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POPULATION HEALTH AND DIGITAL HEALTH PROMOTION – ASSESSMENT 1

BLOG AND POSTURE DESIGN

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1.THE SLEEP SOLUTION HUB:

USING SLEEPPIO APP FOR TRACKING YOUR SLEEP

Sleep deprivation:

In our fast-paced and interconnected world, sleep deprivation has become a widespread but often unnoticed problem that impact the lives of millions. is a state where an individual consistently does not obtain a sufficient amount of sleep, whether due to life style choices, [work](#), medical issues, stress or various factors (NCBI,2006; Bandyopadhyay and Sigua, 2019). It can lead to a negative impact on physical health, mental health, cognitive function and overall quality of life (Liew and Aung, 2021). According to NHS more than 50% adult have sleeping problem.

Sleepio App:



It

Sleepio was started in march,2013 by NHS for providing online cognitive behavioral therapy to people live with insomnia and other sleep related problems. This app can be operated by computer, tablets or smart phones. This app is six week clinically proven app and available free of cost for improving the sleep pattern of people (NHS; Cowie et al,2018).According to NICE (2022) [Sleepio](#) is one kind of sleeping pill for people who did not get enough sleep and it save the money as well as decrease the number of GP appointments related to sleep problems.

Features of App:

According to NHS and NICE these are the key features are sleepio app for deal with the sleep problems.

- ✓ Sleep assessment
- ✓ Sleep schedule
- ✓ Cognitive behavioral therapy (CBT)
- ✓ Sleep diary
- ✓ Sleep education (like do or don't and about sleep problems)
- ✓ Relaxation techniques
- ✓ Tracking a progression or improvement
- ✓ Online community and support
- ✓ Professional guidance



According to NHS with the help of this app 54% fall asleep very fast, 45% people have a better experience on the second day of using app and it reduced the waking time during night was 62%.

Which are the Benefits of sleepio?

According to NICE (2022) up to 800,000 people of England use this app.

- Free of cost
 - Continuous support
 - Reduce sense of isolation
 - Engage with the people who have same problem
 - Learn the technique to deal with the triggers or stressful event.
 - Decrease the number of GP appointment
 - Develop routine for sleep
 - Sleep improvement tool
 - Give a best solution of problems every week
 - Use realistic approach
 - Provide suggestion such as avoid caffeine or tea, do exercise, take a bath etc.
 - Make a Daily schedule
 - Easily assessable and convenience
 - In latest version telehealth option
- (NHS, Coulson et al,2016)



Which are the cons of sleepio?

- Time consuming
- Data privacy
- Navigation problem
- Negative comparison with other
- Not suitable for severe sleep problems
- In some features need subscription (NHS, Coulson et al,2016)

Approaches to rectify any potential deficiencies...

According to Collard and colleagues (2021) here are some areas which needs to improve.

- Regularly feedback from user by the app can helpful to identify the area of improvement in features.
- Regular update and include new features for better experience of users.
- Use a new resources and relaxation techniques.
- Integrating the mobile app with wearable.
- Enhance the privacy and security of app.
- Conduct Research in this area and providing latest finding.

2. THE SILENT ENEMY: LIVER CANCER AND IT'S LINK TO ALCOHOLISM



Liver cancer:

Liver cancer is a formidable foe that frequently escapes early detection, often manifesting in advanced stages. The liver, a vital organ response for numerous metabolic functions, can fall victim to [Liver cancer](#) due to the alcoholism (Choi et al,2023). It remains concern for public health for all around world. New cases of liver cancer were approximately, 906,000 and 830,000 were die due to the liver cancer in year 2020 (Liu et al,2023).

[Heavy alcohol consumption](#) is the second highest cause for developing cancer. However, in current era, European countries people alcohol consumption level is highest as compare to other countries (Huang et al,2023). Because of these reasons to control alcohol consumption is very crucial and that's why this digital technology.

APP NAME: AlcoAlert

AlcoAlert is user-friendly mobile application designed for individuals to take control of their excessive alcohol consumption and promote their drinking habits. This app provide support as well as education regarding how to control the alcohol addiction and ultimately contributing people well-being and public health.

Key features of App:

In this app including the following features for users.

- ✚ Personalized tracking (self-monitoring)
- ✚ Set a goal and reminders
- ✚ Immediate feedback to users
- ✚ Education about early intervention of risk
- ✚ Connect users with supportive community
- ✚ Mind diversional activities (games, music, short clips etc.)
- ✚ Emergency resources or contact (quick access to drivers, taxi and medical facilities)
- ✚ Privacy and data security



Which are the benefits of App?

According to Grant and their colleagues (2023) there are several benefits to use of app for control alcohol intake such as....



- AlcoAlert increase awareness about health risks due to excessive alcohol intake and learn about responsible drinking.
 - Encourage the users for monitoring their alcohol intake.
 - Users can set goal and understand healthier habits.
 - It's provided immediate feedback regarding the guidelines.
 - Connect individual with similar goal people for motivation.
 - The app collects the data which can be useful for public health research or campaign.
 - In case of emergency situation provide assistance and facilities.
 - Safety and confidentiality of user's information.

Which are the shortfalls of App?

Here, are some drawbacks of using app for control the alcoholism (Karthikeyan et al,2023).

- Sometimes users not inputting the data in app.
- This app not suitable for severe cases of alcohol addiction.
- It is a very challenging for long time engagement.
- People overly reliant on the app and not develop their own self-control and responsibility.
- Always concern about data privacy and security.

Approaches to rectify any potential deficiencies...

- ✓ For User accuracy provide clear instruction about input data and include drink size in app.
- ✓ Update the activities frequently for make an app more interesting for users as well as including reward option in games.
- ✓ Provide proper guidance and education for severe cases.
- ✓ Improve the data privacy and security option.
- ✓ Provide more education and information about self-management.
- ✓ Regular app update and feedback option for improving the features of app.

➤ Both digital and non-digital technologies have been utilizing to help individuals improve their sleep habits. Here's an example of each technology.

Non-digital technology intervention: Light therapy – it also known as phototherapy, is a non-digital method used for sleep disorders (Chesson et al, 1999). In this therapy exposing individuals to specific types of light, usually through specialized lightboxes or lamps that replicate natural daylight and can help reset the body's internal clock and improve sleep patterns. This therapy proven very effective for individuals with particular sleep related problems (Maanen et al, 2016; Terman et al, 2006).

