

Analysis of the Use of Website-based Couple Therapy Module in TB Patients in Coastal Areas

Sitti Muhsinah¹, Dewi Sartiya Rini^{1*}, Fitri Wijayati¹

¹ Poltekkes Kemenkes Kendari, Kendari, Southeast Sulawesi, Indonesia

(Correspondence author email, dewi.sartiya@gmail.com)

ABSTRACT

The Couple Therapy module is based on the website as a form of intervention for TB patients in dealing with sexual needs. Key components of this web-based couple therapy module include programme content, use of multimedia, interactive online activities, and provision of feedback support. This study aimed to analyze the use of a website-based Couple Therapy Module on Pulmonary TB patients in the Coastal Area of Nambo District. The method used in this study is a combined research/combination of quantitative and qualitative (mixed-method), namely concurrent triangulation design (a balanced mixture of quantitative and qualitative) with a total of 20 respondents. The results of the study quantitatively showed that the couples therapy website had a positive impact marked by 90% of respondents stating that the website is easily accessible, has an attractive appearance, updated information and is interactive because it provides online consultation features. This is confirmed by participants' expressions regarding participants' perceptions of this website. Positive perception shows the expression of participants stating that the website is easily accessible, attractive display, fast access to information and interesting information. Negative perceptions show the expression of participants stating that it is difficult to open the website. The conclusion of this study is that website-based educational media is one of the right solutions in transferring health information to pulmonary TB patients.

Keywords: *Couple Therapy Module, Website, Pulmonary TB*

<https://doi.org/10.33860/jik.v17i3.3061>



© 2023 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>).

INTRODUCTION

Tuberculosis (TB) is an infectious disease that until now is still the leading cause of illness and death worldwide. Indonesia is one of the countries contributing to the second highest incidence of pulmonary TB in the world¹. By *Global Tuberculosis Report* In 2021, the number of newly diagnosed and reported TB patients worldwide was 5.7 million cases, with a death rate of 1.3 million cases². In Indonesia, there are an estimated 824,000 TB cases with 13,110 deaths from TB.

The Kendari City Health Office of Southeast Sulawesi in 2022 reported 1,181 cases with 25 deaths³. The coastal area of Nambo is an area in the city of Kendari with a large number of TB cases. Data from the Nambo Health Center TB program states that in 2022 there were 24 cases, and in the January-September 2023 period there have been 23 TB cases³.

The diagnosis, treatment and treatment undertaken by TB patients have had an impact on meeting basic human needs as a whole, one of which is the occurrence of sexual needs disorders^{4,5}. Interventions that can address the problem of sexual needs are by *Couple*

Therapy. Research conducted by Rini, Wijayati & Muhsinah (2023) on TB patients who experience sexual needs fulfillment disorders shows that intervention Couples therapy has significantly had a positive impact on patients' sexual needs⁶.

Couples therapy provided includes printed modules as a learning medium and health promotion to increase knowledge and change the behavior of TB patients. However, the use of print modules has many disadvantages, including limited information available, impractical, information cannot be updated, there is no interactive process between nurses / therapists, and expensive printing costs as well. The current reality is that people cannot be separated from gadgets, not only as a means of communication but also a means of managing health through applications or health information systems⁷.

Globally there has been a movement towards the use of digital technology in mental health care or psychotherapy, including the development of an increasing number of website-based therapy programs. Reasons for using these web-based interventions typically include accessibility, flexibility (in terms of when and where they can be accessed), lack of mental health care professionals to meet the need as well as cost considerations. The use of web-based therapies showed hope, reported efficacy similar to face-to-face interventions⁸.

Module *Couple Therapy* website-based as a form of intervention in TB patients in dealing with sexual needs disorders. Key components of this web-based couple therapy module include programme content, use of multimedia, interactive online activities, and provision of feedback support. Self-referral to self-help modules improves ease of access for patients and keeps patients motivated to engage with treatment Research on referral and use of web-based therapies in routine care is limited, particularly in sexual needs interventions for TB patients and their partners. So it becomes a challenge in providing adequate professional services, especially for challenging tasks^{9,10}.

Module creation *couple therapy* Based *website* trying to answer the shortcomings of the print module, namely by providing modules that can be accessed quickly and practically, presenting the latest information about TB, interesting images and videos are available, and consultation columns are

available. Base usage *website* As a medium of learning, intervention, and health promotion shows an increase in knowledge, attitudes and behaviors when compared to conventional educational media¹¹.

Therefore, this study aims to analyze the perception of the use of *website-based couple therapy* modules in TB patients.

METHOD

The method used in this study is a combined research/combination of quantitative and qualitative (mixed-method), namely concurrent triangulation design (a balanced mixture of quantitative and qualitative). Quantitative research in this study to identify the perception of research subjects about the website-based couple therapy module using an instrument, namely a questionnaire. The use of this measuring instrument aims to determine the point of view of the subject of the module user in this case is pulmonary TB patients and their partners. Of course, the use of this measuring tool needs reinforcement through in-depth interviews with user subjects through qualitative methods. In qualitative research, researchers follow the phenomenological stages according to Spielberg in exploring the perception of research subjects on the feasibility of using website-based couple therapy modules, namely: the first stage is bracketing, which is the stage carried out by researchers and participants. Researchers carried out the following stages: 1). identify participants' perceptions related to the use of website-based therapy modules, 2). researchers read repeatedly transcripts compiled based on in-depth interviews with participants. 3). the researcher analyzes records that are meaningful and in accordance with the research objectives, 4). Assign categories based on keywords, 5). Composing the theme grid, 6). Write down the theme of research results¹².

RESULT

1. Quantitative a. Characteristics of Respondents

The results of the study in the Nambo coastal area of Kendari City during August – September 2023, the number of pulmonary TB patients as many as 20 people obtained the

following results:

Table 1. Frequency Distribution Based on Respondent Characteristics (n=20)

Variable	f (n=20)	percentage%
Gender		
Male	17	85
Female	3	15
Age		
31 -44	11	55
45-59	5	25
>60	4	20
Education		
Primary school	4	20
Junior High School	6	30
High School	9	45
Bachelor	1	5
Work		
Self employed	4	20
Fisherman	9	45
Farmer	2	10
Laborer	1	5
IRT	4	20

Table 1, it is known that respondents are mostly male, which is as many as 17 people (85%). The most respondents aged 31-44 years were 11 people (55%). Most respondents have a high school education of 9 people (45%), and most of the respondents are fishermen who are 9 people (45%).

Table 2. Respondents Perception of Website Ease of Use

Perceptual Indicators	Likert scale							
	Strongly Disagree		Disagree		Agree		Totally Agree	
	n	%	n	%	n	%	n	%
Easy to access the web	0	0	1	5	15	75	4	20
Easy to access menus & links within the web	0	0	0	0	18	90	2	10
Easily find the information needed on the web.	1	5	0	0	17	85	2	10
This web display can adjust when accessed via mobile phone or computer	0	0	1	5	15	75	4	20

Based on table 2, it shows that TB patients' perceptions of the ease of use of

web-based *couple therapy* modules are mostly agreed, including ease of accessing the web (75%) and links (90%), easy to find the information needed (85%), and easily accessible via *mobile phone* (75%).

Table 3. Respondents Perception of Website Display

Perceptual Indicators	Likert scale							
	Strongly Disagree		Disagree		Agree		Totally Agree	
	n	%	n	%	n	%	n	%
This website is quite interesting and not boring.	0	0	0	0	15	75	5	25
The division of the position of information presented on the web is easily recognizable.	0	0	0	0	18	90	2	10
The text displayed in this web is easy to read clearly	0	0	1	5	14	70	5	25

Based on table 3, it shows that TB patients perceptions of the appearance of web-based *couple therapy* modules are mostly agreed, including interesting (75%), easily recognizable information (90%). TB patients strongly agree with the readable and clear display of text (70%).

Table 4. Respondents Perceptions of the Website Information Download Process

Perceptual Indicators	Likert scale							
	Strongly Disagree		Disagree		Agree		Totally Agree	
	n	%	n	%	n	%	n	%
Every page on this website is displayed quickly after clicking on an existing link. Users are easy to access information on every page on the website	0	0	1	5	14	70	5	25
Overall, this website component does not experience errors.	0	0	0	0	18	90	2	10

Based on table 4, TB patients perceptions of the process of downloading information on the *couple therapy* module

website mostly agree, including the display of pages that appear quickly after clicking (75%), users easily access information on each page 75%, and (70%), components that do not experience errors (90%).

Table 5. Respondents Perception of Website Content

Perceptual Indicators	Likert scale							
	Strongly Disagree		Disagree		Agree		Totally Agree	
	n	%	n	%	n	%	n	%
Information presented according to user needs.	0	0	0	0	18	90	2	10
The diversity of information presented is quite interesting.	0	0	1	5	16	80	3	15
The displayed image can be seen clearly.	0	0	1	5	16	80	3	15
Information presented is up to date	0	0	0	0	18	90	2	10

Based on table 5, TB patients' perceptions of the content of the *couple therapy* module website mostly agree, including information presented as needed (90%), the diversity of information is quite interesting (90%), the images displayed can be seen clearly (80%), the latest information presented (90%).

Table 6. Respondents Perception of Convenience in Using the Website

Perceptual Indicators	Likert scale							
	Strongly Disagree		Disagree		Agree		Totally Agree	
	n	%	n	%	n	%	n	%
Users feel comfortable using the website	0	0	0	0	16	80	4	20
Users will continuously access the website	0	0	1	5	17	85	2	10
The website is in accordance with the needs of users	0	0	1	5	19	95	0	0
Users feel happy with the overall look and content of the website	0	0	1	5	16	80	3	15

Table 6 shows that TB patients perceptions of the convenience of using the couple therapy

module website are mostly agreed, including the convenience of using the website (80%), the sustainability of accessing information (85%), the website according to user needs (95%), users feel happy with the overall appearance of the website content (80%).

b. Qualitative Analysis

Analysis of participants perceptions of the use of website-based modules

a. Positive perception:

Theme 1: easy website access

The perception of four participants said that this website is easy to access. The participants' statements were expressed as follows:

"... This module is easy to open using a cellphone, moreover, my internet package has fast access...." (p1)

"The website can be opened using a cellphone" (p3)

"I can open the web via cellphone and quickly accessed" (P5)

"Easy to open and access (P6)

Theme 2: attractive website appearance

The perception of three participants said that the appearance of the website was attractive. The statement of the party is expressed as follows:

"This web front view is good...." (P2)

"When this web is opened, there are pictures of couples therapy. I think this is good" (P4)

"When I opened it, many of the explanations were easy to understand. It's also good how it's explained" (P7)

Theme 3: quick information access

The perception of three participants said that access to information through this website was fast. Participant statements are expressed as follows:

"The web never errors when opened...." (p10)

"When opening a feature on the web, there are no bottlenecks" (p8)

"I search for TB information through the web, quickly open and easy I read the information" (p9)

Theme 4: pulling the information

Two participants stated that this website provides information of interest to participants. Participant statements are expressed as follows:

"I am interested in partner therapy, obviously also the therapeutic steps..." (P1)

" The information about TB is complete, easy to read... " (P3).

b. Negative perception:

Theme 1: difficult to open the web

Two participants gave statements that it was difficult to open the website. Participant statements are expressed as follows:

"I don't know how to use the internet... I can't open the website" (P11)

"I can't open the website, I've been taught but I'm confused, maybe because I'm old. hehe" (p12).

DISCUSSION

The development of technology changes human behavior in seeking information. The demands of technology produce new innovations in educational media, especially health education. In this study, website-based educational media equipped with online consultation features gave a new color in pulmonary TB education, especially in couples with pulmonary TB. The results of this study show that this website-based educational media makes it easy for pulmonary TB patients to get information and also conduct online consultations with researchers.

Research conducted by Gusti Kumala (2022) shows that electronic education media has a significant influence in changing people's knowledge and attitudes. Growing technology requires health workers to innovate in providing health education to the public, one of which is by using electronic educational media that is able to disseminate information quickly compared to conventional educational methods that have been used by health workers¹³.

The increasingly rapid flow of information with various educational media innovations along with the development of technology has a positive impact on health promotion, including: making it easier for people to find information about health, quickly accessing information and new innovations in health promotion so as to improve the degree of public health¹⁴.

Online educational media has advantages compared to conventional methods because educational media are more interesting, interactive, easy to remember by the public because they are accompanied by information presented with a combination of

audio and visual^{15,16}.

The development of technology requires people to go hand in hand so that they are not left behind (technology stuttering). One obstacle that usually becomes an obstacle in the process of transferring information using website-based educational media is the ability of people to use the internet. Therefore, the importance of families who accompany pulmonary TB patients in finding information through website media so that information transfer continues to run^{14,17}.

CONCLUSION

The use of website media as an interactive information tool for couples with pulmonary TB has a positive impact marked by 90% of respondents easily accessing websites, attractive website displays, interesting website information and *updates*. Researchers hope that this website can be used as an educational medium by health workers within the puskesmas to the community in the coastal area of Nambo.

ACKNOWLEDGMENTS

The researcher expressed his gratitude to those who have helped smooth the research process, namely: Director of Poltekkes Kemenkes Kendari, Head of Nambo Health Center who has facilitated researchers to conduct research, pulmonary TB programmers who help researchers to contact with respondents and enumerators who help researchers conduct in-depth interviews with respondents

REFERENCES

1. Condeng B. Effects of Counseling on the Quality of Life of MDR Lung TB Patients. *Poltekita J Ilmu Kesehatan*. 2023;17(1):67–75.
2. WHO. Tuberculosis [Internet]. WHO; 2020. Available from: <https://www.who.int/indonesia/news/campaign/tb-day-2022/fact-sheets#:~:text=Pada tahun 2020%2C 1%2C1,menyumbang 86%25 kasus TB baru>
3. Kementerian Kesehatan Republik Indonesia. TBC. Kementerian Kesehatan Republik Indonesia. 2023.
4. Cahyono LA, Winarno W wahyu, Nugroho HA. *Virtualisasi Medis:*

- Analisis Kecenderungan Masyarakat Mencari Informasi Kesehatan di Internet. *Semnas Teknomedia Online*. 2015;3(1):1–2.
5. Saputra MKF, Nasution RF, Rini DS, Sartika D, Zulkarnaen I, Kurniawan H, et al. *Keperawatan penyakit tropis*. 1st ed. Padang: Global Eksekutif Teknologi; 2023.
 6. Rini DS, Wijayati F, Muhsina S. Pengaruh Couple Therapy terhadap Kebutuhan Seksual Pasien TB Paru: Mixed Methode. *Jurnal Keperawatan*. 2023 May 4;15(3):1279-88.
 7. Barua M, Van Driel F, Jansen W. Tuberculosis and the sexual and reproductive lives of women in Bangladesh. *PLoS One*. 2018;13(7):1–20.
 8. Davies F, Shepherd HL, Beatty L, Clark B, Butow P, Shaw J. Implementing web-based therapy in routine mental health care: Systematic review of health professionals' perspectives. *J Med Internet Res*. 2020;22(7):1–12.
 9. Darely PDK, Iqbal M. Perbandingan efektivitas penggunaan database makanan berbasis website, dekstop dan buku pada mahasiswa gizi di Indonesia. *AcTion Aceh Nutr J*. 2019;4(1):75.
 10. Kulchavenya E, Khomyakov V. Tuberculosis as a reason for male and female sexual dysfunction. *J Antimicrob Agents*. 2018;04(01):1–5.
 11. Wahyuningsih H. *View of Pengembangan Konseling dan Terapi Keluarga Berbasis Web.pdf* [Internet]. Yogyakarta: Nasional Informatika Medis; 2016. Available from: <https://journal.uii.ac.id/snimed/article/view/6363/01>
 12. Dharma KK. *Metodologi penelitian keperawatan*. Jakarta timur: CV Trans Info Media; 2013.
 13. Dewi GK, Yovani Y. Pengaruh Media E-Booklet Terhadap Perubahan Pengetahuan Dan Praktik Pemberian Makanan Pendamping Asi. *J Pangan Kesehat dan Gizi Univ Binawan*. 2022;2(2):48–54.
 14. Jelita TI, Hanum NA, Wahyuni S. Pengaruh Penyuluhan Dengan Metode Pemutaran Video Animasi Secara Virtual Terhadap Tingkat Pengetahuan. *J Kesehat Gigi dan Mulut*. 2021;2(2):41–4.
 15. Sari ED, Lisum K, Susilo WH. Pengaruh Edukasi Kesehatan Berbasis Youtube terhadap Pengetahuan Siswa SMA tentang Pencegahan Tuberkulosis. *Jurnal Keperawatan*. 2021 May 9;13(2):395-402.
 16. Sembada SD, Pratomo H, Fauziah I, Amani SA, Nazhofah Q, Kurniawati R. Pemanfaatan Media Online Sebagai Sarana Edukasi Kesehatan Pada Remaja : Tinjauan Literatur. *PREPOTIF J Kesehat Masy*. 2022;6(1):564–74.
 17. Wardani ND. Emotional Focused Therapy pada Pasangan Paska Perselingkuhan Natalia Dewi Wardani Bagian Psikiatri Fakultas Kedokteran Universitas Diponegoro Semarang. 2017;5(1):1–11.