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The Importance of Preventive Measures to Reduce the Incidence of Postpartum Depression in Unintended Pregnancies: A Narrative Review

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Abstract: Unintended pregnancies and associated emotional issues can negatively affect expectant mothers, potentially harming both them and their babies. This study focuses on the significance of forgiveness as an intervention for healing emotional wounds, enhancing self-acceptance, and improving overall well-being and relationships among mothers. It assesses forgiveness's impact on the physical, psychological, social, and spiritual health of mothers throughout their lives, bolstering their resilience. A narrative review of evidence on forgiveness in the context of unwanted teenage pregnancies was conducted from January 2016 to January 2019, including PubMed, EMBASE and Cochrane, EBSCO, PubMed, UpToDate, and Clinical Key. Out of 995 studies, 14 articles were selected, primarily emphasizing forgiveness therapy for adolescent bullying and social issues. Although research on forgiveness in unwanted pregnancies was limited and had methodological limitations, early interventions are crucial to safeguard pregnant women's physical and mental health during pregnancy, childbirth, and the postpartum period. Further research with improved methodology is needed to comprehensively understand forgiveness's impact and enhance support for pregnant women.

Keywords: Empowerment; Forgiveness; Quality of life of pregnant women; Unwanted pregnancy.

Introduction

In Sub-Saharan African (SSA) countries, 30-40% of teenage girls have become moms before the age of 18, or one in every five girls has given birth as a teenager each year, and as a result, most women may have numerous children by the age of 20. Teenagers aged 19 years have a 13 times higher risk of experiencing a first pregnancy compared to those aged 15 years. At the time of the most recent Demographic and Health Surveys (DHS), about 27 and 25% of adolescent girls aged 15 to 19 in Tanzania and Uganda, respectively, were pregnant or had their first child. (Ahinkorah, Kang, Perry, Brooks, & Hayen, 2021; Wado, Sully, & Mumah, 2019)

Adolescent females, between the ages of 15 and 19, are often at high risk of pregnancy for both the mother and the fetus. This can result in intergenerational cycles of poverty, inadequate education, and unemployment. Age, occupation, marital status, degree of education, early sexual beginning, contraceptive knowledge, unmet need for contraception, and wealth quintile are all connected with first adolescent pregnancy in SSA (Ahinkorah et al., 2021; Ayalew et al., 2022).

How to Cite:

Example: Susilawati, S., Doyan, A., Muliyadi, L., & Hakim, S. (2019). Growth of tin oxide thin film by aluminum and fluorine doping using spin coating Sol-Gel techniques. *Jurnal Penelitian Pendidikan IPA*, 1(1), 1-4. <u>https://doi.org/10.29303/jjppipa.v1i1.264</u>

The psychological, biological, social, and spiritual impacts of an unplanned pregnancy (UP) can include negative emotions which can affect self-acceptance. Selfacceptance in an UP is very important to be free from negative emotional confinement, and encouraging and changing attitudes towards others will therefore change the situation to be positive to set new life goals (Priadi & Gurmichele, 2019).

Negative emotions caused by a lack of acceptance of an UP or problems that arise during pregnancy will have an impact on an individual's sympathetic nervous system, resulting in such physical impacts as palpitations, gastric disorders, or muscle disorders, which is why parasympathetic balance is important (Priadi & Gurmichele, 2019). It is the parasympathetic balance that will suppress the volatility of behavioral reactions due to negative emotional stress that arises during pregnancy which will have an impact on metabolic and circulation disorders as a whole, and in the long term, this essential balance will eventually have an impact on the growth of the baby's sacral nerves from the behavior of the mother.

The importance of interventions to forgive in UP involves various components that will reduce negative impacts during pregnancy and childbirth or on both the mother and baby; thus, the therapy can focus on psychosocial risk factors and their prevention (Priadi & Gurmichele, 2019). With such therapy, pregnant women will focus on the balance of the parasympathetic nerves whose impacts include calming and relieving sympathetic nervous pressure, thereby suppressing behavioral maladaptation caused by negative emotional pressure.

Method

Search strategy

Selected publications published between 2004 and 2020 were retrieved from electronic databases such as PubMed, EMBASE and Cochrane, EBSCO, UpToDate, and ClinicalKey using the following search terms: Unwanted Pregnancy, Unplanned Pregnancy, Physical, Psychic, Social, and Spiritual Benefits and Effects with Literature Limited to English. All of the search results exported to Mendeley's were then reference management software. The selection of research results was done using the Guide for Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA). The search results according to the complete PRISMA Guidelines are presented in Figure 1.

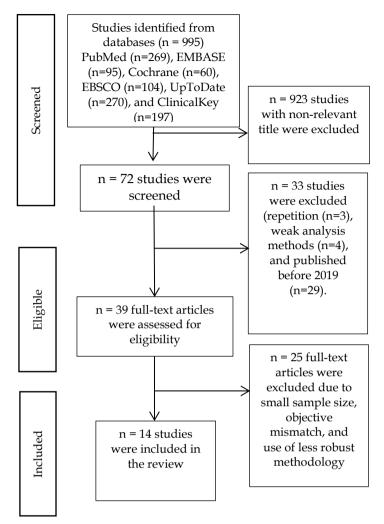


Figure 1. Schematic representation of the studies included

Inclusion and exclusion criteria

This review looked for research publications that discussed a) teenage or adult patients who were pregnant, b) patients who had apology therapy for some adult disorders, c) the benefits of therapy to improve one's quality of life, and d) articles written in English. All of the articles were evaluated critically based on the research approach used.

Study selection

The search results were sorted after removing any duplicate citations, which was done by reading the title and abstract and selecting the full-text articles according to the eligibility criteria. An article was considered eligible if the article discussed the effectiveness of forgiveness therapy for cases of illness or social problems. This review covered all study levels from level I to level V starting from case-control designs, and cohort studies, to prospective studies and randomized controlled trials, with bibliographical sources of

evidence from the Oxford Center for Evidence-Based Medicine (CEBM).

Data extraction

Authors

The data extraction in this literature review contains a list of the studies included in the review on the importance of forgiveness therapy in mothers, adolescents, or adults with psychological problems due to trauma or other social pressures. The study-related information in this review included the first author, year, country, title, objective, study design, and findings.

Result and Discussion

Based on Figure 1, 995 of these studies were screened with 901 complete and 94 incomplete articles. For this review, the 981 studies that did not meet the requirements were reduced to 14 fully qualified articles that focused on the importance of forgiveness therapy for adolescent bullying and social problems in society. Table 1 provides a synthesis of the 14 studies including a breakdown of some of the available and related variables. Most of the studies (35.7% (n = 5)) used a

systematic review, followed by 21.4% (n = 3) with an observation group, 21.4% (n = 3) with retrospective cohorts, and 21.4 % (n = 3) with an experimental design. The majority (n = 4, 28.5%) were conducted in the UK, and the rest were in the USA (n = 3, 21.4%), Indonesia (n = 3, 21.4%), Thailand (n = 1, 7.1%), India (n = 1, 7.1%), Turkey (n = 1, 7.1%), and Italy (n = 1, 7.1%).

The results shown were all obtained from the studies that met the requirements for multiple maternal inclusion requirements and the effects of forgiveness therapy on mental well-being and mental states of humans included in the index of pregnant women regardless of the study design. This review provided some evidence of the importance of remission therapy in UP (unwanted pregnancies). The results of forgiveness therapy can reduce anxiety, feelings of sadness, depression, and not accepting circumstances. The use of apology therapy for fetal growth and development, benefits for the physical, psychosocial, and spiritual conditions of pregnant women, the welfare of the couple and the fetus, and the optimal life of the mother were also reviewed in this study.

Confounders

Key findings

Significant

	222110 4114(010	in the second				
confounders	adjusted in		characteristic		country	
	multivariable		s of study			
	analysis		participants			
Increasing	Health, economic,	Young women are	176 articles	This	USA	Sattarzadeh et
public	cultural and social	victims of violence		investigation		al. (2019)
awareness	issues.	throughout their most		was carried		(Mokhlesi,
and the		active years of life and		out by		Simbar,
cooperation		are vulnerable in		scanning		Tehrani,
of related		society due to health,		several		Kariman, &
organizations		economic, cultural, and		databases for		Majd, 2019)
-		social concerns. Given		publications		-
		its prevalence,		published		
		underage marriage can		between 2000		
		be avoided by raising		and 2018		
		public awareness and				
		enlisting the help of				
		relevant organizations.				
Parental	Parental Socio-	The religious practices	3,795 pairs of	Through	Thailand	Siriphadung,
Mindful Self-	Demographic, Pare	of parents are	parents and	path		Sakesun (2019)
Conduct	ntal Mindful	important as they	adolescent(s)	analysis, this		(Siriphadung,
	Altruism, Parental	operate through		study		2019)
	Mindful Self-	adolescents' own		examined		
	Conduct	religious adherence		familial		
		and their self-		religious		
		control/guidance		socialization		
		system, as a mechanism		in connection		
		to protect against		to teenagers'		
		adolescent risk-taking.		risk-taking		
		_		behavior.		
Adolescents,	support from	the impact of unwanted	2051 articles,	The method	Indonesia	Ermiati E et al
who	families, health	pregnancy on	then adjusted	used in the		(2022)
experience		pregnancy care in	to the	literature is a		(Ermiati,

 Table 1. Study characteristics of the included 14 full-text articles

Study

Study design

Number and

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Widiasih, &		narrative	inclusion and	adolescents will have	workers, and the	unwanted
Mediani, 2022)		review using	exclusion	an impact on both	community	pregnancy,
		the Preferred	criteria for	physical and		tend not to
		Reporting	screening to	psychological problems		do ANC,
		Items for	710 articles,			behave in
		Systematic	then the			harming to
		Review	articles were			themselves
		(PRISMA).	screened			and their
		The data	based on			fetus
		used are	titles and			
		secondary	abstracts that			
		data taken	matched the			
		from	literature			
		scientific	theme, the			
		articles 2011	results were			
		to 2021	six articles			
<u></u>	LIV			Due an en an hinth an d	Demonstal	Effections
Chamberlain <i>et</i>	UK	This study	18329 articles	Pregnancy, birth, and	Parents'	Effective
al. (2019)		was based on		the early postpartum	experiences and	support
(Chamberlain		screened		period provide a once-	views of perinatal	strategies
et al., 2019)		articles for		in-a-lifetime healing	care and early	
		inclusion and		chance for parents who	parenting were	
		extracted		have experienced	discussed	
		data. Data		mistreatment.		
		were		Understanding parent's		
		synthesized		experiences and views		
		using		of perinatal care and		
		grounded		early parenting is		
		theory and		critical for informing		
		thematic		the development of		
		analysis		acceptable and effective		
		approaches.		support strategies		
Kurniati et al.	Indonesia	his study	Non	REACH-FC (Recall the	Environment,	Mental
(2020)	maonesia	compared	experimental	hurt, Empathize,	character, and	health
(Kurniati,		immediate	sample ((N =	Altruistic give of	experiences	condition
Worthington,		treatment	251; 62 males;	forgiveness, Commit to	experiences	contantion
0			189 females;			
Widyarini,		(IT) and		the forgiveness		
Citra, &		waiting list	ages between	experience, Hold on to		
Dwiwardani,		(WL)	17 and 25	the forgiveness		
2020)		conditions in	years old)	experience, forgiveness		
		a 2x3(S)	and	collectivistic) was		
		quasi-	experimental	successful in increasing		
		experimental	sample (($N =$	decisional forgiveness		
		repeated-	97; 24 males;	and emotional		
		measures	73 females;	forgiveness in		
		design.	ages between	collectivistic		
		[Condition	16 and 21	Indonesians.		
		(IT,	years old)			
		WL)×Time				
		([S] 3 time				
		points)]				
Praptomojati <i>et</i>	Indonesia	A quasi-	seventy adult	Forgiveness therapy	lack of meaningful	isolation
al. (2020)		experimental	inmates (M =	could increase the self-	activities and	from social
(Praptomojati		method was	33 years, SD	acceptance of the	insecurity about	networks
& Subandi,		used, with	= 7.5)	inmates. The researcher	future prospects	1.200 0110
2020)		measures	- 7.3)		intuite prospects	
2020)				anticipated that		
		taken three		forgiveness therapy		
		times (before,		will be used as the		
		after, and		foundation for		
		one week		treatment and the		
		after the		creation of mental		
		intervention)				

		using a one- group pretest- posttest		health programs in Indonesian prisons.		
Toktas, Sermet (2019) (Toktas, 2019)	Turkey	design. This study was conducted with the relational	During the 2017-2018 academic year, 479 university	The highest average point of forgiveness belonged to the students of the coaching department.	living conditions, undesirable experiences, and stress and difficult life conditions	surviving these stressful processes
		screening model	students studied at Kahramanma ras, Gaziantep, Burdur, Denizli, and Mersin.			
Dahiya <i>et al.</i>	India	The cohort	376	The study shows that	the growing	level of
(2019) (Dahiya & Rangnekar,		retrospective technique	employees working in	forgiveness significantly reduces	demands for workplace	tolerance in adversity
2019)		was used for this	various Indian	the NA on employees and hence,	behavioral health, health and	increased
		investigation.	manufacturin	organizations should	performance of	
			g organizations	make positive interventions in order to encourage	employees, cross- cultural phenomenon.	
				forgiveness at work	prienomenom	
Quintana-Ort, et al (2019)	USA	This study was	There were 637 non-	Adolescents with higher forgiveness	the emotional impact and	Cyber victimization
(Quintana-		conducted	duplicated	levels bully less and	traditional	displayed
Orts, Rey, &		with	studies out of	adolescents with higher	victimization	high levels of
Worthington, 2019)		systematic searches in	a total of 1,093 studies,	forgiveness show less victimization		negative emotions
2017)		PsycINFO,	and 18 were	victimization		emotions
		MEDLINE,	subsequently			
		PsycArticles, and Scopus databases	included.			
Clabby <i>et al.</i>	UK	This study	435 young	Divine forgiveness also	experience of	emotional
(2019) (Clabby, 2020)		was conducted	adults	mediated the connection between	feeling angry, frustrated, and	injury
2020)		with a cohort		self-forgiveness and	impatient can	
		observational method		psychological distress, with lower but not larger levels of self-	trigger increased heart problems	
				forgiveness associated with less depressive		
Toussaint, et al.	UK	This study	1,423 United	symptoms. Forgiveness of others	immune system	depressive
(2020) (Toussaint, Gall, Cheadle,		was conducted with a cohort	States adults.	and self-forgiveness may reduce feelings such as anger, regret,	and improved learning and memory	symptoms
& Williams, 2020)		observational method		and rumination and provide a buffer between one's own and		
				others' transgressions that occur during the		
				day, as well as provide a tranquil mental state that promotes sound		

Gall et al. (2020) (Gall & Bilodeau, 2020)	UK	This study was conducted with a cohort retrospective method	An online survey of 116 persons was conducted to assess forgiveness, general,	sleep, which is related with greater health. Forgiveness mediates the relationship between coping and well-being and so may function as a protective mechanism within the context of couple stress.	Acceptance, positive refocusing and reappraisal, planning, putting the situation into perspective, reliance on seeking	acceptance
			spiritual, and interpersonal coping, and well-being.		support and conflict resolution, and lesser reliance on revenge seeking	
Wulandari et al. (2019) (Wulandari & Megawati, 2020)	Indonesia	This study was conducted with research journals published between 2013 and 2018 as the criteria of the article.	The journals containing the papers must be published between 2013 -2018.	According to the findings, forgiving may be a factor in adolescents' psychological well- being. Forgiveness has been shown to improve happiness, spiritual well-being, and subjective well-being in teenagers, particularly youth who have been bullied.	self-control, age, and gender.	social support
Barcaccia <i>et al.</i> (2019) (Barcaccia et al., 2019)	Italia	The study was conducted with a cohort observational method	773 Adolescents	Adolescents who were more forgiving had higher HB and lower depression because they reported a lower general inclination to experience anger. Through the mediation of all aspects of Anger, forgivingness was also positively associated to both HB and despair.	Gender and Age	Experiences

Risks of violence in teen marriage

Overall, young women are vulnerable to becoming victims of violence in their active lives, and violence triggers health, economic, social, and cultural problems. Building cooperation and awareness at the organizational level and in the community can reduce the number of teenage marriages. There is a high-risk phenomenon of domestic violence, mental health disorders, and high-risk pregnancy in teenage marriage. Women with a history of violence will be at risk during pregnancy and childbirth. The importance of preventing domestic violence can be emphasized for at-risk groups. In addition, women who experience violence sometimes do not attend treatment and may not even report acts of harassment. Even if they have signs of abuse and/or violence, they rarely report sexual violence or other forms of harassment. Therefore, women who experience violence must be identified and intervened with forgiveness therapy to practice positive thinking and coping or to activate parasympathetic nerves to reduce disappointment, thereby enabling them to think rationally (Mokhlesi et al., 2019; Sezgin & Punamäki, 2020).

Correcting the ill effects of childhood: sexual abuse

The long-term health effects of abuse are a significant public health concern. Abuse in early childhood, whether single, repeating, or multigenerational, causes long-term trauma to the individual's well-being and health, resulting to physical, psychological, social, and emotional consequences and adversely even affecting one's emotional life. Organizations working in the field of disease prevention and violence control stated that child abuse is behavior that presents a potential danger or is in the form of threats, statements, or words with open actions resulting in acts of physical, sexual, or psychological abuse. Abuse of children, especially psychological abuse, is linked to a detrimental long-term number of effects on development and health that continue throughout adolescence and early adulthood (M. A. da Cruz et al., 2021; Strathearn et al., 2020). Experience of child abuse, or often called Adverse Childhood Experiences (ACE), can involve violence and abuse during childhood or can be in the form of global emotional neglect, a dysfunction that occurs in the household, or in the form of physical neglect (Schulte, Bach, Berkowitz, Latner, & Pearl, 2021).

Often harassment is done by the caregiver of the closest person, resulting in a loss of security for the child, and this abuse will have consequences for the growth and development in the form of physical or psychological stress reactions or emotional dysregulation, biological, and cognitive dysfunctions (Arslan & Engin, 2022; Henkhaus, 2022). Unresolved history of childhood trauma can have negative physical and psychological consequences, such as cognitive disability, anxiety and depression, psychosis, teen-aged pregnancy, addiction disorders, obesity, and cardiovascular disease (Strathearn et al., 2020; Zhang et Forgiveness therapy al., 2021). can provide opportunities for children with a history of sympathetic and parasympathetic imbalances, and in adulthood and pregnancy, coping mechanisms such as the stages of forgiveness therapy can be established, leading to body balance or homeostasis and avoiding diseases of vital organs.

Healing the past by improving the quality of life in the future

Physical, social, and emotional development and well-being can be significantly disrupted by bad parenting (Wang, 2022). Long-term toxic relationships can impair children's capacities, potentially resulting in "intergenerational trauma." The transition to loving parenthood throughout pregnancy, labor, and the early postpartum period, on the other hand, provides life opportunities and has the potential to be a cure. Children with a history of abuse need lifelong healing opportunities provided to initiate a comfortable environment physically, psychologically, socially, and spiritually during pregnancy, childbirth, and the puerperium (Chamberlain et al., 2019).

Pregnancy, childbirth, and postpartum periods that are physically, psychologically, socially, and spiritually healthy are lifelong healing opportunities for children who have experienced violence. Therefore, information about support strategies and effective parenting for parents must be provided to support effective care and parenting during the perinatal period (Chamberlain et al., 2019; Ong, Ong, Ang, Vehviläinen-Julkunen, & He, 2023). With forgiveness therapy, there will be a balance of sympathetic and parasympathetic nerves, and this can lead to parental affection for the child and examples of how to deal with inappropriate emotions, so the child's sacral nerve will develop well. Processes of selfregulation affect the probability of forgiveness in interpersonal situations (Ho, Van Tongeren, & You, 2020).

Forgiveness: move on is healthy

Forgiveness is the primary preventive intervention for doctors and nurses to facilitate their services. Forgiving will generate respect, love, and generosity for those who practice it. Injured individuals do not put themselves in danger since forgiving can stop and avoid revenge actions of the injured person. Forgiveness means that individuals who still imagine past wounds without continuing to think about negative emotions can let go of hatred or unfair treatment. This learning to forgive and move forward is an effective and healing approach (Clabby, 2020).

Some individuals who fail to forgive will experience symptoms of depression (Jung et al., 2019). The four domains of quality of life were assessed as good and significant in patients with cancer who underwent forgiveness therapy for four weeks, and such an approach could reduce anger. Therefore, the practice of forgiveness therapy can be a nurturing approach to development. Besides, the results of a study showed that the influence of the four domains is quite large (Clabby, 2020).

The REACH (Recall the hurt, Empathize, Altruistic gift of forgiveness, Commit to the forgiveness experience, Hold on to the forgiveness experience, forgiveness collectivistic) provides concrete evidence that such a method can help individuals learn to forgive what they feel in the form of hurt, so they foster empathy and will experience forgiveness and then commit to forgive. Therefore, it is also important that they forgive themselves because overcoming disturbing negative emotions can be beneficial to health (Clabby, 2020; Long, Worthington, VanderWeele, & Chen, 2020).

Forgiveness therapy influence on emotions and decisions to forgive

Forgiveness is defined as the process of recognizing an offender's faults and attempting to repair one's emotional wounds while also developing new relationships in the future (Wulandari & Megawati, 2020). A meta-analysis of forgiveness interventions suggested that forgiveness can help an individual deal with various types of psychological problems (Sandage, Crabtree, & Bell, 2019). Forgiveness emphasizes two topics, namely emotional responses and the decision to forgive, which is a form of desire to avoid revenge, a violation done by an individual with dignity (Kurniati et al., 2020). An individual can decide to forgive the person who hurt him/her but still experience negative emotions. The negative emotions that cannot be neutralized can be replaced with positive emotions, and if they are still oriented towards other people's mistakes, then they have not emotionally forgiven (Brémault-Phillips, Cherwick, Smith-MacDonald, Huh, & Vermetten, 2022; Kurniati et al., 2020).

Forgiveness can increase self-acceptance and understanding of self-worth. This is a mechanism to improve individual well-being. Individuals who no longer feel pain can accept and grow new insights and creativity if they have already forgiven the negative emotions that they felt before. They can accept unconditionally and think rationally although it is not easy to give up the unpleasant situations, with time finding a way out of the problem at hand is a sign that the individuals have made peace with themselves and others and the circumstances they are facing. As a result, the individuals have a strong mentality when facing life's trials using a new perspective (Praptomojati & Subandi, 2020).

High self-acceptance in individuals who have forgiven

This approach provides a positive effect as it can reduce the levels of anxiety, depression, and stress, indicating effective forgiveness interventions, according to the results of a meta-analysis study. Empirical evidence indicated that such a process can result in optimism, mental health, positive thinking and achievement of life satisfaction as a result of the forgiveness of the negative emotions experienced. In addition, forgiveness helps physically ill individuals to reduce their anger and psychological distress (Kim, Payne, & Tracy, 2022).

Qualitative results revealed that individuals show more positive changes after attending therapy in which physical complaints are reduced, and negative emotions become positive. Individuals can perceive themselves positively and have a better ability to respect themselves and others by fostering behavior to be able to face such conditions (Praptomojati & Subandi, 2020).

Effects of forgiveness on work and negative effects at work

Disputes and various arguments for personal revenge or strong disputes have the potential to affect employees and the workplace in general. In this case, an alternative is needed, such as forgiveness therapy, to organize and resolve disputes and conflicts in organizations. Forgiveness is a coping mechanism that focuses on emotions and can help reduce the negative impact of conflicts with fellow workers on employees. Forgiveness is a constructive attitude in emotions, beliefs, and activities related to oneself (Dahiya & Rangnekar, 2019).

As the self-forgiveness model emphasizes, failures, mistakes, stress, and coping with stress at work can harm psychological well-being as well as the organization in which the individual works (Toussaint, 2022). This situation can also be experienced by women with UP who tend to come into conflict with family members (Dahiya & Rangnekar, 2019).

The negative impact on the work situation requires mutual forgiveness, so it will be important to foster a situation of mutual understanding of conflicts and to analyze each other's work situations (Dahiya & Rangnekar, 2019). There are long-term impacts on employees' way of thinking if there is a situation that emotionally burdens them (Kent, Bradshaw, & Uecker, 2018). Forgiveness is used as not only therapy but also an early intervention program, involving coaching and mutual acceptance in the workplace to help reduce the negative effects on employees. Therefore, adopting the forgiveness dimension can be a good substitute for stress management in the workplace.(Dahiya & Rangnekar, 2019; Witvliet, Root Luna, Worthington, & Tsang, 2020)

Effects of forgiveness therapy on bullying and cyberbullying in adolescents

Bullying and cyberbullying have a negative consequences for physical and mental health (Méndez, Jorquera, Ruiz-Esteban, Martínez-Ramón, & Fernández-Sogorb, 2019). To handle bullying and cyberbullying, forgiveness techniques can be used (Eroglu, Peker, & Cengiz, 2022). The high negative emotional stress reactions and resentment can also be overcome. Learning to forgive can be used as a strength building and mechanism to help children and adolescents think more positively in dealing with conflicts to create a better culture. To help an individual quickly adjust emotions, manage feelings, and suppress social conflicts and maladaptive behavior, it is highly important to intervene with forgiveness. Increasing the ability to manage emotions will reduce the nature of aggression in victims of bullying in children and adolescents, making it important to build the resilience of forgiveness for each individual.(Quintana-Orts et al., 2019)

A positive relationship between forgiveness therapy and rest quality and health

One of the causes of lack of sleep is stress. Forgiveness therapy helps build understanding and coping (Toussaint, Gall, et al., 2020). Forgiving others and oneself has an important role as a coping mechanism that can help individuals deal with "past regrets and violations". Mental and physical health, less pain, and better immunity are signs that an individual has forgiven oneself and others (Toussaint, Worthington, et al., 2020). Stressful conditions will also increase cardiovascular response. Forgiving others and oneself can have a significant correlation with an individual's health and sleep quality. Forgiving others and oneself can reduce emotions including negative reflections. Forgiveness allows an individual to be mentally calm, resulting in a deep sleep and better health (Toussaint, Gall, et al., 2020).

Role of forgiveness as a coping response to married couples

Forgiveness indicators are connected with higher self-esteem, higher expectancies, and a higher degree of partner influence and adjustment, which are associated with lower negative impacts. Individual welfare is obtained by supporting the intimate relationship between husband and wife. It also offers hope, an attitude that can provide consistency with good behavior. Forgiving the partner for the mistakes during the marriage will encourage an individual to have a sense of self-worth, hope, and positive influence. Meanwhile, the pain and urge to reciprocate will result in stress and low adjustment for the partners (Gall & Bilodeau, 2020).

With forgiveness therapy, benevolent behavior will grow, resulting in positive coping as well as spiritual coping. Individuals with positive coping in dealing with negative emotions are more likely to analyze experience, resulting in a greater positive influence and greater partner adjustment. Forgiveness can help individuals to suppress negative emotions by consistently dealing with personal stress. Forgiveness can also facilitate individuals to take advantage of coping strategies with positive thinking and spiritual solutions and to strengthen the relationship between husband and wife which requires empathy to reduce the negative impact of emotions and manage stress from the partners as well as strengthen one's relationship with other people over time (Gall & Bilodeau, 2020).

Forgiveness supporting adolescent psychological development

Psychologically prosperous and better outlooks exist in individuals who have an attitude of forgiveness (Toktas, 2019). There is a significant relationship between showing happiness and forgiveness (Wulandari & Megawati, 2020). Forgiveness of others and oneself has been linked to higher levels of life happiness and reduces depression (Tian & Wang, 2021). There is also a renewed sense of spiritual well-being. Children, adolescents, and adults who consistently apply forgiveness to individuals who have psychologically hurt them will feel prosperous (Wulandari & Megawati, 2020).

Forgiveness is an effective coping strategy for teenagers because by forgiving teenagers will grow positively in their interpersonal relationships, thereby enabling them to have good peer-to-peer interactions and to consistently maintain positive internal conditions for themselves. They will have spiritual happiness and well-being. There is a significant correlation in adolescence which shows that the more mature adolescent is, the easier it is for them to forgive. Also, feeling calmer will lower blood pressure, lower stress, and prevent heart disease (Barcaccia et al., 2019; Wulandari & Megawati, 2020).

Pregnancy is a vulnerable period that will increase the anxiety and depression of an individual who experiences it. A high level of anxiety during pregnancy is a factor leading to depression, especially in the case of UP (Bedaso, Adams, Peng, & Sibbritt, 2021; Diebold et al., 2021). An UP is an unwanted and/or unplanned conception, which has major consequences for the health of the mother and newborn and is still a top priority in the field of health (Goshu & Yitayew, 2019).

Factors that lead to UP include a pregnancy that occurs as a result of rape, a pregnancy at an unexpected time, the baby in the womb suffering from severe multiple defects, a pregnancy resulting from sexual relations outside marriage, families with many children, low socioeconomic conditions, old age, contraceptive failure, husbands who do not want to accept another pregnancy, the distance between children being too close, ignorance or lack of knowledge about sexual behavior that can lead to pregnancy, the health condition of the mother who does not want pregnancy, a career or school reasons, and pregnancy due to incest (Ameyaw et al., 2019; Bekele & Fekadu, 2021; Kassahun et al., 2019).

The greater gestational age will cause concern for mothers who experience UP, especially unmarried individuals because there will be feelings of guilt and fear which will cause deviant behavior. This will trigger stress in the mother excluded from the family because of UP, or they will be considered abnormal in the relationship (E. Cruz, Cozman, Souza, & Takiuti, 2021). UP especially those occurring in adolescence will have negative physical, psychological, social, and spiritual impacts. The physical impact will harm the mother and the fetus, or the mother may attempt to have an abortion which can result in death. From a psychological perspective, the mother will try to avoid responsibility or continue her pregnancy forcibly. Meanwhile, from the social impact, the community may ridicule and isolate the mother (Ameyaw et al., 2019).

The risks that can occur psychologically are stress, severe depression, a stop from continuing education, abuse of the babies, and a feeling of being isolated because of their distant environment and friends. Excessive stress can cause hyperemesis gravidarum (excessive nausea and vomiting), increased blood pressure, or pregnancy poisoning called pre-eclampsia 130 or progress to eclampsia which can be life-threatening and increase the risk of maternal mortality. The consequences of depression may cause an individual to consume drugs, alcohol, or smoke. Depression can also result in an accidental or intentional miscarriage that can endanger the safety of both the mother and the fetus (E. Cruz et al., 2021).

When an individual experiences stress, their system will activate the autonomic nerves, especially the sympathetic nerves, and this results in the activation of the parasympathetic nervous system. This will release the hormones from the adrenal cortex into the bloodstream, which causes various effects in the body, such as vasoconstriction of blood vessels, increased blood pressure, increased muscle contractility, the release of stress hormones, and increased heart rate (Jong, Kyung, & Geun, 2021). Besides, the mother's emotions also affect the child's development, in which very strong emotions will influence the autonomic nervous system, endocrine work, and metabolism, thereby increasing the child's heart rate and activity. Children born to sad mothers tend to be hyperactive, and if this is not resolved immediately the problem will be aggravated if the mothers become neglectful in caring for their babies (Nawati & Nurhayati, 2018). On the other hand, severe stress that occurs in mothers with UP can affect self-acceptance and their self-image, increased risk of suicide and depression, poor nutrition throughout pregnancy, mental health concerns, low birth weight infants, and a delayed initiation of prenatal care (Rastad, Golmohammadian, Jalali, Kaboudi, & Kaboudi, 2021).

Adjustment is a human effort to achieve harmony with oneself and the environment to be able to banish feelings of hostility, envy, jealousy, prejudice, depression, anger, and other negative emotions as inappropriate and inefficient personal responses. Acceptance of one's self does not mean that the individual can accept what happens entirely. Adjustment to UP does not come only from the individual but also the social environment such as family, friends, or neighbors. UP can cause an individual to lack self-confidence in the social environment, such as limiting their interaction with other people, rarely leaving the house, and limiting contact in social media. In this case, it is important to implement appropriate interventions to reduce the negative impacts during pregnancy, especially in cases of UP, such as by applying forgiveness therapy (Priadi & Gurmichele, 2019).

Forgiveness is defined as healing from an injured memory, not erasing. The concept of "forgiveness" can mean two actions, namely apologizing and forgiving. There are multiple factors involved in doing these two, including victims, perpetrators, and varied levels of pain, injuries, and injustice, where forgiveness is always related to three key aspects. The first aspect is to forgive others, the second is to accept other people's apologies, and the final one is to forgive oneself (Priadi & Gurmichele, 2019). Forgiveness is a coping mechanism that focuses on emotions (Dahiya & Rangnekar, 2019). The well-being, self-esteem, and self-acceptance in an individual will increase by forgiving (Praptomojati & Subandi, 2020).

Every problem will have a solution if an individual has a feeling of worth, and acceptance, and is filled with positive thoughts because the individual sees a problem with rational logic and does not easily give up. The individual will have the psychological strength to be able to enjoy life. Forgiveness therapy causes an individual to respect himself and the environment more positively, so the problem is not seen as a threat and there is a change in behavior toward the ability to face the condition (Praptomojati & Subandi, 2020).

Forgiveness can reduce resentment and negative emotions by which an individual can recognize spiritual needs in the psychological, emotional, social, and aesthetic dimensions. Psychosocial interventions such as forgiveness therapy are useful for promoting psychologically adapting behavior, such as social empathy, thereby suppressing maladaptive attitudes (Quintana-Orts et al., 2019). This improves immunity to promote physical health and reduce pain as a sign that the neurological function is good and the individual has forgiven himself and others (Toussaint, Worthington, et al., 2020). Forgiveness therapy is the same as activating the parasympathetic nerves which will ease the work of the heart and calm the work of the brain on the neocortex (Toussaint, Gall, et al., 2020).

The forgiveness dynamics experienced by informants with UP begin with the subject's feeling hatred for their partners and the UP. Although the subjects initially tried to abort the pregnancy, in the end, they decided to keep the fetus with the excuse that they would not repeat the mistake a second time. Some informants tried to forget the past and did not bring up the mistakes their partners had made. The informants could offer such forgiveness because it was for the later development of their children (Priadi & Gurmichele, 2019).

Forgiving others and oneself can reduce such emotions as anger and regret, and raise awareness of the mistakes that others or oneself have made (Toussaint, Worthington, et al., 2020). Forgiveness offers a calm mental state that supports deep sleep, resulting in better health, where an individual who finds efforts to forgive would be happier (Wulandari & Megawati, 2020), and a happy individual will always feel better and easily forgive, and vice versa (Toussaint, Worthington, et al., 2020).

Conclusion

Unwanted pregnancies can pose a serious risk to the birth of the baby, therefore women with an unwanted pregnancy need an intervention to learn to forgive. This forgiveness therapy can affect physical, psychological, mental, and spiritual conditions which provide a sense of well-being for women during pregnancy, childbirth, and postpartum periods, so it can be a primary preventive intervention for doctors and nurses to facilitate their services. However, further research is needed to measure sympathetic stimulation due to stress and other possible influencing factors, such as personality and family background. If pregnant women who experience UP have not received primary approach attention by providing counseling or therapy during pregnancy, it will have an impact on the risks of childbirth, postpartum, and childcare patterns.

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Author Contributions

Conceptualization, S.Y. and A.G.; methodology, S.Y.; software, S.H. and A.K; validation, S.Y., A.G. and A.K.; formal analysis, S.Y.; investigation, S.Y.; resources, S.H.; data curation, S.P.; writing – original draft preparation, S.Y.; writing – review and editing, S.Y. and S.H.; visualization, S.P.; supervision, S.Y.; project administration, A.G., S.P., and A.K. All authors have read and agreed to the published version of the manuscript.

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Conflicts of Interest

None.

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