

H5J (Hypnotic 5 Fingers) Mobile Application For Reduce Anxiety Problems Chemotherapy Patient

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ABSTRACT

Introduction: Chemotherapy as a therapy for cancer patients has several effects, one of which is anxiety. Anxiety can be reduced by using relaxation techniques. One of these relaxation techniques can be done with five finger hypnosis. These efforts can be modified in accordance with the 4.0 industrial revolution by using digital technology. **Objective:** The purpose of this study was to develop H5J (Mobile Application Hypnotic 5 Fingers) to reduce anxiety problems in chemotherapy patients. **Methods:** The application was developed through two stages, the first was carried out by creating application content and sophisticated systems by technology experts. Furthermore, in the second stage, a perception test was performed in the fields of mental, medical surgical nursing and information technology expert. Then, 100 patients with chemotherapy were assessed in Jember Regency Malang Regency, East Java, Indonesia using a learning media questionnaire, and Intraclass Correlation Coefficients (ICC) test. The H5J Mobile application contains menu content that provides information about non-pharmacological relaxation therapy material relaxation distraction in the form of five-finger hypnosis (hypnosis guide and five-finger hypnosis wave) in industrial era 4.0. **Results:** The statistical analysis showed the value of 0.875, while the average of 3 assessors was $0.964 > 0.5$ (high stability). Furthermore, from the diligence results, 86.78% of the patients stated that the application was very suitable for use, while 13.22% commented that it was feasible. **Conclusion:** H5J Mobile Application was a health application used for chemotherapy patients and was able to reduce anxiety.

ABSTRAK

Latar belakang: Kemoterapi sebagai terapi bagi pasien kanker memiliki beberapa efek, salah satunya adalah kecemasan. Kecemasan dapat dikurangi dengan menggunakan teknik relaksasi. Salah satu teknik relaksasi ini dapat dilakukan dengan hipnosis lima jari. Upaya tersebut dapat dimodifikasi sesuai dengan revolusi industri 4.0 dengan menggunakan teknologi digital. **Tujuan:** Penelitian ini bertujuan untuk mengembangkan H5J (Mobile Application Hypnotic 5 Fingers) untuk mengurangi masalah kecemasan pada pasien kemoterapi. **Metode:** Aplikasi dikembangkan melalui dua tahap, yang pertama dilakukan dengan membuat konten aplikasi dan sistem yang canggih oleh pakar teknologi. Selanjutnya pada tahap kedua dilakukan uji persepsi di bidang keperawatan jiwa, keperawatan medikal bedah dan ahli teknologi informasi. Kemudian, 100 pasien kemoterapi di salah satu rumah sakit di Kabupaten Jember Kabupaten Malang, Jawa Timur, Indonesia dilakukan penilaian menggunakan media pembelajaran angket, dan uji Koefisien Korelasi Intraclass (ICC). Aplikasi H5J Mobile berisi konten menu yang memberikan informasi tentang materi terapi relaksasi non farmakologis distraksi relaksasi berupa hipnosis lima jari (panduan hipnosis dan gelombang hipnosis lima jari) di era industri 4.0. **Hasil :** Analisis statistik menunjukkan nilai 0,875 , sedangkan rata-rata dari 3 asesor adalah $0,964 > 0,5$ (stabilitas tinggi). Selanjutnya dari hasil uji tuntas, 86,78% pasien menyatakan aplikasi sangat layak digunakan, sedangkan 13,22% menyatakan layak. **Kesimpulan:** H5J Mobile Application merupakan aplikasi kesehatan yang digunakan untuk pasien kemoterapi dan mampu mengurangi kecemasan.

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Introduction:

Cancer is one type of non-communicable disease that has the highest mortality rate in addition to cardiovascular disease, respiratory disease and diabetes mellitus (Warganegara, 2016). This disease has many negative impacts on human life in terms of physical, psychological, social and spiritual, so that it has an impact on the quality of life of patients. The prevalence of cancer in various countries also shows an increase in cases. The American Cancer Society predicts that there will be 4,600 new cancer diagnoses and 600,000 cancer deaths (Siegel R., 2017). According to the Basic Health Research (Riskesmas) in 2018, the prevalence of cancer in Indonesia reached 1.79 per 1000 population, up from 2013 (KEMENKES, 2018).

Chemotherapy is one of the therapies for cancer patients at this time. In general the patient forms an emotional response consisting of questions, anxiety and depression (Haris, Syahrudin, Susanto, & Kekalih, 2015). Anxiety can be caused because patients will face chemotherapy as an effort to treat cancer (Pratiwi, Widiati, & Solehati, 2017). Anxiety can be reduced by using relaxation techniques. Relaxation is a technique or therapy in reducing tension and anxiety. One of these relaxation techniques can be done with five finger hypnosis. Five finger hypnosis is an intervention to reduce anxiety by helping clients to hypnotize themselves by imagining pleasant events in their lives. The use of 5 finger hypnosis is an art of verbal communication that aims to bring the client's mind waves into trance (alpha/theta waves). Also known as self-hypnosis which aims to self-programming, eliminate anxiety by involving the parasympathetic nerves and will reduce the increase in heart work, respiration, blood pressure, sweat glands etc. (Evangelista, Widodo, & Widiani, 2016)

These efforts can be modified in accordance with the 4.0 industrial revolution by using digital technology. Five-finger hypnosis will be developed in the H5J (

Hypnosis 5 Jari) Mobile Application) model. The content of the application is in the form of non-pharmacological relaxation therapy materials, relaxation reactions in the form of five-finger hypnosis (hypnosis guide and five-finger hypnosis sound). With the Hypnotis 5 Jari mobile application, patients are able to access and use the health service model to reduce anxiety before undergoing chemotherapy via a smartphone. The purpose of this study was to develop H5J (Mobile Application Hypnotic 5 Fingers) to reduce anxiety problems in chemotherapy patients.

Methods:

This study used a quantitative approach to determine the perceptions of three experts and respondents about using the application by 5 finger Hypnosis, and was conducted in Jember Regency, East Java, Indonesia. The samples used were experts in mental, medical surgical nursing and as well as those in the information technology fields. Furthermore, the respondents were 100 chemotherapy patient

This application was developed in two stages, the first was creating it by determining the contents to be included, then inputting them into the system to develop H5J Mobile Application. The following were the system contents:

This application was created by experts in the information technology field in the form of a smartphone gadgets. The supporting applications, such as Microsoft Word, Power Point (Microsoft Office), and animation editing gadgets were also included. Therefore the contents in these applications were introduced to chemotherapy patient.

The second stage was testing the application on 100 patients with chemotherapy from one of the hospital in Jember Regency Malang Regency, East Java, Indonesia. The test was assessed by experts from mental, medical surgical nursing and information technology expert. Then 100 respondents receive a learning media

assessment questionnaire as a perception test. The following were the system contents:

No	Content	Sub Content
	Concept of Cancer	1. Meaning 2. Etiology 3. signs and symptoms
	Cancer treatment	1. Type of cancer treatment 2. Concept of chemotherapy 3. Functions of chemotherapy 4. Chemotherapy side effects 5. What to prepare for chemotherapy
	Anxiety Management	1. Meaning 2. Cause of anxiety 3. signs and symptoms of anxiety
	Non-pharmacological therapy	1. Meaning 2. Therapeutic Goals 3. Action To Reduce Anxiety
	Hamilton Anxiety Rating Scale	1. Meaning 2. Questionnaire sheet 3. Questionnaire history
	H5J (Five finger hypnosis)	Application description H5J wave

The results were assessed using perception reliability between raters with Intraclass Correlation Coefficients (ICC) on Statistical Product and Service Solutions (SPSS) 16. The approval and ethical feasibility of this study were carried out by the Health Research Ethics Committee STIKES dr Soebandi, Ethical Number No . 047/KEPK/SDS/V/2021

Results:

The H5J Mobile application contains menu content that provides information about non-pharmacological relaxation therapy material relaxation distraction in the form of five-finger hypnosis (hypnosis guide and five-finger hypnosis wave) in industrial era 4.0, anxiety prevention and management. The following were figures of the application content


Mobile Application H5J




PENGERTIAN KANKER




PENGOBATAN



CEMAS




NON FARMAKOLOGI



HIPNOTIS 5 JARI



HAMILTON ANXIETY RATING SCALE




Pengertian Cemas

Cemas merupakan suatu keadaan psikologis yang di alami seseorang dengan karakteristik berupa rasa takut, khawatir berkepanjangan dan rasa gugup. Sehingga dengan respon tersebut menyebabkan masalah dalam kehidupan sehari,hari. Cemas sendiri juga bisa di artikan sebagai rasa takut atau khawatir karena terdapat objek atau penyebab tertentu.

Penyebab cemas :

1. Faktor Biologis : adanya gangguan syaraf ke otak untuk mengontrol emosi dan rasa takut, gangguan akibat penyakit fisik yang di alami (diagnosis dokter kondisi klinis seperti kanker, akan di operasi, penyakit akut dan kronisdll)
2. Faktor lingkungan : terutama masa kecil (kekerasan dalam rumah tangga



Hipnotis 5 Jari

Mulai Hipnotis

Pengertian

Hipnotis 5 jari (H5J) merupakan aplikasi pada samrtphone yang bertujuan untuk membantu seseorang dengan rasa cemas akibat kanker baik akan di kemoterapi ataupun tidak. Tindakan ini

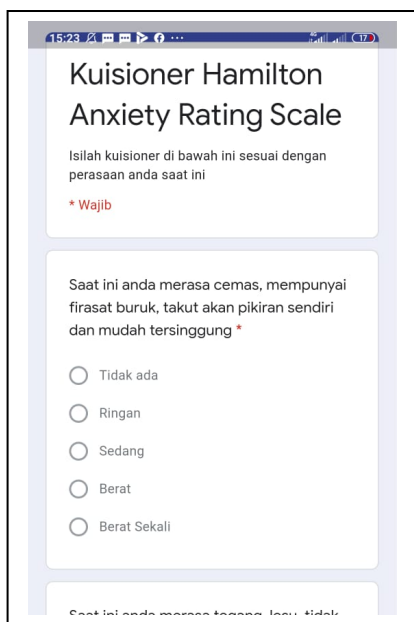


Figure 1. H5J Content

Furthermore, the perception test results using ICC analysis were shown in table 1 below:

Table 1. Expert perception test results with respondents using the ICC test

	<i>Intraclass Correlation</i>
Single Measures	0,875
Average Measures	0,964

Based on the content reliability test results, the evaluator value was 0.875, while the average value of the 3 assessors was $0.964 > 0.5$, therefore it was concluded that the application developed had an adequate reliability coefficient. This correlated with the Polger and Thomas (2000) study "The Introduction to The Research in Health Sciences" stating that the measuring instrument had adequate stability when the ICC value between the gauges was > 0.5 , while for high stability, it was > 0.80 . Furthermore, from the feasibility test conducted on 100 patient chemotherapy in Jember Regency, East Java, Indonesia, 86.78% stated that the application was very suitable for use, while 13.22% commented that it was feasible.

Discussion:

This application is a combination of various concepts, the first containing the concept of anxiety where this situation is often experienced by patients with chemotherapy which greatly impacts the mental health of cancer patients undergoing chemotherapy. (Juniarti, Rizona, & Hikayati, 2019). Various efforts were made in order to reduce the anxiety that is often experienced by patients with chemotherapy, including the development in the industrial revolution 4.0 era by incorporating internet technology. Technology development by utilizing smartphone applications also has the potential to expand the capacity to interact directly as feedback from smartphone-to-user. This capability presents further potential for anxiety self-management. Smartphone-based applications are of great concern especially in anxiety management. This condition shows that there is continuous rapid progress in the availability of digital as a new innovation in line with the development of industry 4.0 (Firth, Torous, Carney, Newby, & Cosco, 2018; Khalil, Faheem, Fahim, Innocent, & Mansoor, 2016)

The second concept in this application is the availability of the development of five-finger hypnosis waves developed in the form of an application. The five-finger hypnosis wave is able to reach the subconscious mind where emotions are processed so that the level of anxiety and other emotional problems decreases (Nugroho & Anggorowati, 2016)

In the last concept, there is a measurement of the level of anxiety that can be used in chemotherapy patients. Overall, these concepts are incorporated into the H5J (5 Finger Hypnosis) Mobile Application which can be used as one of the technological development innovations in the health sector to be applied to patients with chemotherapy.

Conclusion:

H5J Mobile Application was used in chemotherapy patient and was able to reduced anxiety.

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