

01 SEPTEMBER 2014

**FORM LAPORAN KEGIATAN PERJALANAN DINAS/PELATIHAN DAN
PENGEMBANGAN**

Nama Pelapor : Linda Wati, M. Psi.
NIK : 10710007
Hari/Tanggal Perjalanan : Senin-Selasa/ 3-4 Agustus 2020
Jenis Kegiatan : Konferensi Internasional (on line)
Tema/Topik : Tarumanagara International Conference on the Application
of Social Science & Humanities 2020
Peran Pelapor : Peserta
Tempat Kegiatan : Zoom & Ms.Teams
Penyelenggara : Universitas Tarumanagara

Intisari

a. Tujuan Kegiatan:

- Bentuk pengembangan diri – menambah pengetahuan.
- Presentasi hasil penelitian

b. Deskripsi Jalannya Acara:

- Hari Pertama: 3 Agustus 2020
Opening ceremony dimulai dengan adanya sambutan Rektor, penampilan video paduan suara, paparan dari keynote speakers, dan tanya jawab. Keynote speaker adalah Prof. Ir. Dr. Lee Sze Wei, Prpf. Dr. Ir. Trena P. Soemardi, S.E., M.S., dan Prof. Marco Polo. Paparan yang menarik perhatian saya adalah paparan dari keynote speaker ke-3 yaitu Prof. Marco Polo di mana menjelaskan tentang proses pembelajaran dalam pandemi.
- Hari Kedua: 4 Agustus 2020 merupakan pemaparan dari saya dan mahasiswa yang mengikuti kegiatan ini. Mahasiswa yang presentasi adalah Grace Amelia sebagai peneliti 1 dan saya mendampingi sebagai peneliti 3. Peneliti 2 adalah Monty P. Satiadarma tidak hadir pada acara tersebut. Presentasi berjalan dengan lancar.

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c. Manfaat Bagi Subyek

- Saya mendapatkan kesempatan untuk terlibat dalam penelitian.
- Saya mendapatkan kesempatan untuk terlibat dalam publikasi penelitian.

d. Manfaat Bagi Lembaga:

- Mendukung fakultas dan universitas untuk melakukan tugas dosen untuk meneliti yang menjadi syarat untuk pengisian BKD dan prosedur lainnya.
- Mendukung fakultas dan universitas untuk memiliki dosen yang aktif dan berkualitas sesuai dengan yang ditentukan pemerintah.
- Menjalin relasi dengan pihak universitas lain dan masyarakat lain di luar UNTAR.

e. Rekomendasi:

- Dosen dapat mengikuti webinar dengan topik ini untuk lebih memahami topik lansia.

Penilaian Pelapor Terhadap Kegiatan : Puas

Lampiran yang diserahkan:

- Laporan Kegiatan
- Sertifikat
- Foto kegiatan
- Surat tugas

Tertanda,



Linda Wati, M. Psi., Psikolog
(Pelapor)

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**FORM LAPORAN KEGIATAN PERJALANAN DINAS/PELATIHAN DAN
PENGEMBANGAN**

Lampiran:



UNTAR untuk INDONESIA

**Tarumanagara International Conference on the
Applications of Social Sciences & Humanities**

CERTIFICATE

OF ACHIEVEMENT

this certificate is presented to

Linda Wati

for the contributor as **PRESENTER**

Paper Title:

The Effects Of Drawing And Coloring Mandala On Anxiety Among Pregnant Women In Their Third Trimester

Universitas Tarumanagara | August 3RD - 4TH, 2020

Chairman

Dr. Hugeng, S.T., M.T.

Rector

Prof. Dr. Ir. Agustinus Purna Irawan

01 SEPTEMBER 2014

**FORM LAPORAN KEGIATAN PERJALANAN DINAS/PELATIHAN DAN
PENGEMBANGAN**

SURAT TUGAS

Nomor: 1095-D/1690/FPsi-UNTAR/VIII/2020

Dekan Fakultas Psikologi Universitas Tarumanagara, dengan ini menugaskan kepada :

Linda Wati, M.Psi., Psikolog

Untuk mengikuti Tarumanagara International Conference on the Applications of Social Sciences and Humanities (TICASH) yang diselenggarakan secara online pada :

Hari : Senin – Selasa
Tanggal : 3 – 4 Agustus 2020
Tempat : MS Teams
Status : **Pemakalah**
Judul Penelitian : The Effects of Drawing and Coloring Mandala on Anxiety among Pregnant Women in Their Third Trimester
Penyelenggara : Universitas Tarumanagara

Melaporkan hasil penugasan kepada Pimpinan Fakultas Psikologi Universitas Tarumanagara, sesuai format laporan kegiatan perjalanan dinas, paling lambat 1 (satu) minggu setelah kegiatan selesai (Pasal 13 PUT No. 057 tentang Perjalanan Dinas).

Surat Tugas ini dibuat untuk dilaksanakan dengan sebaik-baiknya dan penuh rasa tanggung jawab.

1 Agustus 2020

Dekan


Dr. Rostiana, M.Si., Psikolog

Tembusan:

1. Ketua Lembaga Sistem Informasi & Database
2. Kasubbag Keuangan F.Psi.
3. Patrick N. Nicktow, S.Psi.

The Effects of Drawing and Coloring Mandala on Anxiety among Pregnant Women in Their Third Trimester

Grace Amelia^{1*}, Monty P. Satiadarma¹ & Linda Wati¹

¹*Faculty of Psychology, Universitas Tarumanagara, Jakarta, Indonesia*

**Corresponding author. Email: Grace.705160050@stu.untar.ac.id*

ABSTRACT

Pregnancy triggers changes in women's physical and psychological conditions. These changes may bring anxiety, which may escalate when the time of labor is getting closer. Anxiety is an unpleasant emotional reaction to real or imaginary danger. There are two types of anxiety, state anxiety and trait anxiety. State anxiety can be defined as momentary anxiety and trait anxiety is a relatively permanent anxiety. The alternative way to reduce the level of anxiety is doing activities such as drawing and coloring mandalas. Mandala is a geometric form that is considered as a universal symbol that can be used for spiritual growth or as visual meditation. This study is aimed to determine the effect of the activity of drawing and coloring mandalas on anxiety. The research method used was an experimental in the form of one group pre-test and post-test. Participants in this study were women in their third trimester of pregnancy divided into mandala drawing group and the free-form drawing group as the control group. In the mandala drawing group, the participants were asked to draw and color designs in mandala and in another group were asked to draw in freely. The result of this study indicates that drawing and coloring circles (mandalas) significantly reduces trait anxiety, $t = 2.61$, $p < 0.05$.

Keywords: *Anxiety, Mandala, Art, and Pregnancy*

1. INTRODUCTION

The period of pregnancy and childbirth is a critical phase in the lives of women [9]. During pregnancy, many changes occur in women. These changes include physical, psychological, and social changes [4]. Based on data from the World Health Organization (WHO) in 2010, Indonesia ranked first for maternal mortality rate among 181 other countries [6]. Another data from the WHO stated that in 2018 [17] as many as 830 women die every day due to interference during the process of pregnancy and labor. These disorders have various causes that can originate from physical and psychological changes [4].

Psychological disorders can occur due to the emergence of fear of the unknown, stress, and erratic feelings associated with physical and hormonal changes that often result in anxiety among pregnant women [4]. Anxiety is a form of abnormal fear and worry that a person cannot overcome the perceived life threat [16]. There are two types of anxiety, namely state anxiety and trait anxiety. State anxiety is an experience of unpleasant feelings when faced with a particular situation, demand, object or event. The intensity, duration, and range of situations that cause anxiety in state anxiety tend to be temporary when compared to trait anxiety. Trait anxiety refers to personality characteristics instead of feelings that are only temporarily [4].

In 2014, Shodiqoh and Syahrul conducted research on anxiety in pregnant women in Madura, East Java. The result of this study indicates that anxiety is found among pregnant women who are in their third trimester in all age ranges [14]. Another study regarding anxiety among pregnant women were conducted in 2015 by Deklava et al. in Latvia, which discovered that 104 of 150 adult women in the gestational period experience state anxiety and trait anxiety [4].

The level of anxiety among mothers in their third trimester of pregnancy is higher compared to first and second trimesters. Increased anxiety is caused by the development and growth of the fetus accompanied by a growing number of fears. Maternal anxiety in the third trimester of pregnancy generally focuses on labor or the period of care and healing that ensues [11]. The third trimester gestational age is a period of high risk of premature births which can lead to an increase in anxiety of expecting mothers [8]. Although birth is a normal physiological phenomenon, bleeding and extreme pain felt by the mother during labor can cause anxiety [18].

Anxiety among pregnant women can trigger stimulation of uterine contractions, resulting in increased blood pressure which can then also trigger preeclampsia and miscarriage. Preeclampsia is a condition of high-potential pregnancy complications that are characterized by high blood pressure [12]. In addition, the anxiety felt by pregnant

women can also have a negative impact on the development and growth of infants. The adverse effects include low birth weight (LBW) babies and premature births [7].

A number of alternatives have been found to reduce anxiety, one of which is using art in the form of art therapy. Through art, a person can gain an understanding of the outside world and themselves. Therefore, art can also be used as an alternative for those who experience anxiety to communicate their anxiety [5].

One form of art therapy used to reduce anxiety is by drawing or coloring mandalas. The word mandala comes from Sanskrit which means a circular shape associated with a sense of wholeness and healing [5]. Carl Jung [5] stated that artwork in a circle can support psychological healing. When someone fills the circle pattern on the mandala with colors, letters, numbers, pictures and symbols, it calms minds and limit external stimuli. This can result in increased attention or even the emergence of a meditative state [5].

A number of studies have been conducted to determine the effect of drawing or coloring mandala on anxiety. Curry and Kasser (2005), Van der Vennet and Serice (2012), Lee (2018), and Duong Stargell and Mauk (2018) conducted research that proved that drawing and coloring mandalas effectively reduces the level of anxiety in students. Research involving art therapy on anxiety in pregnant women was conducted by Sezen and Unsalver in Turkey. There are 7 types of art therapy, which are listening to music and singing, making masks, drawing, making mandalas, making dolls, taking photos, and making collages. The results showed that art therapy was effective in reducing anxiety [13]. The study used various types of art therapy so it is not known exactly which type of art therapy that is truly effective at reducing anxiety.

Based on the background, the phenomenon and the limited research that addressed this topic, the researcher is interested in conducting further research on the effect of drawing and coloring mandalas on anxiety among pregnant women in their third trimester.

2. METHOD PARTICIPANTS

The criteria for participants of this study were women who were expecting, and in their third trimester (7-9 months of pregnancy), did not have special skills in drawing or coloring, and showed anxiety according to the results of the STAI measuring instruments with anxiety scores of over 47. Age, ethnicity, religion, race, education level, and income are not taken into account in this study. The number of participants in this study were 31 people who were then divided into 2 groups: a) mandala, as an experimental group of 16 participants, and b) free-form, as a control group of 15 participants. The sampling technique used in this study was purposive sampling.

MEASURING INSTRUMENT

The measuring instrument used to collect data from participants in this study is a questionnaire called State-Trait Anxiety Inventory (STAI) form Y which was developed by Spielberger in 1983. The STAI gauge is used for adults in the age range of 18-69 years. STAI form Y consists of 40 statements that are divided into 20 items that measure the intensity of anxiety as an emotional state (state anxiety) and also 20 other items to measure individual differences during anxiety as trait anxiety. State anxiety has 20 items consisting of 10 positive items and 9 negative items. Trait anxiety has 20 items consisting of 11 positive items and 9 negative items.

3. RESULT AND DISCUSSION

Based on table 1, there is a decrease in the average of state anxiety score and the trait anxiety score in the mandala group before (pre-test) and after (post-test) drawing and coloring, which is 84.00 to 72.87. In the free-form group there is an increase in the average of state anxiety score and trait anxiety score (anxiety) before (pre-test) and after (post-test) drawing and coloring, which is 87.53 to 90.13.

Table 1 Paired Sample t-test Pre-test and Post-test of Mandala Group dan Free-form Group

Group		N	Mean	SD
Mandala	Pre-test	16.58	84.00	4.14
	Post-test	16.78	72.87	4.19
Free-form	Pre-test	15	87.53	15.96
	Post-test	15	90.13	17.19

Table 2 shows the result of paired sample t-tests on the pre-test and post-test scores of state anxiety and trait anxiety of the mandala group and the free-form group. In the mandala group, the value of t obtained was 2.06 and the significance value was greater than 0.05, which is 0.057. This shows no significant difference in the level of

state anxiety and trait anxiety of mandala group before and after drawing and coloring.

In the free-form group the t value obtained is -2,641 and the significance value is smaller than 0.05, which is 0.019. This shows that there is a significant difference in the level of state anxiety and trait anxiety in the free-form group after drawing and coloring.

Table 2 Results of Paired Sample t-test Pre-test and Post-test of Mandala Group and Free-form Group

Group		Mean	SD	t	Sig. (2-tailed)
Mandala	Pre-test	11.12	21.59	2.06	0.057
	Post-test				
Free-form	Pre-test	-2.60	3.81	-2.641	0.019
	Post-test				

Table 3 shows a decrease in the total of state anxiety scores in the pre-test and post-test mandala group pre-test and post-test, which is 42.43 to 38.00. In the free-form group, there was an increase in the average total score of state anxiety pre-test and post-test, which is 46.00 to

47.06. This shows that drawing and coloring activities reduce the level of state anxiety in the mandala group. However, drawing and coloring activities did not lower the level of state anxiety in the free-form group.

Table 3 Paired Sample t-test for State Anxiety Pre-test and Post-test of Mandala Group and Free-form Group

Group	Anxiety Scale	N	Mean	SD
Mandala	Pre-test	16	42.43	8.51
	Post-test	16	38.00	8.74
Free-form	Pre-test	15	46.00	8.04
	Post-test	15	47.06	9.06

Table 4 shows the result of the paired sample t-tests of state anxiety of the mandala and free-form groups. In the mandala group, the value of t obtained is 1.46 and the significance value was greater than 0.05, which is 0.164. This shows that there is no significant difference in the level of state anxiety before (pre-test) and after (post-test)

drawing and coloring activities. In the free-form group the t value obtained is -1.32 and the significance value is greater than 0.05, which is 0.208. This shows that there is no significant difference in the level of state anxiety before (pre-test) and after (post-test) drawing and coloring activities

Table 4: Summary of Paired Sample t-test for State Anxiety of Mandala Group and Free-form Group

Group	Anxiety Scale	Mean	SD	t	Sig. (2-tailed)
Mandala	Pre-test	4.43	12.14	1.46	0.164
	Post-test				
Free-form	Pre-test	-1.06	3.12	-1.32	0.208
	Post-test				

Table 5 shows a decrease in the average total score of trait anxiety in the mandala group before (pre-test) and after (post-test) drawing and coloring, which is 41.56 to 34.87. In the free-form group, there was an increase in the average total score of trait anxiety before (pre-test) and

after (post-test) drawing and coloring, which is 41.53 to 43.06. This shows that drawing and coloring activities reduce the level of trait anxiety in the mandala group, but shows otherwise for the free-form group.

Table 5 Paired Sample t-test for Trait Anxiety Pre-test and Post-test of Mandala Group and Free-form Group

Group	Anxiety Scale	N	Mean	SD
Mandala	Pre-test	16	41.56	8.64
	Post-test	16	34.87	8.69
Free-form	Pre-test	15	41.53	8.21
	Post-test	15	43.06	8.42

Table 6 shows the results of paired sample t-test of the trait anxiety of the mandala and free-form groups. In the mandala group the value of t obtained was 2.61 and the significance value was smaller than 0.05 which was 0.020. This shows that there is a significant difference in the level of trait anxiety before (pre-test) and after (post-test) drawing and coloring activities. In the free-form group, the

value of t obtained is -1.53 and the significance value is smaller than 0.05 which is 0.001. This shows that there is a significant difference in the level of trait anxiety before (pre-test) and after (post-test) drawing and coloring activities.

Table 6 Summary of Paired Sample t-test for Trait Anxiety of Mandala Group and Free-form Group

Group	Anxiety Scale	Mean	SD	t	Sig. (2-tailed)
Mandala	Pre-test	6.68	10.24	2.61	0.020
	Post-test				
Free-form	Pre-test	-1.53	1.50	-3.94	0.001
	Post-test				

DISCUSSION

Based on the results of data analysis, there was a decrease in the average score of anxiety before (pre-test) and after (post-test) drawing and coloring activities in the mandala group, but there was no decrease in the free-form group. Duong, Stargell and Mauk claimed that filling a circular pattern on a mandala with colors, letters, numbers, images and symbols calms the mind and limits external stimuli, which can then increase attention or even creates a meditative state [5]. This is also in line with research conducted by Curry and Kasser which found that the mandala group shows a more significant anxiety reduction compared to the checkered group and the free-form group. When individuals are given an assignment to draw on a blank piece of paper and color it, they tend to have difficulty determining what they should draw [3]. Ashlock, Miller-Perrin and Krumrei-Mancuso claimed that this can affect anxiety compared to drawing according to a particular design or shape [2].

After the difference test was conducted using paired sample t-test, it was found that the mandala group did not show a significant difference before (pre-test) and after (post-test) doing drawing and coloring activities while the free-form group showed a significant difference. This is not in line with a previous study conducted by Curry and Kasser which found that anxiety among the mandala group decreased significantly while anxiety among the free-form and checkered groups was stable [3]. In addition, the result of this study contradicts the result of another study conducted by Van der Vennet and Serice which showed a decrease in anxiety among the mandala, checkered and free-form groups [16].

For state anxiety, the mandala group showed a decrease in the average anxiety score before (pre-test) and after (post-test) drawing and coloring activities. This is in line with research conducted by Duong, Stargell and Mauk which measured state anxiety by involving mandala group and free-form group [5]. The results of the study showed a decrease in the level of state anxiety among the mandala

group by comparing the results of pre-test and post-test. However, in this study the free-form group did not show a decrease in anxiety score. After using paired sample t-test, the mandala group and free-form group did not show a significant difference.

For trait anxiety score, the mandala group showed a decrease in the average score of trait anxiety before (pre-test) and after (post-test) drawing and coloring activities. This is in accordance with what was stated by Jung that art in the form of a circle can support psychological healing [5]. Small stated that the use of mandalas is very helpful in reducing anxiety levels because it allows individuals to explore, identify, understand and control their thoughts [5]. However, the free-form group showed no decrease in the average score of trait anxiety before (pre-test) and after (post-test) drawing and coloring activities. Paired sample t-test proved that the mandala group and free-form group showed significant differences before (pre-test) and after (post-test) drawing and coloring activities.

The inconsistency of the results of this study with previous studies, specifically a decrease in anxiety that is not significant in the mandala group and no decrease in the level of anxiety in the free-form group, can be caused by several things. Grossman claimed that if anxiety is seen as an "inner chaos," structured activities such as coloring with rather complex designs can bring order to the chaos [3]. When one draws and colors a specific design, one becomes more focused until one may enter a meditative state.

However, when one attempts to draw and color a blank piece of paper, one tends to become confused and spends more time thinking about what to draw [3]. Then another factor that can influence the result is that data collection in this study was conducted at the home of each participant with instructions given by social media messages, therefore allowing other variables that affect participants during pre-test, post-test, as well as during drawing and coloring activities.

Furthermore, another factor that can also affect the anxiety score in this study is the COVID-19 pandemic which was on the rise when data collection was performed. Spielberger suggested that anxiety is an unpleasant emotional reaction to an actual or imaginary threat [15]. Anxiety is also characterized by concerns that arise as a result of an unexpected future threat [1]. Uncertainty due to the COVID-19 pandemic can be one of the causes of increased anxiety among participants. The need to travel to the hospital regularly to monitor the condition of the fetus causes pregnant women to feel concerned about being exposed to COVID-19.

4. CONCLUSION AND SUGGESTION

CONCLUSION

Based on data analysis that has been conducted regarding the effect of drawing and coloring mandalas on anxiety among pregnant women in their third trimester, it can be concluded that there is a decrease in the average anxiety score of state anxiety and trait anxiety. The most significant reduction was found in trait anxiety. The decrease in anxiety scores indicates that drawing and coloring mandalas has an influence on anxiety among pregnant women in their third trimester.

SUGGESTION

A suggestion from the researcher for further research on similar topic is that the data collection should be done face to face with participants directly in a particular room to reduce the possibility of other variables that can influence the results of research. In addition, further research is expected to be able to consider using other equipment besides color pencils for drawing and coloring so that the results of drawing and coloring can be seen clearly and minimize interruption due to the pencil turning blunt or breaking.

Further research should be able to collect additional data, such as by asking participants to write down things or experiences that make participants feel anxiety before starting the drawing and coloring activities. At the end of the study it is recommended to provide relaxation techniques or emotional stabilization to reduce the possibility of increased anxiety levels. Furthermore, a suggestion for pregnant women in their third trimester who experience anxiety is that they can draw and color a mandala once every two days to reduce anxiety. If and when the anxiety is felt to be disruptive, then the individual should seek help from professionals in the field of psychology.

REFERENCES

[1] Annisa, D. F., & Ifdil. (2016). Konsep kecemasan (*anxiety*) pada lanjut usia (lansia). *Konselor*, 5(2), 93-99.

[2] Ashlock, L. E., Miller-Perrin, C., & Krumrei-Mancuso, E. (2019). The effectiveness of structured coloring activities for anxiety reduction. *Art Therapy*, 35(4), 195-201.

[3] Curry, N. A., & Kasser, T. (2005). Can coloring mandalas reduce anxiety?. *Journal of the American Art Therapy Association*, 22(2), 81-85. <http://dx.doi.org/10.1080/07421656.2005.10129441>

[4] Deklava, L., Lubina, K., Circenis, K., Sudraba, V., & Millere, I. (2015). Causes of anxiety during pregnancy. *Procedia-Social and Behavioral Sciences*, 205, 623-626.

[5] Duong, K., Stargell, N. A., & Mauk, G. W. (2018). Effectiveness of coloring mandala designs to reduce anxiety in graduate counseling students. *Journal of Creativity in Mental Health*, 13(3), 318-330.

[6] Evayanti, Y. (2015). Hubungan pengetahuan ibu dan dukungan suami pada ibu hamil terhadap keteraturan kunjungan *antenatal care* (ANC) di puskesmas Wates Lampung Tengah tahun 2014. *Jurnal Kebidanan*, 1(2), 81-90.

[7] George, A., Luz, R. F., De Tyche, C., Thilly, N., & Spitz, E. (2013). Anxiety symptoms and coping strategies in the perinatal period. *BMC pregnancy and childbirth*, 13(1), 233.

[8] Hernanto, F. F. (2016). Pengetahuan tentang kehamilan, dukungan keluarga dan kecemasan ibu primigravida trimester III. *Persona: Jurnal Psikologi Indonesia*, 5(3).

[9] Juariah. (2018). Kepercayaan dan praktik budaya pada masa kehamilan masyarakat Desa Karang Sari, Kabupaten Garut. *Jurnal Ilmu – ilmu Sosial dan Humaniora*, 20(2), 162-167.

[10] Lee, S. (2018). Why color mandalas? A study of anxiety-reducing mechanisms. *Journal of the American Art Therapy Association*, 35(1), 35-41. DOI: 10.1080/07421656.2018.1459105

[11] Rinata, E., & Andayani, G. A. (2018). Karakteristik ibu (usia, paritas, pendidikan) dan dukungan keluarga dengan kecemasan ibu hamil trimester III. *Medisains*, 16(1), 14-20.

[12] Sari, F. S., & Novriani, W. (2017). Dukungan keluarga dengan kecemasan menjelang persalinan trimester III. *Jurnal Ipteks Terapan*, 11(1), 55-64. <https://doi.org/10.22216/jit.2017.v11i1.1414>

[13] Sezen, C., & Ünsalver, B. Ö. (2018). Group art therapy for the management of fear of childbirth. *The Arts in Psychotherapy*, 64, 9-19. DOI:10.1016/j.aip.2018.11.007

[14] Shodiqoh, E. R., & Syahrul, F. (2014). Perbedaan tingkat kecemasan dalam menghadapi persalinan antara primigravida dan multigravida. *Jurnal Berkala Epidemiologi*. Retrieved from //download.portalgaruda.org/article.

[15] Spielberger, C. D. (1972). *Anxiety: Current trends in theory and research*. London: Academic.

[16] Van der Vennet, R., & Serice, S. (2012). Can coloring mandalas reduce anxiety? A replication study. *Journal of the American Art Therapy Association*, 29(2), 87-92.
DOI:10.1080/07421656.2012.680047

[17] World Health Organization. (2018). *Maternal mortality*. Accessed on 12 September 2019 at

<https://www.who.int/news-room/factsheets/detail/maternal-mortality>

[18] Zamriati, W. O., Hutagaol, E., & Wowiling, F. (2013). Faktor-faktor yang berhubungan dengan kecemasan ibu hamil menjelang persalinan di Poli KIA PKM Tuminting. *Jurnal Keperawatan*, 1(1).