Integrative psychotherapy in stress management of cervical cancer patients at RSUD Dr. Moewardi Surakarta: A case study

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ABSTRACT

**Background:** Worldwide, cervical cancer is the second highest cause of death after breast cancer. In Indonesia, cervical cancer is ranked second among all types of cancer. Psychological distress negatively affects the mortality rate of cancer patients, and there is no stress management treatment of standard integrative psychotherapy to be carried out in the process of individual therapy in cervical cancer.

**Objective:** To treat psychological distress in cases of cervical cancer using an integrative psychotherapy approach, create a model of factors that influence psychopathology related to psychological distress, and an integrative psychotherapy model as the basis for making modules and standard operation procedures of stress management in cervical cancer patients.

**Methods:** This is an integrated case study with descriptive, exploratory, and exploratory qualitative approaches in two women with cervical cancer who were given integrative psychotherapy (integrative psychoeducation combined with integrative guided imagery and music), data analysis using the constant comparative method. Presentation of data using tables and graphs.

**Results:** Two models were illustrated, a model of factors that influence psychopathology related to psychological distress and an integrative psychotherapy model in stress management of cervical cancer patients. Evaluation of decreased distress and improved related physical symptoms (pain and sleep quality).

**Conclusion:** A model of factors that influence psychopathology related to psychological distress and an integrative psychotherapy model that can be implemented in stress management of cervical cancer patients were obtained, with sessions and types tailored to the patient’s needs.

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**Latar Belakang:** Di seluruh dunia, kanker serviks merupakan penyebab kematian kedua tertinggi setelah kanker payudara. Di Indonesia, kanker serviks menduduki peringkat kedua di antara semua jenis kanker. Distres psikologis berpengaruh negatif terhadap angka kematian pasien kanker dan belum ada penanganan manajemen stres dengan psikoterapi integratif standar yang dilakukan dalam proses terapi individu pada kanker serviks.

**Tujuan:** Tatalaksana distres psikologis pada kasus kanker serviks menggunakan pendekatan psikoterapi integratif, membuat model faktor-faktor yang mempengaruhi psikopatologi terkait dengan distres psikologis, dan model psikoterapi integratif sebagai dasar pembuatan modul dan prosedur operasi standar manajemen stres di serviks pasien kanker.

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**Keywords:** integrative psychotherapy, stress, distress, stress management, cervical cancer.

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**INTRODUCTION**

Worldwide, cancer is the second leading cause of death after cardiovascular disease. Cervical cancer is the second highest after breast cancer (16 per 100,000 women) and is likely to continue to increase.\(^1\) Based on World Health Organisation (WHO) data, it is estimated that there were 570,000 new cases of cervical cancer in 2018, and 311,000 of them died from cervical cancer in low-middle-income countries. Cervical cancer is the leading cause of cancer death in 42 countries, including developing countries. Due to lack of awareness for screening and inadequate management.\(^2\) The incidence of pregnancy with cervical cancer is quite low but is the most common malignancy with an incidence of 0.8 to 1.5 cases per 10,000 births, about 1-3% of women diagnosed with cervical cancer during pregnancy or postpartum.\(^3\)

In Indonesia, cervical cancer is ranked 2 of all types of cancer, new cases in 2020 were reported as many as 36,633 cases, with a death toll of 21,003 cases. The prevalence of this cancer in the last 5 years in all age ranges was 92,930 cases, with the highest number of cases was East Java (21,313 cases) and followed by Central Java (19,734 cases) according to Riskesdas (Basic Health Research) 2013. Riskesdas data in 2013 and 2018 showed an increase in cancer prevalence in Indonesia from 1.4% to 1.49%. Gorontalo Province had the highest increase, from 0.2% in 2013 to 2.44% in 2018. Significant increases also occurred in the Provinces of Central Sulawesi and the Special Region of Yogyakarta. Meanwhile, several provinces experienced a decrease in prevalence, namely Jambi, Bengkulu, East Kalimantan, South Sulawesi, Maluku, and North Maluku. The prevalence of cancer in the Special Region of Yogyakarta is high compared to other provinces, namely 4.1% in 2013 and 4.86% in 2018.\(^4\)

Distress screening followed by distress management (including non-psychotherapists) and outcome assessment is needed to improve well-being in cancer patients, especially cervical cancer.\(^5\) Psycho-oncology has emerged as an interdisciplinary field within the foundation of the relatively new Consultation-Liaison Psychiatry to address the psychosocial issues that may modulate cancer (impact on the patient’s physical and mental well-being) and provide support for patients who face many challenges at various stages of cancer.\(^6\) In the past few decades, a growing number of psychotherapists have not fully chosen to identify themselves using any psychotherapeutic approaches but prefer to define themselves as integrative or eclectic.\(^7\) In recent surveys of more than 1000 psychotherapists, only 15% indicated that they used only one theoretical orientation in their practice, and the average number of theoretical orientations used in practice was four.\(^8\)

This study focuses on how the process of application/implementation of integrative psychotherapy and its influence on the stress management process of cervical cancer patients at the general hospital (RSUD) of Dr. Moewardi, Surakarta. This study aimed to obtain a model of factors that influence psychopathology related to psychological distress and an integrative psychotherapy model in stress management in cervical cancer patients and to carry out integrative psychotherapy in cervical cancer patients at RSUD Dr. Moewardi, Surakarta.
METHODS

Study design

This is transformative qualitative research (accompanied by intervention) using an integrated case study design with a descriptive, exploratory, and explanatory qualitative approach. This method was chosen to answer clinical research questions in the form of “what, how, and why” the process model of integrative psychotherapy can be carried out in the management stress of cervical cancer patients. This study was conducted in RSUD Dr. Moewardi, Surakarta. Research time from November 2020-December 2021.

Study subject

A purposive sampling method was applied based on the demographic profile criteria and case variants of cervical cancer patients at RSUD Dr. Moewardi. The participants’ criteria were cervical cancer patients diagnosed by obstetrics and gynaecology specialists, aged 20 to 50 years, who can understand, read, and write the Indonesian language, willing to be research subjects, sign a research agreement (informed consent), and cooperatively participate in integrative psychotherapy in stress management of cervical cancer patients. The exclusion criteria were patients with severe mental disorders (delirium and psychosis) from a psychiatrist’s diagnosis and hearing impairments that could interfere with the integrative psychotherapy intervention process.

Sources and data collection techniques

Data were collected by interview, observation (experimental and systematic observation using observational instruments), active participation, and documentation of notes and audio recordings of research respondents diagnosed with cervical cancer and treatment plan to provide primary therapy at RSUD Dr. Moewardi. Psychoeducation intervention sessions on stress were carried out with individual and family/couple therapy settings for three sessions, one session for 60 minutes, and integrated with supportive and integrative guided imagery & music (GIM) per session for 11-15 minutes for 3 sessions. Interviews were conducted until all the required data were met. Observations carried out are active from assessing the patient directly.

Data analysis technique

The data analysis begins with a direct study of all available data from various sources: direct interviews (in-depth interviews), observation notes (medical records and researcher notes), and audio documents. Collected data was then reduced, a compilation of units, categorisation, and finally, data interpretation. The process of data analysis was: data reduction, data presentation or display, and conclusion or verification. Overall, a constant comparative analysis method, namely during pre- and post-intervention that was presented in the form of graphs, diagrams or charts, and verbatim, has the potential to strengthen the analytical process while retaining the voice of the subject.

Study instrument

1. The author himself (main research instrument), but in order to further sharpen and complete the data from observations and observations using several additional instruments.
2. Demographic data sheet.
3. Informed consent sheet.
4. Depression, Anxiety, and Stress Scale (DASS)-42. This instrument has been validated for Asians, especially Indonesians, with Cronbach’s alpha scores of 0.87, 0.85, and 0.72, and when combined, can get a psychological distress score. The Cronbach’s alpha for depression, anxiety, and stress were 0.9053, 0.8517, and 0.8806 among Indonesian subjects. Thus, the DASS-42 questionnaire is reliable, demonstrated with Cronbach’s alpha greater than 0.6.
5. The Pittsburg Sleep Quality Index (PSQI). This instrument has been validated in Indonesian with the internal consistency test Cronbach’s alpha = 0.79, content validity 0.89, construction validity shows the correlation of components with a good
global PSQI score, known group validity is significant \((p < 0.001)\), the sensitivity value is 1, the specificity is 0.81, the cutoff point is 5.  

6. Visual Analogue Pain Scale (VAS) for pain. 
7. Documentation instrument in the form of an audio recorder. Recording activity is carried out after obtaining permission from subjects.

**Permission and research ethics**  
The research was carried out after obtaining ethics issued by the Ethics Committee of the RSUD Dr. Moewardi (number: 990/XI/HREC/2021) and permission from the Head of the Psychiatry Section of Medical Faculty Sebelas Maret University/RSUD Dr. Moewardi. Before conducting the research, prospective respondents declared their willingness to be subject after the objectives and activities of this research were explained.

The research was conducted concerning the basic principles of bioethics and good clinical practice. Following the rules of respect for autonomy, the author asked the subjects to sign the research permit after receiving a sufficient explanation and were allowed to ask questions that were still unclear. There was no element of compulsion to participate in the research. Subjects could also stop participating in research if they feel negative things arise during the research. The rule of justice was met through no discrimination between individuals, for example, gender, ethnicity, or religion, in selecting respondents. Beneficence rules are met because this research is believed to benefit the participants. Furthermore, the non-maleficence rule has also been complied along with no negative impacts on participants arising from this research.

**RESULTS**

**Demographic description**  
In the two study subjects, there were several differences in demographics which might be factors that influenced the psychopathology that emerged, such as marital status, number of children, initial distress psychopathology, economic status, and occupation (see Table 1).

**Model of factors influencing psychopathology related to psychological distress**  
Individuals with cervical cancer experience dominant biological stress from a systemic inflammatory reaction, likely to become chronic. Chronic biological stress was likely to affect psychological stress due to physical complaints and vulnerability due to chronic inflammation. Individuals with cervical cancer have various stressors: 1) At the beginning of the diagnosis while pregnant, stressors arise in the form of conflicts between continuing the pregnancy or not, and social ethics and morals also influence their decisions; 2) Therapy or treatment actions taken in cases of cervical cancer such as chemotherapy, radiotherapy, and surgery; 3) Family economic conditions; 4) Emotional reactions from the family; 4) Stressors from the environment.

Families and environments with a good level of education regarding the condition of cervical cancer patients were more receptive to these individuals. The culture in the family of having a son is also a stressor if the person with cervical cancer does not have or is pregnant with a male fetus, even more so if the person with cervical cancer does not have children. Individuals who have lost their jobs, are out of work, or have limitations in their jobs due to cervical cancer are vulnerable to the emergence of economic stressors.

Individuals with cervical cancer with low self-esteem, less able to express their emotions, and less adaptive coping were vulnerable to developing psychopathology, especially related to psychological distress, which has a reciprocal relationship with quality of life. The notification of bad news from medical personnel to individuals with cervical cancer must be carried out with good supportive processes and techniques so that they do not become a heavy stressor to individuals with cervical cancer (See Figure1).
Table 1. Overview of study subjects

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Subject I</th>
<th>Subject II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>37</td>
<td>24</td>
</tr>
<tr>
<td>Diagnosis and clinical staging</td>
<td>Cervical cancer Stage IIA2, G3P2A0 19 weeks</td>
<td>Cervical cancer Stage IIB, post myomectomy</td>
</tr>
<tr>
<td>Psychopathology Screening</td>
<td>No psychopathology found</td>
<td>There are psychopathological signs and symptoms in the form of mixed anxiety and depression disorder</td>
</tr>
<tr>
<td>Sick time</td>
<td>1 Month</td>
<td>3 Month</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td>Divorce</td>
</tr>
<tr>
<td>Number of children</td>
<td>2 (All women)</td>
<td>Do not have kids</td>
</tr>
<tr>
<td>Last education</td>
<td>Senior high school</td>
<td>Junior high school</td>
</tr>
<tr>
<td>Job-status</td>
<td>Entrepreneur</td>
<td>Unemployment</td>
</tr>
<tr>
<td>Economic status</td>
<td>Upper-intermediate</td>
<td>Middle down</td>
</tr>
<tr>
<td>Address</td>
<td>Magetan, East Java</td>
<td>Karanganyar, Central Java</td>
</tr>
<tr>
<td>Psychological distress level (DASS-42)</td>
<td>27 (No psychological distress)</td>
<td>32 (There is psychological distress)</td>
</tr>
<tr>
<td>Pain scale (VAS-Wongbaker)</td>
<td>0 (No pain)</td>
<td>2 (Mild pain)</td>
</tr>
<tr>
<td>Sleep quality (PSQI)</td>
<td>3 (good sleep quality)</td>
<td>6 (decrease in sleep quality)</td>
</tr>
<tr>
<td>Pharmacological Treatment</td>
<td>Chemotherapy (paclitaxel and cisplatin) until termination of pregnancy followed by radiotherapy; In the beginning, there was no psychopharmacological therapy</td>
<td>Chemotherapy (paclitaxel and cisplatin), then evaluation for radiotherapy; maprotiline 12.5 mg bid</td>
</tr>
</tbody>
</table>

Figure 1. Model of factors influencing the emergence of psychopathology (psychological distress) in individuals with cervical cancer.
The implementation model of integrative psychotherapy in stress management of individuals with cervical cancer

Stress management of cervical cancer patients begins with forming a cervical cancer case management team in special (rare) populations as a promotive action. The team gave each other opinions based on their respective scientific fields and then discussed them for follow-up and management planning. Preventive actions were comprised taken screening for psychological distress and psychiatric diagnostic examinations. Psychoeducation was also given to caregivers and subjects with different portions, in which the caregiver is added to emphasise the importance of social support (See Figure 2).

**Figure 2. Integrative psychotherapy model on stress management of individuals with cervical cancer**

Giving the subject medication or psychopharmacology and psychotherapy is a curative action based on the level of distress in psychopathology cases. One of the forms of rehabilitation carried out by the psychiatric department is the management of stress in palliative care with psychotherapy, especially those based on the meaning of life, and pharmacology to deal with complications of the long-term effects of primary cancer therapy or end-stage cancer.

**DISCUSSION**

In this study, both subjects were diagnosed with cervical cancer for the first time. In Subject I, cervical cancer was found during antenatal care, and in Subject II, a myomectomy was performed. In Subject I, because cervical cancer in pregnancy is rare and there are no standard therapeutic guidelines, a multidisciplinary team was formed to follow every action from planning to implementation. The team consists of obstetricians, psychiatrists, paediatricians, radiotherapy specialists, and forensic and medicolegal specialists in decision-making in a special population of pregnant women. Subject II is a consul patient from the obstetrics-gynaecology section because psychological distress has been found in the psychiatry department.

In subjects I and II, there were differences in the characteristics of educational background, marital status, and family structure. Subject II has a clear risk of cervical cancer, such as having sex at an early age (married at the age of 18 years, even though the subject has never had sex
before marriage, according to information). A literature review reported that 10 of 12 journals (national and international) concluded that the risk of cervical cancer increases with age at first sexual intercourse, with the risk varying from 1.6 to 58 times greater if having sex before age 16.\textsuperscript{17}

Several additional integrative psychotherapy sessions were conducted on the Subject I due to the emergence of new stressors that were more severe than before. In addition, this action is important because persons with cervical cancer who are exposed to psychological stress risk worsening 1-2 times, especially for the distress that occurs in the year before or after diagnosis. In Subject II, a stressor appears, but it is considered not as severe as the stressor caused by cervical cancer. Thus, the new stressor can be coped with properly.\textsuperscript{18}

In this study, an integrative psychotherapy model based on the patients encountered has been attempted. Integrating medication and psychological treatment (psychoeducation, guided imagery, and cognitive therapy) has a good impact on reducing stress levels and improving the quality of life of cancer patients.\textsuperscript{19} Cognitive therapy as a combination was not used because there was no patient irrational beliefs. Guided imagery is considered an effective adjuvant therapy in reducing pain-related suffering in cancer patients.\textsuperscript{20} This therapy can be used to manage other symptoms such as sleep disturbances, appetite, nausea (a side effect of chemotherapy), and psychological distress (anxiety and depression).\textsuperscript{21}

CONCLUSION

There were several conclusions: 1) An integrative psychotherapy model in stress management of cervical cancer patients was obtained, which was carried out with 3 integrative psychoeducation sessions and 3 sessions of guided imagery and music integrative therapy with a duration of 30-60 minutes each session; 2) Psychopathology related to distress was influenced by several factors, as follows: biological (deterioration of cancer stage, difficult temperament, pregnancy, and physical complaints related to cancer), environmental (stigmatisation of society and lack of family support), individual (lack of intelligence, less self-care, poor resilience (maladaptive coping)), and stressor (paternalistic culture, job loss, high family emotional reactions, surgery, and cancer primary therapy); 3) Integrative psychotherapy sessions can be repeated and psychotherapeutic components can be added depending on the degree of distress and the stage of cervical cancer development (according to individual needs); 4) Decisions in managing cervical cancer patients in special populations (pregnant and productive age) are made by forming a multidisciplinary medical team and considering the expectations of individuals, families, and environmental factors by prioritising ethical principles to obtain better results.

CONFLICT OF INTEREST

All authors declare in this study there is no conflict of interest.

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