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PERKASA INTERVENTION: A PSYCHOTHERAPY INTERVENTION AMONG PARENTS OF CHILDREN WITH LEUKEMIA IN MALAYSIA

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Abstract:

This study, known as PERKASA Intervention, is a psychotherapy intervention towards parents of children with leukemia, implemented in one of the University Teaching Hospital (UTH) in Kuala Lumpur, and has been conducted by a Medical Social Worker. This Randomized Controlled Trial (RCT) is a sequel study adapted from a pilot study that has been done previously. This intervention consists of four sessions with 60 minutes per session emphasizing emotional, rational thinking, cognitive, and behavior. A total of 60 samples are selected using purposive sampling, and a 1:1 ratio has been used at randomized stages. A total of 30 participants were placed in the Experimental Group (EG), while the remaining 30 participants were placed in the Control Group (CG). All the participants were approached by the researcher with rigorous monitoring by Pediatric Oncology/Hematology and cooperation from two Chief Nurses. Participants from EG have been assessed three times; pre-intervention (T1), mid-intervention (T2), and post-intervention (T3), meanwhile CG participants were assessed just at the post-intervention (T2a) and compared with EG. This study used chi-square, multivariate ANOVA repeated measures, and independent samples t-test to analyze the intervention interactions. Intent-to-treat analysis shows no significant correlation and no significant differences between remaining participants and participants who withdrew from the study. At pre- to mid-intervention in EG shows no significant changes, except in emotional-focus; the pre- to post-intervention assessment shows significant changes in anxiety, problem-focus, and emotional-focus. Comparison between two groups tested at post-intervention assessment reveal that all variables show significant differences, except in

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depression level. This PERKASA Intervention successfully overcame the emotional and psychological distress and enhanced coping strategies used among parents of children with leukemia at post-intervention. Recommendations for a future study to be performed in a larger scale of participants and should be done over a long period of time.

Keywords:

Psychotherapy Intervention, Malaysia Medical Social Work, Psychological Distress, Randomize Controlled Trial, Parents, Leukemia

Introduction

Malaysia Ministry of Health (MOH) stated between 2007 to 2011, leukemia accounted for 4.4% of total cancers in Malaysia (National Cancer Registry Report 2007-2011, 2019) and the highest type of cancer among children up to 14 years old (Synopsis of Childhood Cancer in Malaysia, 2018). According to the 2014 World Health Organization (Steward & Wild, 2014) estimated that children reported to have leukemia aged 0 to 14 years in 2012 was 165,000 patients. Although leukemia can be treated with the current and sophisticated medical methods, however, psychological distress still occured despite passing the crucial treatment phase (Ljungman, Hoven, Ljungman, Cernvall, & von Essen, 2015). Parents are the most affected when children are diagnosed with leukemia and feel the psychological distress (Rosenberg, Dussel, Kang, Geyer, Gerhardt, Feudtner, & Wolfe, 2013). Psychological distress among parents are often discussed in previous studies right after they knew their children are diagnosed with leukemia (Patino-Fernandez, Pai, Alderfer, Hwang, Reilly, & Kazak, 2008; McCarthy, Ashley, Lee, & Anderson, 2012; & Heckel, Fennell, Reynolds, Osborne, Chirgwin, Botti, Ashley, & Livingston, 2015).

Empirical studies prove that this psychological distress is caused by environmental factors that cause thought disturbances and cause difficulties in controlling emotions, and ultimately affect daily life. Psychological distress among parents is also related to the treatment of the children suffering from leukemia themselves. Thus, a psychotherapy intervention to help families, especially parents to overcome psychological problem is recommended. The implementation of a specific intervention recommended by the American Academy of Pediatrics (1997) aims to help parents control the symptoms of psychological distress in the long term. Therefore, this study involved parents of children with leukemia as a study sample to test the effectiveness of PERKASA Intervention on the variables of stress, depression, anxiety and the use of coping strategies at the pre, middle, and post intervention stages. Besides, the implementation of the PERKASA Intervention is also handled by the Medical Social Worker as an interventionist, in reference to a pilot study that has been implemented (Zin, Azman, Latiff, & C-Khai, 2022).

Literature Review

Stress Among Parents

Parents of children with cancer have been empirically proven to experience stress problems around the world, including Malaysia (Feki, Baklouti, & Khanfir, 2021; & Rani, Daud, & Alias, 2018; & Zarina, Radhiyah, Hamidah, Rahman, & Syed Zulkifli, 2012). Stress symptoms among parents were detected to occur as early as the first day a child is diagnosed with cancer and lasting until several years throughout the treatment phase (Tremolada, Bonichini, Aloisio, Schiavo, Carli, & Pillon, 2013). Parents who witnessed the suffering of children with chronic

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diseases experiencing higher stress symptoms than parents who do not have children with chronic diseases, and maternal were shown to experience higher levels of stress than paternal (Carmassi, Corsi, Bertelloni, Carpita, Gesi , Pedrinelli, Massimetti, Peroni, Bonuccelli, Orsini, & Dell'Osso, 2018; & Feki et al., 2021). Stress among parents was also found to continue to increase even though children with cancer have gone through a major treatment phase (Lemos, Lima, Silva, & Fontoura, 2019). The dimensions of stress experienced by parents will influence behavioral patterns and need specific actions to overcome (Othman, Mohamad, Hussin, and Blunden, 2011). Early action is important to help parents who have children with chronic illnesses from suffering psychological distress (Mohamed, Chong, Loh, Zakaria, Alias, Jamal, & Latiff, 2017).

Depression Among Parents

Depression is a common issue experienced by parents of children with cancer around the world (Vernon, Eyles, Hulbert, Bretherton, & McCarthy, 2017; & Ozdemir Koyu & Tas Arslan, 2021), even in Malaysia (Hamidah, Sham Marina, Tamil, Loh, Zarina, Jamal, Iryani, & Ratnam, 2014). Depression is a psychological problem that make someone feel useless, extreme sadness, loss of appetite and loss of focus (World Health Organization, 2017). Studies have found that mothers have higher levels of depression than fathers (Boztepe, Cınar, Ay, Kerimoglu Yıldız, & Kılıc, 2019). Depression problems among parents of children with cancer can continue to occur over a long period of time, even after passing a critical phase of treatment and negatively impact their quality of life (Wikman, Mattsson, von Essen, & Hoven, 2018). If this depressive problem is not detected from an early stage, more severe effects will be experienced not only by the patient, but by their entire family system and social system (Kurtz, & Abrams, 2010).

Anxiety

According to the World Health Organization (2017), anxiety is one of the two main mental disorders that often occur among people. Anxiety among parents of children with cancer begins as early as the first day a child is diagnosed with the chronic disease, and even worsen when children begin treatment (Othman et al., 2011). The anxiety among parents of children with cancer is caused by the negative imagination of their children's future, despite having gone through the treatment phase, and also affects their quality of sleep (McLoone, Wakefield, Yoong, & Cohn, 2013). Anxiety among parents will affect the children (patient) quality of care, either at home or in the hospital. According to Kohlsdorf and Costa Junior (2011), thinking too much over the future of children with cancer was identified as a factor that led to the use of emotional response strategies among parents. Din, Jaafar, Zakaria, Saini, Ahmad, and Midin (2017) found anxiety problems among caregiver of cancer patients will lead to negative implications of patient treatment in the long term and less perceive social support lead to increase parents anxiety level (Boyden, Hill, Carrol, Morrison, Miller, & Feudtner, 2020).

Coping Strategies Among Parents

The use of coping strategies is based on a situation experienced by a person (Santos, Crespo, Canavarro, Alderfer, & Kazak, 2016), particularly parents of children with cancer. A study in Malaysia by Sutan, Al-Saidi, Latiff, and Ibrahim (2017), have found majority of parents of leukemia children uses religious approach problem-focused coping strategies. Although the findings of the study found that problem-focused was used by parents, the relationship of the use of this strategy with the quality of life (QOL) of parents of children with leukemia was still at a low level. This exposes parents of children with leukemia to various other psychosocial threats and lead parents to the use of emotion-focus coping strategies in the absence of specific

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interventions to improve parents' cognitive abilities in dealing with emotionally disturbing situations. In contrast, Nur Saadah, Siti Hajar, and Islam (2014) found that mothers of children with chronic diseases are more likely to use emotional-focused coping strategies due to thinking too much about their children's future expectations.

Parents tends to use emotional strategies when children start receiving treatment through excessive care to ensure their child is not stressed while pursuing their cancer treatment (Ernst, Brahler, Klein, Junger, Wild, Faber, Schneider, & Beutel, 2019). The use of maladaptive action strategies among parents should be noted as it will affect the cancer treatment and affect the children behavior as well (Monti, Winning, Watson, Williams, Gerhardt, Compas, & Vannatta, 2017 ; & Nikseresht, Rassouli, Torabi, Farzinfard, Mansouri, and Ilkhani, 2016). Emotional behavior among parents will also affect the behavior patterns of children (Compas, Desjardins, Vannatta, Young-Saleme, Rodriguez, Dunn, Bemis, Sarah, & Gerhardt, 2014). According to Koumarianou, Symeonidi, Kattamis, Linardatou, Chrousus, and Darviri, (2021), intervention needed to reduce parental distress and improving coping strategies.

Psychotherapy Intervention Among Parents

Psychotherapeutic intervention is a method of emotional treatment through cognitive structuring toward adaptive behavior; an ongoing process; and requires collaboration between the psychotherapist and the client. Nevertheless, the execution of effective psychotherapeutic interventions requires an accurate psychological theory and be empirically proven. According to Afanasyev and Fedorenko (2016), children with leukemia always need parental support to continue treatment. However, if appropriate psychotherapeutic interventions is not given, it will disrupt the parent-child relation.

Besides intervention to patient (children), Steele, Mullins, Mullins, and Muriel (2015), suggested psychotherapeutic interventions should also be given to parents to control the symptoms of psychological problems from becoming more severe as well. The implementation of psychotherapy interventions to parents of children with cancer was also agreed by Koumarianou et al., (2021) to reduce the risk of psychological distress from turning more severe. Warner, Ludwig, Sweeney, Spillane, Hogan, Ryan, and Carroll, (2011) proved that psychotherapy interventions to parents of children with cancer are able to lower the level of psychological distress. Psychotherapy interventions have also been proven to overcome other psychosocial problems among parents of children with cancer and improve quality of life as well (Safarabadi-Farahani, Maarefvand, Biglarian, & Khubchandani, 2016).

Social Worker and Psychotherapy Intervention

Social worker is a profession developed to give any kind of assistance to specific target groups. Besides, social worker also assists to improve the client’s well-being using psychosocial assessment, including client’s health dimension especially in the field of mental health (Midgley, 2010). The roles of the social work profession, particularly in the hospital setting is to deliver any kind of psychosocial intervention, including psychotherapy. Psychotherapy interventions among hospital based social worker have been discussed since 40 years ago in the United States of America, alongside other professions such as Psychiatrists, Psychologists as well as Family and Couple Counselors (Goleman, 1985).

Social work approaches and the psychotherapeutic interventions has been scientifically debated by Wakefield (1988b), on the relationship between social work, universal justice and psychotherapy. Wakefield in his argument that can be considered classical, explains that the

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foundation of social work advocates social justice to restore social functionality as well as connect clients with specific resources (Wakefield, 1988a). Wakefield who made John Rawl's Theory of Justice as a conceptual model has explained the importance of the implementation of psychotherapy by social workers towards promoting superior psychological functioning, and at the same time promoting mental health among people.

Hence emphasizing the importance of social workers and the psychotherapy interventions, Wakefield did not rule out the role of psychiatrists and psychologists who also each have the role of delivering psychotherapy interventions according to the specific expertise of each profession. The social work role in promoting mental health and human well-being can be seen through the widespread use of the Diagnostic Statistical Manual which places social work profession as one of the eligible professions to deliver the psychotherapy interventions (Kirk, Siporin, and Kutchins, 1989). Thus, the role of social work is not only to connect clients with relevant resources, or assistance source, but to ensure the execution of psychotherapy interventions to clients either individually or in groups (Zin, Azman, Latiff, & C-Khai, 2022).

Methods

Designs

This study uses randomized controlled trial and is a continuation of the previous pilot study. The design of the study still involves two groups, Experimental Group (EG) and Control Group (CG), respectively. EG joined the four sessions PERKASA Intervention, meanwhile the other arm does not follow the intervention or any psychotherapeutic intervention programs, and runs a daily routine life as usual. Comparison of the effects of PERKASA Intervention will be carried out at the pre, middle and post intervention in EG; and post intervention comparison between two groups tested.

Participants

All participants were placed either in EG or in CG was approached by researcher with rigorous monitoring from Pediatric Oncology/Hematologists and cooperation from two Chief Nurses, pediatric oncology/hematology ward and hematology day care center respectively. In order to adhere to the code of research ethics, researcher will meet with respondents who have been identified, after permission is granted from the pediatric oncology/hematologist. All participants who agreed to participate in the study had signed a consent form provided. Inclusion criteria are Malay-speaking, Malaysian citizen, having children with leukemia diagnosed not more than 12 months of diagnosis, and the patient's age does not exceed 18 years.

A total of 84 respondents were identified, but just 60 respondents met the criteria. All 60 participants signed consent forms to participate in this study which was conducted from October 2021 until February 2022. A total of 24 samples (28.6%) were removed from the study due to not meeting the permissible criteria. A total of 10 samples (41.7%) had participated in the pilot study which was conducted in April 2021 until May 2021. Two of the samples (8.3%) were non-citizen patients. One sample was not able to speak in Malay (4.2%), seven samples had children exceeding 12 months of diagnosis period (29.2%), and four respondents expressed not interested to participate in this study (16.7%). Therefore, the overall participation rate in this study was 71.4%. Participants diversion in ratio of 1:1; 30 participants were placed in EG, meanwhile the remaining 30 participants were placed in CG.

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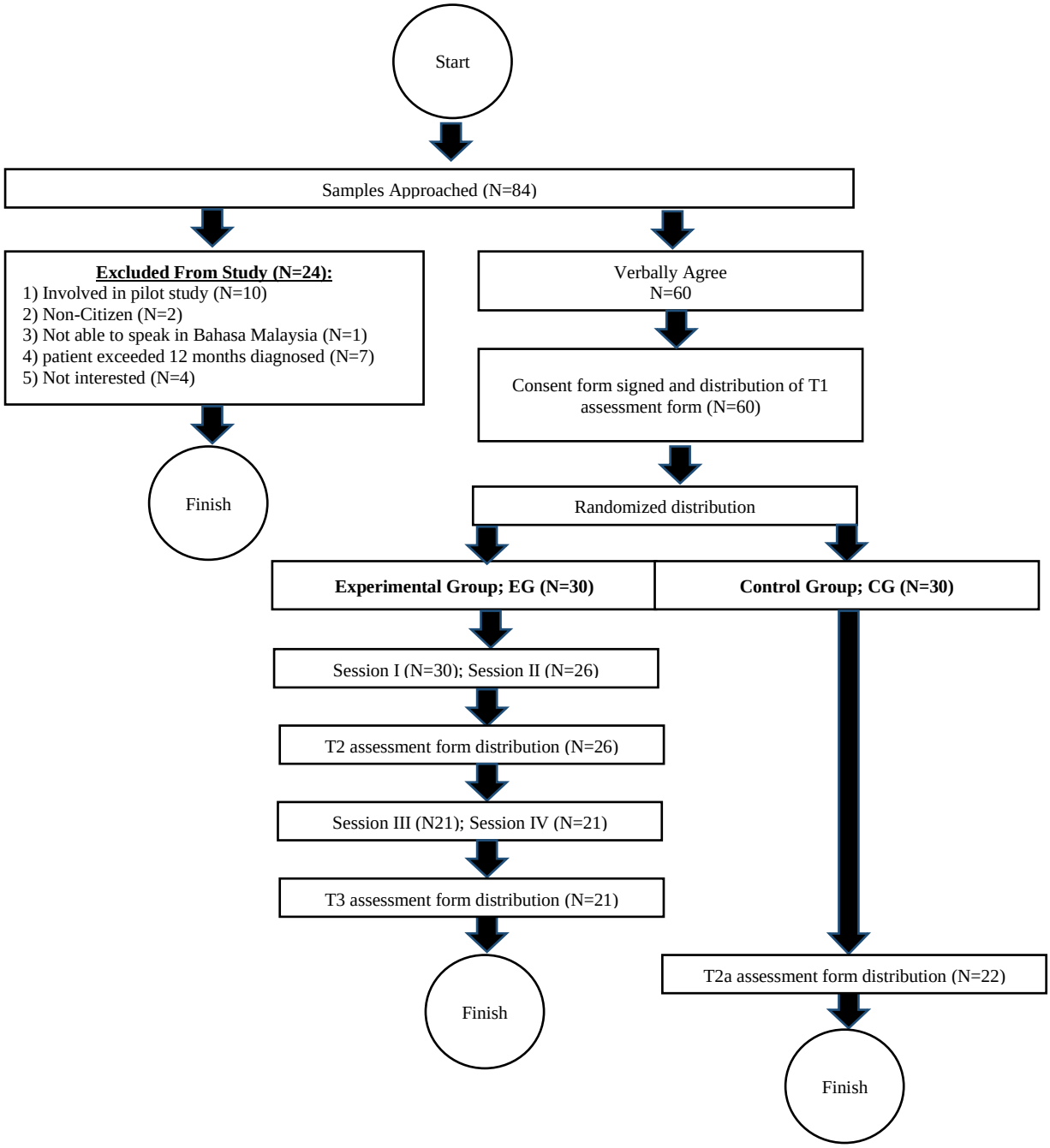
Figure 1: CONSORT Diagram



Legend:
T1: Pre-Intervention
T2: Mid Intervention
T3/T2a: Post-Intervention

Measurements

This study involved parents of children with leukemia as a primary subject to investigate four major variables; stress, depression, anxiety, and coping strategies. Measurements of these variables are using three separate instruments; Parental Stress Index-Short Form (PSI-SF),

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Hospital Anxiety and Depression Scale (HADS), Brief COPE (B-COPE) to measure coping strategies among respondents. These instruments have good reliability and validity in Malay language and have been tested in previous study (Zin et al., 2022). The data was analyzed using the Statistical Package of Social Sciences (SPSS) Version 22. The measurement method used are repeated measures multivariate ANOVA (MANOVA) in EG, independent sample t-test for comparison between EG and CG, and chi-square for intent-to-treat analysis.

Stress (PSI-SF)

This instrument is formed to assess and diagnose stress levels in the Parenting-Child System. This instrument is the tool for children who are at risk of behavioral and emotional development disorders and parent's behavior. This child-parenting based instrument focuses on two main aspects, namely child behavior and the characteristics of parents. The PSI-SF instruments in this study uses Likert Scale range from 0 "Very Disagree" to 5 "Very Agree". The marking for determining the stress level of the parents involved by summing the overall mark scores of the PSI-SF.

Hospital Anxiety and Depression Scale (HADS)

HADS is divided into two main sectors, namely anxiety and depression. HADS has been widely used worldwide in hospital settings. The minimum scores for HADS-Anxiety and HADS-Depression is 0, while the maximum total score is 21. Its scoring method uses Likert scale of four (4) options answer, range from 0 to 3. The cut-point to determine the severity level 0 to 7 (< 7) considered "normal/no case"; 8 to 10 scores is considered a "mild/doubtful case"; and the total score of 11 and above (> 11) is considered "case" for anxiety or depression, respectively.

Coping Strategies (B-COPE)

B-COPE instrument contains 28 questions and no questions in reverse coding. The B-COPE used in this study uses Likert scale range from 0 "I Have Not Been Doing at All" to 3 "I Have Been Doing a Lot". The overall score is summed up the total scores based on two main sectors, namely the Problem-Focus Coping Strategies and the Emotional-Focus Coping Strategies. The minimum score of this instrument is 2, while the maximum mark score is 8 according to dimension of each major sector. Overall, the minimum score for the sector Problem-Focus Coping Strategies is 8 and the maximum score is 32. The marking of the minimum score for the Emotional-Focus Coping Strategies is 6 and the maximum number of scores is 24.

Procedures

Implementation of the PERKASA Intervention in this study refer to a new psychotherapy module developed specifically for Medical Social Workers in clinical field. The new module was developed to help parents of children with leukemia overcome psychological distress after their child was diagnosed with leukemia. The intervention consisted of four sessions, 60 minutes per session, and execution using face-to-face method. This intervention was conducted at minimum of two participants at one time. This study was conducted at one of University Teaching Hospital located in Kuala Lumpur (Ethical Approval: USM/JEPeM/20090474, & UKM PPI/111/8/JEP-2021-237). Participants were recruited from the pediatric oncology/hematology ward and the oncology/hematology day care center.

This study used purposive sampling techniques to ensure only parents of children with leukemia were involved as participants. After the participant signed the approval form to join the study, a pre-assessment form (T1) was given to all participants. Participants from EG will

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join the PERKASA Intervention while participants from CG will not join this intervention. Participants from EG have been assessed three times, pre-intervention (T1), mid-intervention (T2), and post-intervention (T3), respectively. Participants from CG have been assessed just at the post-assessment (T2a) and comparing with EG (T3). The purpose of this design is to compare the effectiveness of PERKASA Intervention between EG and CG.

PERKASA Intervention

The PERKASA Intervention was implemented in line with new intervention training module, known as PERKASA Module. This new training module was developed specifically for this study. The PERKASA Module consists of four (4) sessions, 60 minutes per session, and emphasizes the client's emotional aspect, rational thinking, cognitive, behavior, and part of psycho-education. All these psychological dimensions have been transferred to the participants in CG during the session. This intervention used an interactive conversational approach instead of an interview method to avoid boredom among the participants involved. This intervention was conducted by Medical Social Worker at Pediatric Zone. All the intervention implementation was rigorously supervised by the Pediatric Oncology/Hematology Specialist while intervention session was conducted.

This module was developed to suit the time constraint and the role of participants as parents or caregivers to ensure their children undergo the important treatment according to treatment regime planned by doctor. This intervention was developed to make sure all participants were involved in all session with less long time period. It is intended to drive the intervention implementation more effectively and smoothly. The structure of the four sessions of the PERKASA Module is as follows:

Table 1: PERKASA Intervention Structure

Session	Sub-Module	Activities	Duration
I	Introduction	Participants will join the ice-breaking session, and has been given particular of PERKASA Intervention. Then, participants have been explained the Concepts of A-B-C and matters of psychological distress. Metaphor technique has been used in this session.	60 minutes
II	Belief Concept	Participants have been explained about rational belief, irrational belief, and matters of human belief pattern.	60 minutes
III	Consequences	Participants have been explained the effects if the concept of belief is not given the priority when something happens in their life. All the consequences due to false belief concept encompass cognitive, emotional, and behavior will affect their daily life and the	60 minutes

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		patient treatment as well (children with leukemia)	
IV	Summary	Participants have been thoroughly explained all the session have been learned. At the end of this session, open conversation allowed with other participants or interventionist, e.g.: what is the future plan of children treatment, what kind of assistance they can apply from social worker etc.	60 minutes

Results

Nine participants from EG withdrew from the PERKASA Intervention. Five participants (55.6%) claims they had time constraints due to high commitment to work, while the remaining four (44.4%) stated that they were no longer interested in pursuing the intervention. Five out of eight (62.5%) participants from CG did not resubmit the T2a assessment form, while another three participants (37.5%) said they did not want be involved in the study. At the end of the intervention session, 21 participants from EG and 22 participants from CG respectively remained in the study.

Table 2: Participants Profile

Demography	Experimental Group (N=30)	Control Group (N=30)
Gender		
Male	13 (43.3%)	17 (56.7%)
Female	17 (56.7%)	13 (43.3%)
Participants' Age	M=38.73; SD=5.06	M=38.33; SD=5.12
Race		
Malay	26 (86.7%)	29 (96.7%)
Chinese	3 (10%)	-
Indian	1 (3.3%)	-
Others	-	1 (3.3%)
Occupational Status		
Employed	18 (60%)	25 (83.3%)
Unemployed	12 (40%)	5 (16.7%)
Monthly Income	RM4,940.00 (avg)	RM5,026.67 (avg)
(in Malaysia currency)	Maks: RM15,000.00	Maks: RM12,000.00
	Min: RM1,000.00	Min: RM500.00
Caregiver Status		
Biological Parents	30 (100%)	30 (100%)
Patient's Gender		
Male	24 (80%)	18 (60%)
Female	6 (20%)	12 (40%)
Patient's Age	M=6.27; SD=4.14	M=6.43; SD=2.81
Diagnosis Duration	M=5.8; SD=3.06	M=8.6; SD=2.77
Type of Leukemia		

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ALL	26 (86.7%)	30 (100%)
AML	4 (13.3%)	-

Table 2 shows the demography of all participants. A total of 17 females (56.7%) who are biological mothers were placed in EG, while the remaining 13 males (43.3%) are biological fathers. The mean age of participants in EG is 38.73 (5.06) and was categorized as youth. Majority of the participants in this group were Malays (86.7%), employed (60%), and the average income was RM4,940.00. The table unveil children diagnosed with ALL was 26 people (86.7%) and four children diagnosed with AML (13.3%). The mean age of a child diagnosed with leukemia is 6.27 (4.14) and the mean of diagnosis duration is 5.8 (3.06). Mean age of participants in CG is 38.3 (5.12), involving 17 male participants (56.7%) and 13 females (43.3%). All participants were biological parents. The minimum income recorded in CG was RM500.00 per month and the highest household income recorded RM12,000.00 per month. The data has found only one participant (3.3%) was others, while the rest were Malays. All children diagnosed with ALL leukemia types, age mean is 6.43 (2.81), and the mean duration of diagnosis is 8.6 (2.77).

Intent-to-Treat Analysis

Chi-square intent-to-treat at pre-intervention (T1) analysis between remaining participants and withdrawal participants, has found no significant correlation between participants' employment status factors [χ^2 (1, N=60) = 1.33, $p > 0.05$] and participants' gender [χ^2 (1, N=60) = 0.08, $p > 0.05$]. A comparative analysis of all the variables tested through the independent t-test analysis also found no significant difference between the remaining participants and the withdrawal participants in stress [t = -0.47 (58), $p > 0.05$], anxiety [t = 0.00 (58), $p > 0.05$], depression [t = 0.10 (58), $p > 0.05$]; and coping strategies, problem-focus [t = 0.25 (58), $p > 0.05$] and emotional-focus [t = 0.69 (58), $p > 0.05$], respectively. Hence, participants who withdrew had not affected the PERKASA Intervention.

PERKASA Intervention Results

Table 3 shows the effect of the PERKASA Intervention on four main variables at the pre and mid stages in EG. Overall, Pillai's Trace multivariate shows no significant differences between the interventions against all the variables tested [$F(1,25)=1.16$, $p > 0.05$] and effect size (d) found the interaction of the PERKASA Intervention had more impact on the emotional-focused coping strategies at moderate level, compared to other variables tested. However, an analysis of univariate tests that has been carried out, found that the effect of Perkasa Interventions at pre and intermediate intervention made significant changes only to emotional-focused [$F(1,25)=5.41$, $p < 0.05$] but not to focus-problem [$F(1,25)=0.84$, $p > 0.05$]. The findings also found no significant differences in pre and intermediate in EG towards stress [$F(1,25)=1.00$, $p > 0.05$], anxiety [$F(1,25)=0.22$, $p > 0.05$], and depression [$F(1,25)=0.08$, $p > 0.05$].

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Table 3: Differences Analysis Result in EG at Pre and Mid Intervention

Items	Min Differences (T1-T2)	F	df	*d*	Multivariate result
Stress	- 0.35	1.00	1,25	0.1	p > 0.05
Anxiety	- 0.15	0.22	1,25	0.05	
Depression	0.15	0.08	1,25	0.1	
Coping Strategies					
Problem-Focus	- 0.92	0.84	1,25	0.2	
Emotional-Focus	- 1.36	5.41*	1,25	0.5	

* $p < 0.05$, sig. 2-tailed; univariate result; differentiate analysis T1 (N=30) & T2 (N=26); MANOVA repeated analysis; *d*=Cohen's effect size, *Multivariate Pillai's Trace*; EG=Experimental Group

As a whole comparison at pre and post stages in EG has found that the PERKASA Intervention show a significant impact on all variables tested [$F(1,20)=6.65$, $p < 0.05$] (see Table 4). The univariate analysis found PERKASA Intervention did not give significant impact to stress and depression levels [$F(1,20)=1.00$, $p > 0.05$] and [$F(1,20)=2.4$, $p > 0.05$]. Although there was no significant difference, stress and depression levels at the post intervention showed better data readings compared to pre-interventions, decreasing 0.5%, and 9.3% respectively. The size effect of the two variables tested was also found to be low, *d*=0.1 and *d*=0.3, respectively.

Three other variables tested, namely anxiety, problem-focused coping strategies, and emotional- focus coping strategies showed significant differences at pre and post-intervention levels [$F(1,20)=8.65$, $p < 0.05$], [$F(1,20)=20.57$, $p < 0.05$], and ($F(1,20)=9.88$, $p < 0.05$]. The size effect of PERKASA Intervention towards three tested variables showed a good level, anxiety at moderate size effects (d=0.6), but recorded a large size effect for the two coping strategies, problem-focus (*d*=1.18) and emotional- focus (*d*=0.8). In summary, the PERKASA Interventions managed to lower the level of participants anxiety from pre to post-intervention in EG.

After all, the most important key results in this study is a comparison of the effects of the PERKASA Intervention between EG and CG at post-intervention session (see Table 5). As mentioned earlier, there was a shortage of nine people in EG and eight participants in CG due to withdrawal from the study. Overall result found that participants from EG were better than CG at post-intervention. Hence, the comparison of depression effects at post-PERKASA Interventions showed no significant changes [$t=-0.45$ (41), $p > 0.05$], but data show EG were better than CG by 3.5% lower in depression level and tend to manage their depression well. The analysis of independent t-tests sample found that there were significant differences in stress and anxiety [$t=-2.9$ (41), $p < 0.05$] and [$t=-3.25$ (41), $p < 0.05$] at post-intervention between these two groups. Comparative analysis of the variables of the coping strategies, has found that both parts of the problem-focus and the emotional-focus respectively were significantly different [$t=2.19$ (41), $p < 0.05$] and [$t= -3.36$ (41), $p < 0.05$) at post-intervention; and EG was better than CG in terms of using problem-focused and emotional-focus coping strategies after intervention ended.

International Journal of Politics, Public Policy and Social Work
IJPPSW
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Table 4: Differences Analysis Result in EG at Pre and Post Intervention

Items	Min Differences (T1-T2)	F	df	*d*	Multivariate result
Stress	- 0.43	1.00	1,20	0.1	$p < 0.05$
Anxiety	- 1.43	8.65*	1,20	0.6	
Depression	- 0.57	2.4	1,20	0.3	
Coping Strategies					
Problem-Focus	5.07	20.57*	1,20	1.18	
Emotional-Focus	- 3.24	9.88*	1,20	0.8	

* $p < 0.05$, sig. 2-tailed; univariate result; differentiate analysis T1 (N=30) & T3 (N=21); MANOVA repeated analysis; *d*=Cohen's effect size, *Multivariate Pillai's Trace*: EG=Experimental Group

Table 5: Differences Analysis Result in EG and CG at Post Intervention

Items	EG (N=21)		CG (N=22)		Min Diff.	t	df
	Min	SD	Min	SD			
Stress	86.2	3.49	89.1	3.83	-2.9	-2.59*	41
Anxiety	4.29	1.9	6.41	2.34	-2.12	-3.25*	41
Depression	5.57	1.69	5.77	1.23	-0.2	-0.45	41
Coping Strategies							
Problem-Focus	46.97	3.23	43.95	5.45	3.02	2.19*	41
Emotional-Focus	21.86	4.71	25.82	2.84	-3.96	-3.36*	41

* $p < 0.05$, sig. 2-tailed; t: independent samples t-test result; diff: differences: EG=Experimental Group, CG=Control Group

Discussion

The results at the pre and mid PERKASA Intervention in EG found that the short-term effect did not give total effect to EG participants' psychological aspects, except on the emotional-focused. This finding is in line with the findings by Norberg, Lindblad, and Boman (2005), stating that the synergy between the use of coping strategies and psychological distress will affect a part of the coping strategies. Though this intervention did not affect the overall variables tested at pre to mid intervention, it has proven an association between psychological, emotional, and behavioral disorders, as well as proving that this intervention has an impact on emotional-focus coping strategies in EG.

The average time of six months after a child is diagnosed with leukemia is seen to play an important role in measuring the psychological distress among parents. Interaction of a person's internal and external factors are interrelated to determine the true impact in one's life (Matin, Looyeh, Afrooz, & Dezhkam, 2012). Daily activities and interactions between parents and children with leukemia whether in the ward, clinic or other outdoor activities for six months are seen as factors that determine the level of psychological distress of parents, before participating in the PERKASA Intervention. This study has found that the stress levels of parents at low to medium levels, while the levels of anxiety and depression at low levels and categorized as "no psychological distress issues" (Lin & Wong, 2012). These findings are in line with previous studies (Boman, Lindahl, & Bjork, 2003), proved that longer a child is diagnosed with cancer, lowering the levels of parental stress, anxiety, and depression.

International Journal of Politics, Public Policy and Social Work
IJPPSW
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Results at pre- and mid-intervention stages of focus-emotional coping strategies in line with previous studies (Norberg et al., 2005), proved that if a person has a low level of psychological distress, then the use of emotional-focus becomes better. Parents with a child diagnosed with leukemia are seen as in need of appropriate and ongoing interventions as soon as possible to reduce psychological stress in the early stages of diagnosis (Kearney, Salley, & Muriel, 2015). At the pre- and post-intervention stages, the effect of the intervention to psychological aspects are seen to improve. Overall, the PERKASA Intervention has had an impact to psychological distress among parents of children with leukemia. These findings are in line with previous studies (Svavarsdottir & Sigurdardottir, 2013; Warner et al., 2011; Zin et al., 2022) but differ from previous aspects of anxiety (Kazak, Sims, Alderfer, Rourke, Crump, McClure, Jones, Rodgriuez, Boeving, Hwang, & Reilly, 2005).

Although the PERKASA Intervention did not succeed in lowering stress levels significantly, it did succeed in lowering parental stress in EG as a whole. The stress experienced by the parents has exceeded a stable phase after going through a series of children treatments. Previous studies found that parents who have gone through time interactions will produce post stress that requires a specific research framework to overcome (Kazak, Simms, Barakat, Hobbie, Foley, Golomb, & Best, 1999). Although problem-solving interventions are more suitable for overcoming the stressors, according to Norberg et al., (2005), emotionally-oriented interventions are more suitable for overcoming the causes of stress involving emotions. According to Stuber, Kazak, Meeske, and Barakat (1998), major stress factors usually involve life threatening illnesses among parents. Low levels of stress among parents in this study prove that children diagnosed with leukemia have gone through a bitter and less life-threatening phase. Thus, focusing on stress problems requires a specific intervention in a short period right after a child is diagnosed with leukemia. However, emotional support is seen as an important aspect to ensure that the long-term effects of psychological disorders can be curbed. Lozowski, Chesler, and Chesney (1993), proved that parents are more likely to engage with emotional support-based interventions. In PERKASA Intervention, the main focus to is the emotional aspects of parents to always be rational in aspects of decision-making in the future.

An important aspect from PERKASA Intervention was the comparison between the two groups tested, EG and CG, respectively. The implementation of an emotional approach during the intervention session was found to be an important success factor among participants from EG compared to CG. Emotional support is an important element of strengthening the psychological aspects among parents of children with leukemia. Azman, Singh, and Sulaiman (2019) proved that emotional support is an important element in helping families to reduce the burden they are experiencing because parents who are affected by psychological and emotional burden will affect the whole family system itself.

Overall findings of this study are in line with previous stress and anxiety study (Sahler, Dolgin, Phipps, Fairclough, Askins, Katz, Noll, & Butler, 2013; Stehl, Kazak, Aldelfer, Rodriguez, Hwang, Pai, Boeving, & Reilly, 2008; & Li, Solomon, Zhang, Franklin, Ji, & Chen, 2018) and are in line with depression findings (Kurtz, Kurtz, Given, & Given, 2005). The use of suitable coping strategies leads towards an improvement in the quality of life among parents of children with leukemia (McMillan, Small, Weitzner, Schonwetter, Tittle, Moody, & Haley, 2006). The findings of this study are also in line with the findings of Northouse, Catapodi, Song, Zhang, & Mood (2010), which proved that psychologically based interventions are able to improve the use of adaptive coping strategies towards caregivers of cancer patients. In addition, this study

International Journal of Politics, Public Policy and Social Work
IJPPSW
EISSN: 2637-0980
Volume 4 Issue 12 (June 2022) PP. 37-55
DOI: 10.35631/IJPPSW.412004

also parallels the characteristics of the psychotherapy interventions pilot study among parents of children with leukemia in Malaysia (Zin et al., 2022).

After going through all four sessions, there was no effect on the aspect of depression, and these findings are seen in line with the study done by Artiran and DiGiuseppe (2021) through rational and emotional approaches. The PERKASA Intervention implementation did not affect the depressive aspects between EG and CG of children with leukemia at pre and post intervention. Depression is a complex psychological problem that requires specific and appropriate interventions. Having gone through an average crucial period of six months after diagnosis, time interactions have altered individuals' positive self-concepts and are prone to do adaptive behaviors involving experiences, behaviors, and self-perceptions of the environment and future expectations. According to Beck (1970), a person who is prone to negative self-concepts will be prone to have low self-esteem and severe depression. Study of patients with depressive disorder found that the more severe depressive symptoms, the higher the tendency to use emotional-focused coping strategies (Orzechowska, Zajaczkowska, Talarowska, & Galecki, 2013).

Spiritual approach among the participants is seen as a factor that determines level of depression has been successfully controlled from time to time. Discussions among family members, as well as tolerance between parents and family members support were found to be main factors for better quality of life and prevent psychological distress from worsening. Despite experiencing extreme fatigue (physical and mental fatigue) while managing their children's treatment, sense of responsibility among parents in ensuring their child's prognosis in the best condition even after crucial treatment phase. Evans, Roskam, Stinglhamber, and Mikolajczak (2022), proved that depressive symptoms have nothing to do with a person's extreme fatigue.

Outcome of supportive psychological interventions using emotions-oriented towards parents of children with cancer in this study are in line with the results of a study by Ogez, Bourque, Peloquin, Ribeiro, Bertout, Curnier, Drouin, Laverdiere, Marcil, Rondeau, Sinner, & Sultan (2019). The interventions implementation is able to empower the overall psychological aspect to this vulnerable group. This intervention aims to get rid of negative emotions to make sure participants are able to use a better coping strategy in their real life. Although Kazak et al., (1999), used audio visual equipment to obtain the best intervention effect during the intervention session, the opposite approach was used in this study. Focusing on client values, culture, and beliefs drives the success of psychotherapy interventions (Lee, Johnstone, & Herschman, 2019), even without using the audio-visual devices. The main idea of implementing PERKASA Interventions is to ensure that the psychological, social, and emotional well-being of the client can be improved (Kaushal, Satapathy, Chadda, Bakhshi, Sagar, & Sapra, 2019).

Conclusion

The PERKASA Intervention execution in this study has successfully overcome the emotional and psychological distress, as well as increased the use of adaptive coping strategies among parents of children with leukemia among EG rather than CG participants. This study is also expected to be an essential reference towards practice based evidence for Malaysia Medical Social Work profession in hospital setting. Recommendation for future study is to implement psychotherapeutic interventions among parents of children with newly diagnosed leukemia and should be done over a long period of time, and using larger sample group.

International Journal of Politics, Public Policy and Social Work
IJPPSW
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DOI: 10.35631/IJPPSW.412004

Reference

Afanasyev, P. N., & Fedorenko, M. V. (2016). Psychological features of parent-child relationships families having children with acute lymphoblastic Leukemia. *International Electronic Journal of Mathematics Education, 11*(4), 591-598.

American Academy of Pediatrics, (1997). Guideline for the pediatric cancer center and the role of such centers in diagnosis and treatment. *Pediatrics, 99*, 139-140.

Artiran, M., & DiGiuseppe, R. (2021). Rational Emotive Behavior therapy compared to client-centered therapy for outpatients: a randomized clinical trial with a three months follow up. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 1-28.

Azman, A., Singh, P. S. J, & Sulaiman, J. (2019). The mentally ill and their impact on family caregivers: A qualitative case study. *International social work, 62*(1), 461-471.

Beck, A. T. (1970). *Depression: causes and treatment.* Pennsylvania: First University of Pennsylvania Press.

Boman, K., Lindahl, A., & Bjork, O. (2003). Disease-related distress in parents of children with cancer at various stages after the time of diagnosis. *Acta Oncologica, 42(2), 137-146.*

Boyden, J. Y., Hill, D. L., Carroll, K. W., Morrison, W. E., Miller, V. A., & Feudtner, C. (2020). The association of perceived social support with anxiety over time in parents of children with serious illnesses. *Journal of palliative medicine, 23*(4), 527-534.

Boztepe, H., Cınar, S., Ay, A., Kerimoglu Yıldız, G., & Kılıç, C. (2019). Predictors of caregiver burden in mothers of children with leukemia and cerebral palsy. *Journal of Psychosocial Oncology, 37*(1), 69-78.

Carmassi, C., Corsi, M., Bertelloni, C. A., Carpita, B., Gesi, C., Pedrinelli, V.,Massimetti, G., Peroni, D. G., Bonuccelli, A., Orsini, A., & Dell'Osso, L. (2018). Mothers and fathers of children with epilepsy: gender differences in post-traumatic stress symptoms and correlations with mood spectrum symptoms. *Neuropsychiatric Disease And Treatment, 14*, 1371-1379

Compas, B. E., Desjardins, L., Vannatta, K., Young-Saleme, T., Rodriguez, E. M., Dunn, M., Bemis, H., Sarah, S., & Gerhardt, C. A. (2014). Children and adolescents coping with cancer: Self-and parent reports of coping and anxiety/depression. *Health Psychology, 33*(8), 853-861.

Din, S. H. S., Jaafar, N. R. N., Zakaria, H., Saini, S. M., Ahmad, S. N. A., & Midin, M. (2017). Anxiety disorders in family caregivers of breast cancer patients receiving oncologic treatment in Malaysia. *Asian Pacific Journal of Cancer Prevention: APJCP, 18*(2), 465.

Ernst, M., Brahler, E., Klein, E. M., Junger, C., Wild, P. S., Faber, J., Schneider, A., & Beutel, M. E. (2019). Parenting in the face of serious illness: Childhood cancer survivors remember different rearing behavior than the general population. *Psycho-Oncology*. 1-8

Evans, T. R., Roskam, I., Stinglhamber, F., & Mikolajczak, M. (2022). Burnout across boundaries: can parental burnout directly or indirectly influence work outcomes?. *Current Psychology*, 1-11.

Feki, J., Baklouti, F., & Khanfir, A. (2021). Assessment of psychological distress among parents of children with cancer. *Open Journal of Psychiatry, 11*(4), 229-247.

Goleman, D. (1985). Social workers vault into a leading role in psychotherapy. *Medical Journal of Australia, 143*(9), 388-389.

Hamidah, A., Sham Marina, M., Tamil, A. M., Loh, C. K., Zarina, L. A., Jamal, R.,Iryani, M. D. T., & Ratnam, V. C. (2014). Parental reports of behavioural outcome among

International Journal of Politics, Public Policy and Social Work
IJPPSW
EISSN: 2637-0980
Volume 4 Issue 12 (June 2022) PP. 37-55
DOI: 10.35631/IJPPSW.412004

paediatric leukaemia survivors in Malaysia: a single institution experience. *Tropical Medicine & International Health, 19*(10), 1177-1184.

Heckel, L., Fennell, K. M., Reynolds, J., Osborne, R. H., Chirgwin, J., Botti, M., Ashley, D. M., & Livingston, P. M. (2015). Unmet needs and depression among carers of people newly diagnosed with cancer. *European Journal of Cancer, 51*(14), 2049-2057.

Kaushal, T., Satapathy, S., Chadda, R. K., Bakhshi, S., Sagar, R., & Sapra, S. (2019). Hospital based psychosocial support program for children with ALL and their families: a comprehensive triad's perspective. *The Indian Journal of Pediatrics, 86*(2), 118-125.

Kazak, A. E., Simms, S., Barakat, L., Hobbie, W., Foley, B., Golomb, V., & Best, M.(1999). Surviving Cancer Competently Intervention Program (SCCIP): a cognitive-behavioral and family therapy intervention for adolescent survivors of childhood cancer and their families. *Family process, 38*(2), 176-191.

Kazak, A. E., Simms, S., Alderfer, M. A., Rourke, M. T., Crump, T., McClure, K., Jones, P., Rodriguez, A., Boeving, A., Hwang, W-T., & Reilly, A. (2005). Feasibility and preliminary outcomes from a pilot study of a brief psychological intervention for families of children newly diagnosed with cancer. *Journal of Pediatric Psychology, 30*(8), 644-655.

Kearney, J. A., Salley, C. G., & Muriel, A. C. (2015). Standards of psychosocial care for parents of children with cancer. *Pediatric Blood & Cancer, 62*(S5), S632-S683.

Kirk, S. A., Siporin, M., & Kutchins, H. (1989). The prognosis for social work diagnosis. *Social Casework, 70*(5), 295-304.

Kohlsdorf, M., & Costa Junior, Á. L. (2011). Coping strategies and caregiver's anxiety in pediatric oncohematology. *Psicologia: Reflexão e Crítica, 24*(2), 272-280.

Koumarianou, A., Symeonidi, A. E., Kattamis, A., Linardatou, K., Chrousos, G. P., & Darviri, C. (2021). A review of psychosocial interventions targeting families of children with cancer. *Palliative & Supportive Care, 19*(1), 103-118.

Kurtz, M. E., Kurtz, J. C., Given, C. W., & Given, B. (2005). A randomized, controlled trial of a patient/caregiver symptom control intervention: effects on depressive symptomatology of caregivers of cancer patients. *Journal of pain and symptom management, 30*(2), 112-122.

Kurtz, B. P., & Abrams, A. N. (2010).Psychiatric aspects of pediatric cancer. *Child and Adolescent Psychiatric Clinics, 19*(2), 401-421.

Lee, E., Johnstone, M., & Herschman, J. (2019). Negotiating therapy goals and tasks i cross- cultural psychotherapy. *Journal of Social Work Practice, 33*(4), 447-462.

Lemos, M. S., Lima, L., Silva, C., & Fontoura, S. (2019). Disease-related Parenting Stress in the Post-treatment Phase of Pediatric Cancer. *Comprehensive Child And Adolescent Nursing*, 1-15.

Li, Y., Solomon, P., Zhang, A., Franklin, C., Ji, Q., & Chen, Y. (2018). Efficacy of solution-focused brief therapy for distress among parents of children with congenital heart disease in China. *Health & Social Work, 43*(1), 30-40.

Lin, P. L., & Wong, S. Y. (2012). The reliability of the malay versions of Hospital Anxiety Depression Scale (HADS) and McGill Quality Of Life Questionnaire (MQOL) among a Group of Patients with Cancer in Malaysia. *Malaysian Journal of Psychiatry, 21*(1).

Ljungman, L., Hovén, E., Ljungman, G., Cernvall, M., & von Essen, L. (2015). Does time heal all wounds? A longitudinal study of the development of posttraumatic stress symptoms in parents of survivors of childhood cancer and bereaved parents. *Psycho-Oncology, 24*(12), 1792-1798.

Lozowski, S., Chesler, M. A., & Chesney, B. K. (1993). Parental intervention in the medical case of children with cancer. *Journal of psychosocial oncology, 11*(3), 63-88.

International Journal of Politics, Public Policy and Social Work
IJPPSW
EISSN: 2637-0980
Volume 4 Issue 12 (June 2022) PP. 37-55
DOI: 10.35631/IJPPSW.412004

Matin, A., Looyeh, M. Y., Afrooz, G. A., & Dezhkam, M. (2012). The effect of group rational emotive behavior restructuring on mental health of parents of exceptional children. *Procedia-Social and Behavioral Sciences, 46*, 1872-1875.

McCarthy, M. C., Ashley, D. M., Lee, K. J., & Anderson, V. A. (2012). Predictors of acute and posttraumatic stress symptoms in parents following their child's cancer diagnosis. *Journal of traumatic stress, 25*(5), 558-566.

McLoone, J. K., Wakefield, C. E., Yoong, S. L., & Cohn, R. J. (2013). Parental sleep experiences on the pediatric oncology ward. *Supportive care in cancer, 21*(2), 557-564.

McMillan, S. C., Small, B. J., Weitzner, M., Schonwetter, R., Tittle, M., Moody, L., & Haley, W. E. (2006). Impact of coping skills intervention with family caregivers of hospice patients with cancer: a randomized clinical trial. *Cancer, 106*(1), 214-222.

Midgley, J. (2010). *The Theory And Practice Of Developmental Social Work.* Di dalam Midgley, J., & Conley. A., (Eds.), Social Work And Social Development: Theories And Skills For Developmental Social Work. New York: Oxford University Press, Inc.

Mohamed, M., Chong, D. L. S., Loh, C. K., Zakaria, S. Z. S., Alias, H., Jamal, A. R. A., & Latiff, Z. A. (2017). Parenting Stress In Malaysian Parents Of Children With Thalassaemia. *Malaysian Journal of Paediatrics and Child Health, 23*(1).

Monti, J. D., Winning, A., Watson, K. H., Williams, E. K., Gerhardt, C. A.,Compas, B. E., & Vannatta, K. (2017).Maternal and paternal influences on children's coping with cancer-related stress. *Journal of Child and Family Studies, 26*(7), 2016-2025.

Muskat, B., Jones, H., Lucchetta, S., Shama, W., Zupanec, S., & Greenblatt, A. (2017). The experiences of parents of pediatric patients with acute lymphoblastic leukemia, 2 months after completion of treatment. *Journal of Pediatric Oncology Nursing, 34*(5), 358-366.

National Cancer Registry Report 2012-2016, (2019). Putrajaya:Malaysia Ministry of Health

Nikseresht, F., Rassouli, M., Torabi, F., Farzinfard, F., Mansouri, S., & Ilkhani, M.(2016). The effect of spiritual care on mental health in mothers of children with cancer. *Holistic Nursing Practice, 30*(6), 330-337.

Norberg, A. L., Lindblad, F., & Boman, K. K. (2005). Coping strategies in parents of children with cancer. *Social science & medicine, 60*(5), 965-975.

Northouse, L. L., Katapodi, M. C., Song, L., Zhang, L., & Mood, D. W. (2010). Interventions with family caregivers of cancer patients: meta-analysis of randomized trials. *CA: a cancer journal for clinicians, 60*(5), 317-339.

Nur Saadah, M. A., Siti Hajar, A. B., & Islam, M. R. (2014). Coping strategies among mothers of chronically ill children: A case study in Malaysia. *Journal of Social Service Research, 40*(2), 160-177.

Ogez, D., Bourque, C. J., Peloquin, K., Ribeiro, R., Bertout, L., Curnier, D., Drouin, S., Laverdiere, C., Marcil, V., Rondeau, E., Sinnet, D., & Sultan, S. (2019). Definition and improvement of the concept and tools of a psychosocial intervention program for parents in pediatric oncology: a mixed-methods feasibility study conducted with parents and healthcare professionals. *Pilot and Feasibility Studies, 5*(1), 20.

Orzechowska, A., Zajączkowska, M., Talarowska, M., & Gałecki, P. (2013). Depression and ways of coping with stress: A preliminary study. Medical science monitor: *International Medical Journal of Experimental and Clinical Research, 19,* 1050-1056.

Othman, A., Mohamad, N., Hussin, Z. A., & Blunden, S. (2011). Psychological distress and associated factors in parents of children with cancer. *International Journal of Social Science and Humanity, 1*(1), 37-42.

International Journal of Politics, Public Policy and Social Work
IJPPSW
EISSN: 2637-0980
Volume 4 Issue 12 (June 2022) PP. 37-55
DOI: 10.35631/IJPPSW.412004

Ozdemir Koyu, H., & Tas Arslan, F. (2021). The effect of physical and psychosocial symptoms on caregiver burden of parents of children with cancer. *European Journal of Cancer Care, 30*(6), e13513.

Patino-Fernandez, A. M., Pai, A. L., Alderfer, M., Hwang, W. T., Reilly, A., & Kazak, A. E. (2008). Acute stress in parents of children newly diagnosed with cancer. *Pediatric blood & cancer, 50*(2), 289-292.

Rani, N. A., Daud, F., & Alias, H. (2018). Faktor-Faktor yang mempengaruhi Stres, Kebimbangan dan Kemurungan dalam kalangan Penjaga kepada Pesakit Leukemia Kanak-Kanak. *International Journal of Public Health Research, 8*(2), 987-997.

Rosenberg, A. R., Dussel, V., Kang, T., Geyer, J. R., Gerhardt, C. A., Feudtner, C., &Wolfe, J. (2013). Psychological distress in parents of children with advanced cancer. *JAMA pediatrics, 167*(6), 537-543.

Safarabadi-Farahani, A., Maarefvand, M., Biglarian, A., & Khubchandani, J. (2016). Effectiveness of a brief psychosocial intervention on quality of life of primary caregivers of iranian children with cancer: A randomized controlled trial. *Journal of pediatric nursing, 31*(4), 262-270.

Sahler, O. J. Z., Dolgin, M. J., Phipps, S., Fairclough, D. L., Askins, M. A., Katz, E. R., Noll, R., B., & Butler, R. W. (2013). Specificity of problem-solving skills training in mothers of children newly diagnosed with cancer: Results of a multisite randomized clinical trial. *Journal of clinical oncology, 31*(10), 1329.

Santos, S., Crespo, C., Canavarro, M. C., Alderfer, M. A., & Kazak, A. E. (2016). Family rituals, financial burden, and mothers' adjustment in pediatric cancer. *Journal of Family Psychology, 30*(8), 1008.

Steele, A. C., Mullins, L. L., Mullins, A. J., & Muriel, A. C. (2015). Psychosocial interventions and therapeutic support as a standard of care in pediatric oncology. *Pediatric blood & cancer, 62*(S5), S585-S618.

Stehl, M. L., Kazak, A. E., Alderfer, M. A., Rodriguez, A., Hwang, W. T., Pai, A. L., Boeving, A.,& Reilly, A. (2008). Conducting a randomized clinical trial of an psychological intervention for parents/caregivers of children with cancer shortly after diagnosis. *Journal of Pediatric Psychology, 34*(8), 803-816.

Stewart, B. W. K. P., & Wild, C. P. (2014). *World cancer report 2014*.

Stuber, M. L., Kazak, A. E., Meeske, K., & Barakat, L. (1998). Is posttraumatic stress a viable model for understanding responses to childhood cancer?. *Child and adolescent psychiatric clinics of North America, 7*(1), 169-182.

Sutan, R., Al-Saidi, N. A., Latiff, Z. A., & Ibrahim, H. M. (2017). Coping strategies among parents of children with acute lymphoblastic leukemia. *Health, 9*(07), 987.

Svavarsdottir, E. K., & Sigurdardottir, A. O. (2013). Benefits of a brief therapeutic conversation intervention for families of children and adolescents in active cancer treatment. *Oncology Nursing Forum, 40*(5), E346.

Synopsis of Childhood Cancer Incidence In Malaysia, 2007-2011 (2018). Putrajaya: Kementerian Kesihatan Malaysia.

Tremolada, M., Bonichini, S., Aloisio, D., Schiavo, S., Carli, M., & Pillon, M. (2013). Post-traumatic stress symptoms among mothers of children with leukemia undergoing treatment: a longitudinal study. *Psycho-Oncology, 22*(6), 1266-1272.

Vernon, L., Eyles, D., Hulbert, C., Bretherton, L., & McCarthy, M. C. (2017). Infancy and pediatric cancer: an exploratory study of parent psychological distress. *Psycho-Oncology, 26*(3), 361-368.

International Journal of Politics, Public Policy and Social Work
IJPPSW
EISSN: 2637-0980
Volume 4 Issue 12 (June 2022) PP. 37-55
DOI: 10.35631/IJPPSW.412004

Wakefield, J. C. (1988a). Psychotherapy, distributive justice, and social work: Part 1: Distributive justice as a conceptual framework for social work. *Social Service Review*, *62*(2), 187-210.

Wakefield, J. C. (1988b). Psychotherapy, distributive justice, and social work: Part 2: Distributive justice as a conceptual framework for social work. *Social Service Review*, *62*(3), 353-382.

Warner, C. M., Ludwig, K., Sweeney, C., Spillane, C., Hogan, L., Ryan, J., & Carroll, W. (2011). Treating persistent distress and anxiety in parents of children with cancer: An initial feasibility trial. *Journal of Pediatric Oncology Nursing*, *28*(4), 224-230.

Wikman, A., Mattsson, E., von Essen, L., & Hoven, E. (2018). Prevalence and predictors of symptoms of anxiety and depression, and comorbid symptoms of distress in parents of childhood cancer survivors and bereaved parents five years after end of treatment or a child's death. *Acta Oncologica*, *57*(7), 950-957.

World Health Organization. (2017). Depression and other common mental disorders: global health estimates (No. WHO/MSD/MER/2017.2). World Health Organization.

Zarina, A. L., Radhiyah, R., Hamidah, A., Rahman, J., & Syed Zulkifli, S., Z. (2012). Parenting stress in Childhood Leukaemia. *Medicine and Health*, *7*(2), 73-83.

Zin. M., S., M., Azman, A., Latiff, Z., A., & C-Khai, L. (2022). Pilot study: Feasibility and preliminary outcome of the psychotherapy intervention with parents of leukaemia children in Malaysia. *Asian Social Work Journal*, *7*(1), 11-23.