental illness. Patients access the physician - from home, using **home-based video-teleconferencing equipment** and software, such as Skype for PC or iChat AV for Mac OS X.

A telepsychiatry service providing **mental health care by videoconference** in real time on patients' own language.

A telepsychiatry service, using wireless technologies (WADSL) was established in order to provide psychiatric assessments and/or treatment for patients with **DEPRESSION.**

**Telepsychiatry can be quite helpful in providing this type of service for patients with DEPRESSION.**





# METHODS:



## METHODS:

A total of 80 Bosnian clients were studied.

1. **Internet Addiction Test (IAT),**
2. **Beck Depression Inventory (BDI),**  
and the
3. **Zung Depression Inventory (ZDI)**

was used,  
by Telepsychiatry service,  
to assess state measures  
of symptom severity.

# INSTRUMENTS:

## 1. Internet Addiction Test (IAT),

1. Young, K. (1996). Internet addiction: the emergence of a new clinical disorder. *CyberPsychology & Behavior* 3:237–244.
2. Young, K. (1998). *Caught in the Net*. New York: John Wiley & Sons.

## 2. Beck Depression Inventory (BDI),

Beck, A.T., Ward, C.M., Mendelson, M., Mock, J.F., & Erbaugh, J.K. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, 4, 5~571.

and the

## 3. Zung Depression Inventory (ZDI)

Zung, W.K. (1965). *Self-rating depression scale*. New York; Springer-Verlag.

# Internet Addiction Test (IAT)

Developed by Dr. Kimberly Young,  
the IAT is a 20-item questionnaire  
that measures mild, moderate, and severe  
levels of Internet Addiction.

**To assess your level of addiction,  
answer the following questions using this scale:**

- 1 = Rarely.**
- 2 = Occasionally.**
- 3 = Frequently.**
- 4 = Often.**
- 5 = Always.**



# Internet Addiction Test

(IAT) Dr. Kimberly Young, the IAT is a 20-item questionnaire

1. How often do you find that you stay on-line longer than you intended?
2. How often do you neglect household chores to spend more time on-line?
3. How often do you prefer the excitement of the Internet to intimacy with your partner?
4. How often do you form new relationships with fellow on-line users?
5. How often do others in your life complain to you about the amount of time you spend on-line?
6. How often do your grades or school work suffer because of the amount of time you spend on-line?
7. How often do you check your e-mail before something else that you need to do?
8. How often does your job performance or productivity suffer because of the Internet?
9. How often do you become defensive or secretive when anyone asks you what you do on-line?
10. How often do you block out disturbing thoughts about your life with soothing thoughts of the Internet?
11. How often do you find yourself anticipating when you will go on-line again?
12. How often do you fear that life without the Internet would be boring, empty, and joyless?
13. How often do you snap, yell, or act annoyed if someone bothers you while you are on-line?
14. How often do you lose sleep due to late-night log-ins?
15. How often do you feel preoccupied with the Internet when off-line, or fantasize about being on-line?
16. How often do you find yourself saying "just a few more minutes" when on-line?
17. How often do you try to cut down the amount of time you spend on-line and fail?
18. How often do you try to hide how long you've been on-line?
19. How often do you choose to spend more time on-line over going out with others?
20. How often do you feel depressed, moody, or nervous when you are off-line, which goes away once you are back on-line?

## Internet Addiction Test

(IAT) Dr. Kimberly Young, the IAT is a 20-item questionnaire

mild, moderate, and severe **levels of Internet Addiction.**

Here's a general scale to help measure score:


**20 - 49 points:** You are an average on-line user. You may surf the Web a bit too long at times, but you have control over your usage.

**50 -79 points:** You are experiencing occasional or frequent problems because of the Internet. You should consider their full impact on your life.

**80 - 100 points:** Your Internet usage is causing significant problems in your life. You should evaluate the impact of the Internet on your life and address the problems directly caused by your Internet usage.

*Internet Addiction Test (IAT<sup>2</sup>)*. This is a 20-item questionnaire on which respondents are asked to rate items on a five-point Likert scale, covering the degree to which their Internet use affects their daily routine, social life, productivity, sleeping pattern, and feelings. The minimum score is 20, and the maximum is 100; the higher the score, the greater the problems Internet use causes. Young suggests that a score of 20–39 points is an average online user who has complete control over his/her usage; a score of 40–69 signifies frequent problems due to Internet usage; and a score of 70–100 means that the Internet is causing significant problems.

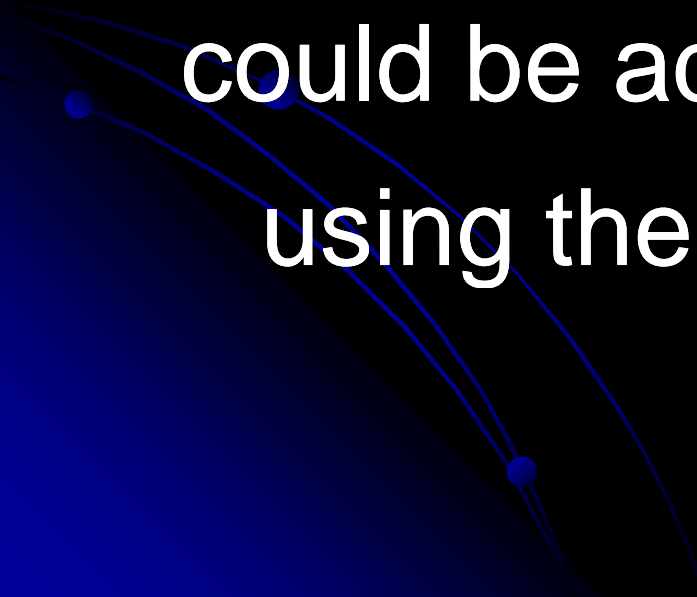
The aim of the study was to  
evaluate the RELATIONSHIP  
BETWEEN DEPRESSION  
AND INTERNET  
ADDICTION(IA) BY  
TELEPSYCHIATRY  
SERVICE.





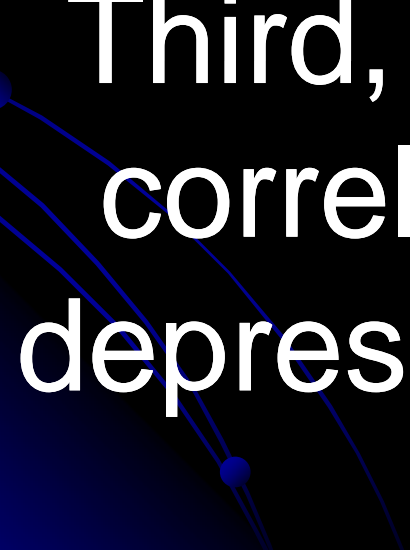
Telepsychiatry and e-mental health services could improve the quality and efficiency of mental health services delivery.

Furthermore, other clinical needs could be addressed by telehealth using the same infrastructure.



First, they were evaluated for their severity of Internet addiction with consideration of their behavioral characteristics and their primary purpose for computer use by IAT.

Second, we investigated Depression by Telepsychiatry service with BDI and ZDI scale.



Third, we investigated correlations between depression and Internet addiction.

# A TELEPSYCHIATRY SERVICE TEST METHODS INCLUDE different scales:

Self-reported scales: Beck scale for  
depression & Zung scale for  
depression,

Interview with physician: Hamilton  
scale (HAMD)

In this study  
we investigated Depression by

Self-reported scales:

**Beck scale for depression**

**&**

**Zung scale for depression,**

There can be several potential **barriers** to the diffusion of telepsychiatry, e consulting and e-mental health.

Some of these are concomitant with the **adoption of any new technologies** and practices in health care, **licensure**, **identify technology infrastructure need**, **equipment purchases** etc. An activity that is never free. It requires money to begin services for telepsychiatry, money to continue and has as a goal the making of more money.

## COMPONENTS AS EVIDENCE THAT SOMEONE CAN BECOME ADDICTED TO THE INTERNET:

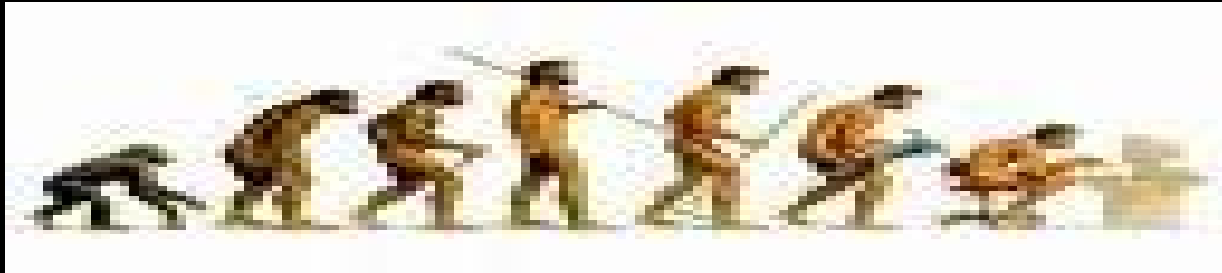
- 1) *excessive use*, often associated with a loss of sense of time or a neglect of basic drives,
- 2) *withdrawal*, including feelings of anger, tension, and/or depression when the computer is inaccessible,
- 3) *tolerance*, including the need for better computer equipment, more software, or more hours of use, and
- 4) *negative repercussions*, including arguments, lying, poor achievement, social isolation, and fatigue

The answer is that those people who are online addicts are often attracted by these kinds of website listed below.

1. Day trading
2. Adult sex chat
3. Online pornography
4. Playing computer games
5. Gambling in virtual casinos
6. Chatting with online strangers
7. Obsessively checking stock quotes
8. Searching for information not relevant to work



- **Negative Consequences  
Of Addictive Use  
Of The Internet**

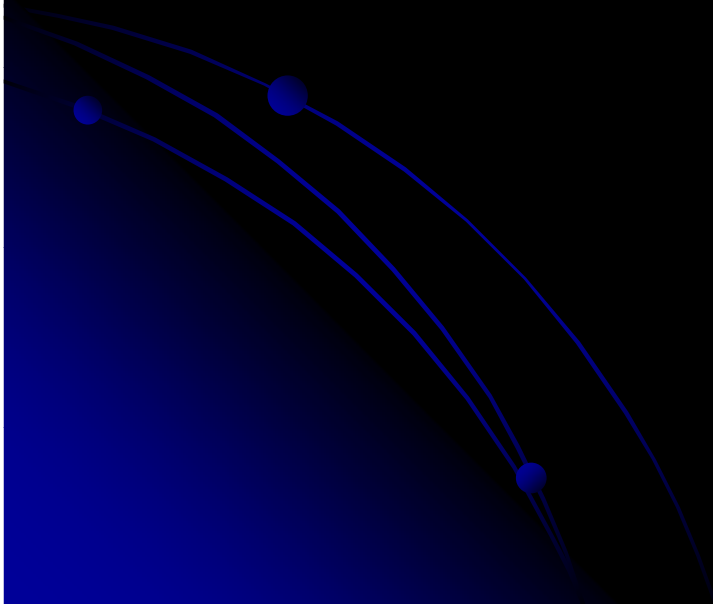


- Familial Problems
- Academic Problems
- Occupational Problems

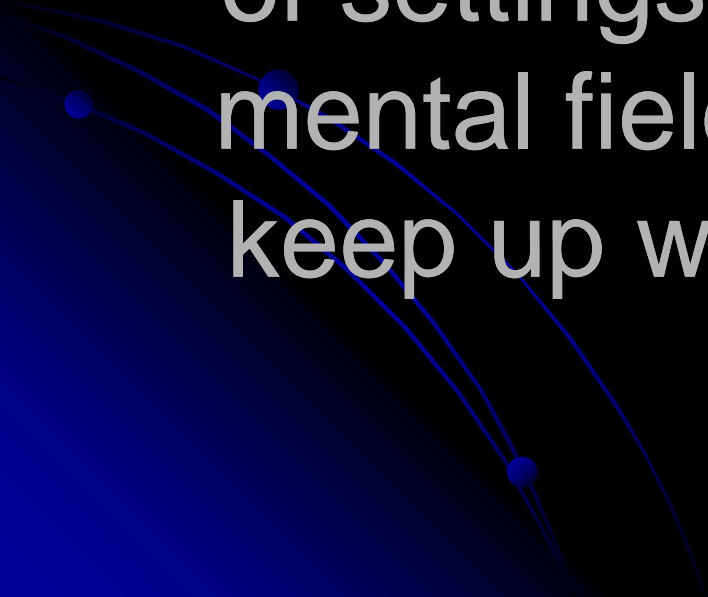
Internet Addiction,  
Internet Addiction Disorder,  
Compulsive Internet Use,  
Computer Addiction,  
Internet Dependence and  
Problematic Internet Use

- all of these are essentially terms  
that have been applied to those that spend  
excessive amounts of time online at the  
expense of and to the detriment of other  
aspects of their lives.

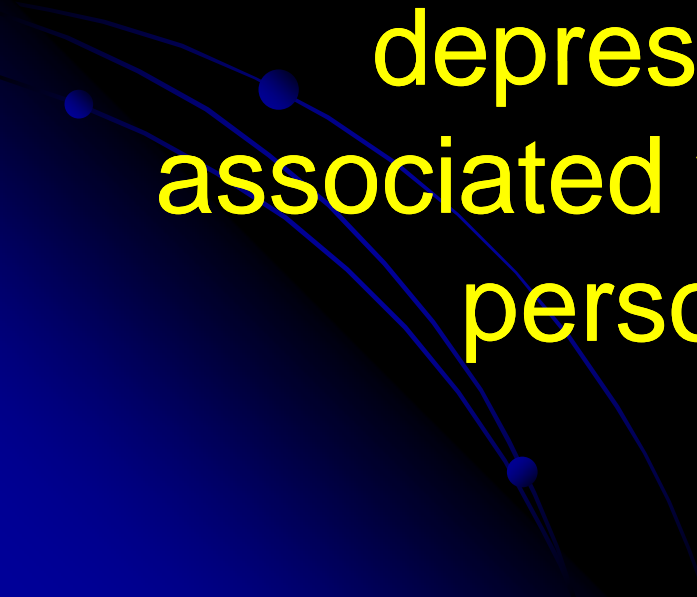
# DISCUSSION



Telepsychiatry, as suggested by this review, is a growing field with the potential to deliver high-quality, much needed assistance in a variety of settings to persons in need of mental field of telepsychiatry will keep up with this moving target.




**DISCUSSION:** As noted with other addictive disorders, our findings suggest that increased levels of depression are associated with those who become addicted to the Internet. This suggests that clinical depression is significantly associated with increased levels of personal Internet use.



Telepsychiatry patients appear to be satisfied with the service, equipment, and setting.

All participants reported a high level of acceptance and satisfaction with telepsychiatry.

Patients also prefer telepsychiatry to in-person appointments, because travel time, time off from work, and child care is not an issue with telepsychiatry.



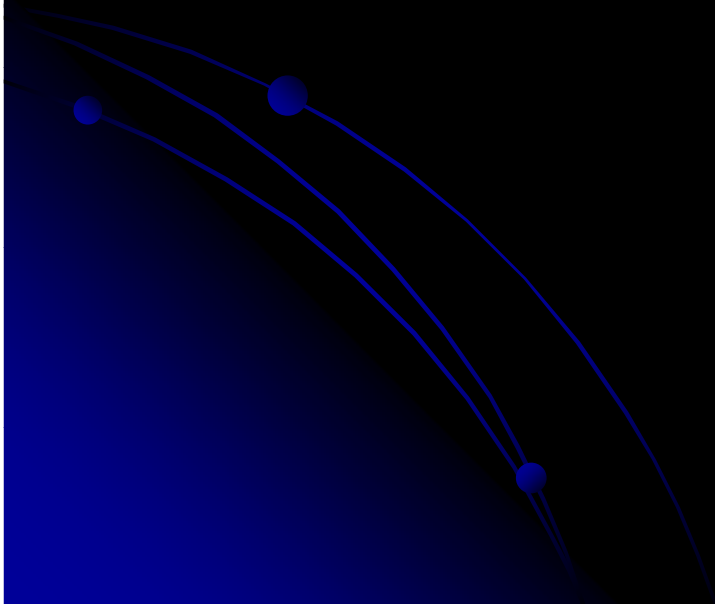
**Telepsychiatry is currently one of  
the most effective ways to  
increase access to psychiatric  
care for individuals living in  
underserved areas**

**Continued follow-up by  
Telepsychiatry service will  
address the evolution of  
DEPRESSION SYMPTOMS AND  
INTERNET ADDICTION**



As noted with other addictive disorders, our findings suggest that increased levels of depression are associated with those who become addicted to the Internet. This suggests that clinical depression is significantly associated with increased levels of personal Internet use.

# RESULTS



## **RESULTS:**

**The symptoms of  
Internet addiction  
had been founded at  
47(58,75%)  
and  
33(41,25 %) of patients  
had no Internet addiction .**

## RESULTS:

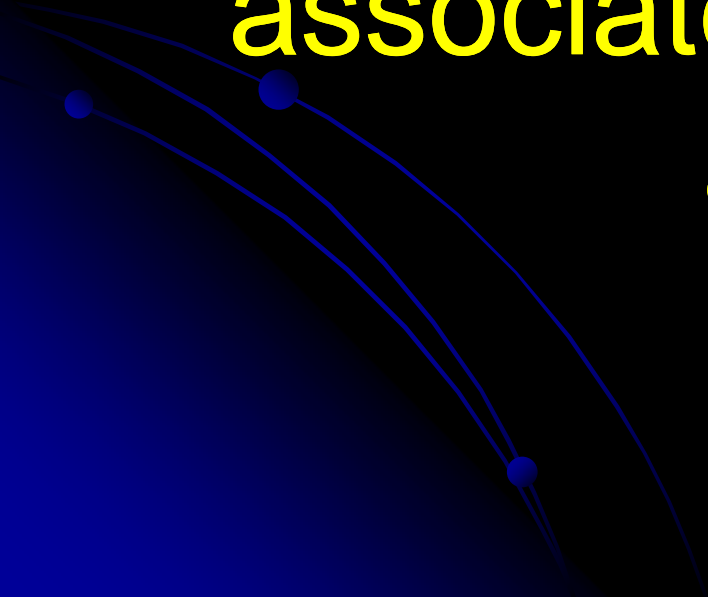
Symptoms of depression had been found at 36(45,00 %) patients.

Internet addiction was significantly associated with depressive symptoms; IA and depression had been found at 33(41,25 %) patients ( $P < 0.01$ ).

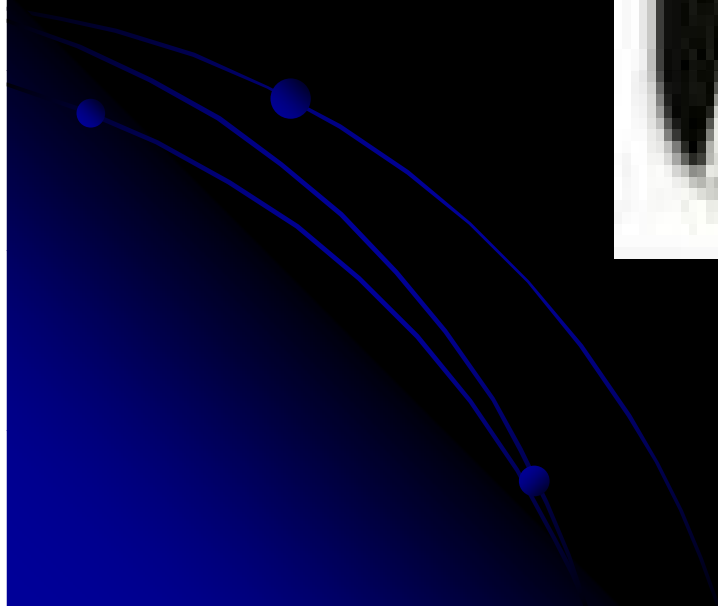
## CONCLUSIONS:

This study reveals a significant association between Internet addiction and depressive symptoms. The data suggest the necessity of the continued examination, evaluation and follow-up evolution of IA by Telepsychiatry service of the potential underlying depression in the treatment of IA.

Research in the addictions field has shown also that psychiatric illnesses such as depression are often associated with other drug addiction.



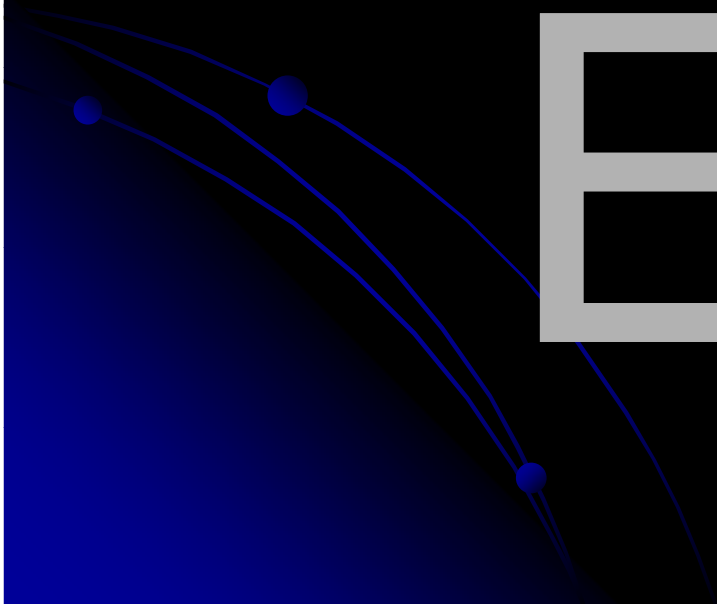
It is recommended  
that online users should  
remember that  
preventing the problem is  
better and easier than  
solving the problem.





THE

END



**the end**

