OVERVIEW OF BLIGHTED OVUM CASES

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ABSTRAK
Blighted ovum atau kehamilan anembrionik merupakan keadaan dimana seorang wanita hamil namun tidak terdapat janin didalam kandungannya, dikarenakan ovum yang dibuahi tidak berkembang. Hingga saat ini penyebab kejadian *blighted ovum* belum dapat dideteksi karena gejala yang tidak spesifik. Umumnya kejadian *blighted ovum* terjadi pada trimester I dan memungkinkan untuk terulang kembali pada kehamilan selanjutnya. Tujuan penelitian ini untuk mengetahui gambaran kejadian *blighted ovum*. Metode penelitian yang digunakan adalah *Literature Review* yang didapatkan dari 3 database yaitu PubMed, ResearchGate dan Google Scholar dengan kriteria inklusi jurnal terakreditasi Sinta dan Scopus. Hasil penelitian dari 5 jurnal didapatkan karakteristik berdasarkan usia, paritas, imunologis, dan kelainan genetik pada ibu hamil yang mengalami *blighted ovum*. Kesimpulan: Ibu hamil yang mengalami *blighted ovum* memiliki karakteristik usia >40 tahun dengan paritas multigravida dan grandemultigravida, memiliki kelainan imunologi dan genetic.

ABSTRACT
Blighted ovum or anembryonic pregnancy is a condition where a woman is pregnant but there is no fetus in her womb, because the fertilized ovum does not develop. Until now, the cause of blighted ovum cannot be detected because the symptoms are not specific. Generally, blighted ovum occurs in the first trimester and allows it to recur in subsequent pregnancies. The purpose of this study was to describe the incidence of blighted ovum. The research method used was Literature Review which was obtained from 3 databases namely PubMed, ResearchGate and Google Scholar with the inclusion criteria of Sinta and Scopus accredited journals. The research results from 5 journals obtained characteristics based on age, parity, immunological, and genetic abnormalities in pregnant women who experienced blighted ovum. Conclusion: Pregnant women who experience blighted ovum have characteristics of age> 40 years with multigravida and grandemultigravida parity, have immunological and genetic disorders.

INTRODUCTION

Pregnancy is a natural (physiological) process (Yuliani et al, 2021). Some pregnancies occur with certain conditions that are not common, one of which is blighted ovum. Blighted ovum is also known as an anembryonic pregnancy, which is where the gestational sac develops normally but the fertilized egg does not develop into an embryo (Mitwally et al., 2018). Blighted ovum often occurs early in pregnancy, even very early, because the symptoms are difficult to know with certainty (Sulistyowati et al. (2017). One of the consequences that can arise from a blighted ovum is an event that is likely to recur in subsequent pregnancies (Nuzul ZA & Rosdiana, 2019).

According to WHO (2012) Around 60% of premature miscarriages worldwide are caused by blighted ovum. Based on ASEAN data, the incidence of blighted ovum reaches 51% and is found in 37% of every 100 pregnancies in Indonesia (Nurlelawati et al., 2019). The incidence of blighted ovum is the second leading cause of early miscarriage, which is 37.5% in a previous research study involving 17,810 early trimester pregnant women who experienced blighted ovum (Sinensis et al.

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2020). In one of the studies conducted by Nurlelawati (2019) also stated the same thing that the prevalence of blighted ovum was around 52% in pregnant women in the first trimester (0-12 weeks).

Some people sometimes associate the blighted ovum with mystical things. Some who said their pregnancy was lost were carried by spirits or their babies were transferred to other people, etc. This indeed gives the impression that the baby has suddenly disappeared, without knowing that the mother actually has a blighted ovum (Sutomo, 2010 in Rahmawati, 2021). Blighted ovum can be diagnosed through ultrasound examination by assessing the development of the embryo. Women who experience blighted ovum generally also feel signs of pregnancy including delayed menstruation, nausea, vomiting, cravings, enlarged abdomen, enlarged breasts and even a positive pregnancy test (Yeni et al, 2018).

Providing pre-conception education and counseling in planning subsequent pregnancies is important in efforts to prevent subsequent pregnancy failures (Yeni et al, 2018) by knowing the description of blighted ovum events which are one of the complications of pregnancy, so the authors are interested in conducting research through literature review entitled "Descriptive Study of Blighted Ovum Events".

METHODS

The research design used is the traditional Literature Review. The literature search used data based on an international scale, such as Pubmed and Research Gate as well as a national scale from Google Scholar which met the researcher's inclusion criteria.

RESULT AND DISCUSSION

Table 1 frequency distribution of blighted ovum events based on age

Journal article	Years of Publication	Sample	Age					
			< 20		20 – 35		> 40	
			(f)	%	(f)	%	(f)	%
Prevalence of blighted ovum in first trimester of pregnancy	2019	280	10	17,1	39	50	78	77,5
Blighted Ovum in Sub fertile Patients Undergoing Assisted Reproductive Technology	2017	147	-	-	-	-	33.57	-

(Mitwally et al., 2019) (Qing Wen et al. 2017)

Table 1 shows the results of a literature review of five articles, two of which show the age characteristics of pregnant women who experience blighted ovum, which are more common at ages > 40 years.

The results of the literature review show that the age characteristic of pregnant women who experience blighted ovum is > 40 years. In the study by Mitwally et al. (2019) showed the same thing, that is, more pregnant women who experience blighted ovum are >40 years old. In the research by Qing Wen et al. (2017) also showed that elderly mothers can increase the risk of blighted ovum.

Age is the length of a person's life which is calculated based on the time of birth, the biological development of the human body's organs develops according to the course of age (Wink-josastro, 2016 in Rahmawati, 2021). When the mother starts to enter the age of 30, the mother's fertility will decrease, where the decrease in fertility affects the quality of the eggs produced each time ovulation (Sukarni, 2014 in Rahmawati, 2021). According to the WHO, the peak of the fertile period and the best quality of egg cells for women is at the age of 20-30 years. This is because at the age of <20 years the female reproductive organs are not fully mature, whereas the increasing age of a woman can affect the quality of egg cells or sperm cells which allows blighted ovum to occur.

Table 2: frequency distribution of blighted ovum events based on parity

Journal article	Years of Publication	sample	Parity					
			1		2 – 5		> 5	
			(f)	%	(f)	%	(f)	%
Prevalence of blighted ovum in first trimester of pregnancy	2019	280	74	26,5	127	45,5	79	28

(Nurlelawati et al., 2019)

Table 2 above is the result of a literature review of five articles, one of which shows that pregnant women who experience blighted ovum based on parity characteristics are more common in women with multigravida parity and second place in pregnant women with grandemultigravida parity.

The results of the literature review show that the characteristics of pregnant women who experience blighted ovum are that most have multigravida parity and grand multigravida parity. In a study by Mitwally et al., (2019) showed that pregnant women who experienced blighted ovum were more likely to occur in women with multigravida parity and some occurred in grandemultigravida mothers. In another study, Nurlelawati et al, (2019) showed the same thing that pregnant women who experienced blighted ovum were more likely to have parity 2-4 and parity > 5.

Based on the theory of Apriyani et al, (2022) Parity is the number of births that produce live or dead fetuses. Multiparas are women who have given birth to live children no more than five times, while grandemultiparas are women who have given birth to fetuses more than 5 times. So that the more the number of births experienced by a mother, the higher the risk of experiencing pregnancy complications (Rahmawati, 2021).

Table 3 frequency distribution of blighted ovum events based on parity

Journal	Years of publication	Sample	Immunological disorders Mean (%)	
			HLA-E	NK Cells
Blighted ovum: Roles of human leukocyte antigen-E and natural killer cells	2017	32	75.15	93.88

(Sulistyowati et al., 2017)

In table 3, the results of a literature review of five articles found that one article showed that pregnant women who experienced blighted ovum had characteristics of immunological disorders with a lower average HLA-E and a higher average of NK cells.

The results of the literature review on the study of Sulistyowati et al. (2017) showed that there are immunological abnormalities in pregnant women who experience blighted ovum. Human Leukocyte Antigen (HLA) is thought to play an important role in maintaining the products of conception. The mean Human Leukocyte Antigen-E (HLA-E) expression in the blighted ovum group was lower than in the normal pregnancy group, while the expression of Natural Killer (NK) cells was higher in the blighted ovum group compared to the normal pregnancy group.

According to theory (Yeni et al, 2018) Miscarriage is the result of immunological activation in response to the presence of pathological organisms. Immunological factors play a role in the occurrence of abortion, where almost all blighted ovum can be detected after a miscarriage. Immunological factors play a role through cellular and humoral response mechanisms against certain organs of pregnant women, such as incompatibility of the HLA (Human Leukocyte Antigen) system. HLA-E has an important role as a mother's immune tolerance in the development of pregnancy. HLA-E is expressed on trophoblast cells which can help

the fetus avoid maternal immune intolerance (Sulistyowati et al, 2017). If HLA-E is not expressed, the ability of trophoblast cells will be reduced and prevented from invading the uterus because they are considered non-self which has antigen properties that trigger the formation of antibodies in the mother resulting in failure of conception products. HLA-E can help the fetus from attacks by the mother's immune system, HLA-E which is not expressed can make the fetus more vulnerable to attack by the expression of NK cell activity which is higher than HLA-E and results in blighted ovum.

Table 4 frequency distribution of blighted ovum events based on Genetic disorder

Journal	Years of publication	Sample	Genetic Diorder					
			CC		CT		TT	
			(f)	%	(f)	%	(f)	%
Polymorphism of MnSOD (Val16Ala) gene in pregnancies with blighted ovum	2017	34	1	2	17	50	16	48
Relationship between HLA-DPA1 genetic polymorphism and an embryonic pregnancy	2019	190	21	43,8	15	25	20	57,1

(Moshtaghi et al., 2017) (Zhendong et al., 2019)

In table 4, the results of a literature review of five articles, 2 of which showed that pregnant women who experienced blighted ovum had genetic abnormalities, namely the MnSOD polymorphism, the heterozygous genotype (CT) was more than the homozygous genotype. Whereas in the HLA-DPA1 polymorphism the number of homozygous genotypes (CC + TT) is higher than the heterozygous genotypes. This shows that polymorphism in both variants has a high value for each variant. This high presentation can disrupt the balance of polymorphism and result in damaged DNA cells. So that genetic variation can increase the risk of anembryonic pregnancy.

The results of a literature review in the study of Zhendong et al., (2019) showed a genetic abnormality in the HLA-DPA1 polymorphism, where the homozygous variant (rs1431403) of this polymorphic locus (CC and TT) is

involved in increasing abnormal HLA-DPA1 expression which can increase the increase the risk of developing an anembryonic pregnancy. Human leukocyte antigen (HLA)-DP is an HLA class II molecule. Overexpression of class II HLA molecules in placental trophoblastic cells can cause miscarriage. In the study of Mostaghi et al., (2017) also showed the same thing but in a different polymorphic, namely the Val/Ala (CT) genotype in the polymorphic MnSOD gene. Manganese superoxide dismutase (MnSOD) is an important antioxidant enzyme in the human immune system. The gene is located on chromosome 6q25 and acts on the mitochondrial matrix. In case of mutation or inactivity of this enzyme, mitochondrial and nuclear DNA will be severely damaged. The most common polymorphism of the gene is Val/Ala (CT). The most important function of MnSOD is its role in scavenging peroxide free radicals to produce H_2O_2 and O_2. The resulting H_2O_2 will then be decomposed into water by GPX1 and catalase. So if the percentage of MnSOD is high, it can disrupt the balance of the three enzymes, so if there is an imbalance between the three enzymes and the concentration of H_2O_2, this can harm the DNA cells inside. According to the theory (Yeni et al, 2019) that genetic chromosomal abnormalities of the parents and several immunological factors are associated with anembryonic pregnancies. Chromosomal abnormalities that most often cause recurrent miscarriages are balanced translocations which cause trisomy conceptions. Single gene disorder can be identified by careful examination of family history or by identifying patterns of abnormalities known as hereditary patterns. This is in line with the results of a study (Sinesis et al, 2020) that genetic factors are the most common factor causing blighted ovum.

CONCLUSION

Based on the identification results from five journals through a literature review process, it was found that the characteristics of pregnant women who experienced blighted ovum, namely pregnant women aged > 40 years,

multi parity and grand multigravida, had immunological disorders as well as genetic abnormalities.

REFERENCE

Mitwally, A. B. A., Eldeen, D., El, M. A., Taher, N., & Abbas, A. M. (2019). *Prevalence of blighted ovum in first trimester of pregnancy : a hospital based study*. 8(1), 94–98.

Moshtaghi, A., Vaziri, H., Sariri, R., & Shaigan, H. (2017). Polymorphism of MnSOD (Val16Ala) gene in pregnancies with blighted ovum: A case-control study. *International Journal of Reproductive BioMedicine*, *15*(8), 503–508. https://doi.org/10.29252/ijrm.15.8.503

Nie QW, Hua R, Zhou Y, Li H, Yu YH. [Blighted ovum in subfertile patients undergoing assisted reproductive technology]. Nan Fang Yi Ke Da Xue Xue Bao. 2017 Jul 20;37(7):902-906. Chinese. doi: 10.3969/j.issn.1673-4254.2017.07.08. PMID: 28736365; PMCID: PMC6765514

Nurlelawati, E., Sulastriningsih, K., & Aryani, N. H. (2019). Faktor-faktor yang berhubungan dengan terjadinya blighted ovum pada ibu hamil di RSUD Pasar Rebo tahun 2017. *Journal Scientific Solutem*, *2*(1), 41–50. https://journal.akperbinainsan.ac.id/index.php/jss/article/view/18

Nuzul ZA, R., & Rosdiana, E. (2019).Faktor-Faktor yang Mempengaruhi Terjadinya Blighted Ovum (BO) pada Ibu Hamil di Rumah Sakit dr. Zainoel Abidin Kota Banda Aceh Tahun 2015. *Journal of Healthcare Technology and Medicine*, 2(2); 135.

Rahmawati, Dechoni., & Fatimah D. A.(2021). Hubungan Pengetahuan dan Usia Terhadap KejadianBlighted Ovum Pregnancy Di PKU Muhammadiyah Gamping Yogyakarta. *Jurnal Kebidanan.* 13(2);128242.Sinesis, Noviani R., dkk. (2020). Diagnosis dan Tatalaksana Blighted Ovum. *Jurnal Kedokteran Unram*, 9 (3); 508-511

Sulistyowati, S., Rahadian, F., Respati, S. H., & Soetrisno, S. (2017). Blighted Ovum: Roles of human leukocyte antigen-E and natural killer cells. *Bali Medical Journal*, *6*(2), 381. https://doi.org/10.15562/bmj.v6i2.580

Yeni, Cut M., M., dkk. (2018). KehamilanAnembrionik pada Primigravida: Sebuah tinjauan kasus. *Jurnal Kedokteran Syiah Kuala,* 18 (2); 110-114.

Yuliani, dkk. (2021). *Asuhan Kehamilan*. Jakarta: Yayasan Kita Menulis.

PHENOMENOLOGICAL STUDY OF ADOLESCENT PERCEPTION OF TOXIC RELATIONSHIPS

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ABSTRACT
A toxic relationship is a relationship where people don't value their personality, don't develop or even experience setbacks. Preliminary studies conducted at SMA 2 Tegal with 10 students have led to toxic relationships such as the early stages leading to free sex. The purpose of this study was to determine the phenomenon of adolescent perceptions about toxic relationships. A qualitative research method with a phenomenological approach, was conducted at SMA 2 Tegal in November 2022. The sampling technique in this study used snowball sampling. The results showed that the 4 respondents had different perceptions about toxic relationships, knowledge about toxic relationships is very important to be given to determine the behavior of today's adolescents. It is recommended that teenagers, especially students, can choose the information they get, ranging from negative to positive, so that they are not wrong in taking action

INTRODUCTION

Mental health is considered important in achieving global development goals, namely the inclusion of mental health in the SDGs (Sustainable Development Goals). Impaired mental health is one of the main risk factors for adolescent morbidity and mortality. Symptoms of mental disorders can include anxiety, depression, sleep disturbances, attempted suicide or self-harm. Bad mentality is a serious health problem, especially for teenagers and most mental health problems start at the age of 14 years (Julianto et al., 2020).

Toxic relationships often develop in adolescence. This situation often coincides with the onset of puberty. Mental health disorders caused by toxic relationships can be experienced by adolescents with the characteristics that they will withdraw from their environment and they tend to violate the rules set (Noviana, 2018). WHO Asia Pacific region 2018 (WHO SEARO) said the highest number of cases of depressive disorders was in

India (56,675,969 cases or 4.5% of the population), the lowest was Meldives (12,739 cases or 3.7% of the population). As for Indonesia, there were 9,162,886 cases or 3.7 of the population (Ayuningtyas et al. 2018). Meanwhile, based on data from the Data and Information Center of the Indonesian Ministry of Health (IFODATIN) in 2019 (Data and Information Center of the Indonesian Ministry of Health, 2019), depressive disorders classified by age have appeared since adolescence (15-24 years) with a percentage of 6.2% (Praptiningsih and Putri, 2021). Primati Yogi Wulandari (2019), said that a toxic relationship is a friendship which is very detrimental and causes a person to feel very bad. Toxic relationships are not only detrimental to physical health, but also very detrimental to mental health. The psychological impact of experiencing a toxic relationship, becomes an individual with low self-esteem and pessimism. Even capable of hating himself as a result of actions or words given to him by friends. This is what can

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trigger mental health problems for people who receive toxic relationship treatment.

The existence of peer support can strengthen the mental health of adolescents. This makes teenagers able express himself, can be accepted and also has the opportunity to have new values and views if the peers he meets give a positive response to him. Of the 10 students who had experienced a toxic relationship, 8 of them had kissed the lips and kissed the neck, 3 students held hands, 1 female student had talked about sex, and 1 female student had never had sexual activity at all and 1 female student said she had it is because of the basis of love. Responding to this problem, the student teacher himself said that he had told several female students who were involved in toxic relationship problems that toxic relationships were not normal for high school students and could have a negative impact on themselves and those around them. Every problem that is done by students, regardless of its form, is always resolved between students and the student teacher, which will continue by informing parents if the student still argues, then it will be followed up with sanctions on students who commit fatal problems.

METHODS

This research is qualitative by using a phenomenological approach. The population in this study were all students of class XI at SMA 2 Slawi.

In this study, 4 informants were taken as samples, namely 2 male students and 2 female students who had entered the inclusion criteria. The sampling technique in this study used snowball sampling.

RESULT AND DISCUSSION

The research was carried out on November 15, 2022 by using interviews, the number of respondents studied was 4 people, namely 2 students and 2 class XI students from SMA 2 Slawi, then the researcher took an approach that aimed to provide an explanation of the intent and purpose and obtain informed consent or seek approval to become respondents according to the criteria and arrange a time agreement to conduct in-depth interviews which are carried out as shown in the table.

Of the four respondents, data collection was carried out with the following steps, namely interviews. The interview was conducted at school and was carried out based on the topic asked, namely regarding adolescent perceptions of toxic relationships. The results of the interview were written in full based on the results of the recording using a cellphone with 1 gb of memory and a small note from the researcher. Then the results of the recording will be documented on a CD.

All information including data, statements and results submitted by respondents was written in full according to the notes and results of the recording. The data that has been written is then examined many times and presented in the form of categories that have been completely determined in the data results as shown in the following table:

1. Adolescents' perceptions of the meaning of a toxic relationship
   Table 1 Categories of keywords regarding adolescent perceptions of toxic relationships.

Key Word	Category
relationships that are sometimes not realized in friendship, and unhealthy dating, benefiting one of them, harming oneself and harming the other. (R1, R2, R3, R4)	Definition of a toxic relationship

In principle, 4 respondents had the same answers regarding adolescent perceptions about the meaning of a toxic relationship, with the results of in-depth interviews such as:

What do you think is meant by a toxic relationship?"
"*Dating is usually not healthy, it often costs time and energy and often drains tears (R1)*"

"*Relationships are usually not realized at first, friends like each other, feel like they belong and are too perfect in this relationship, it's not allowed, it's not allowed, it's dizzy (R2)*"

"*A relationship between 2 people of different sexes without marriage ties but still changing hearts, really jealous. (R3)*"

"*Relationships that are usually done by teenagers but not healthy, too perfectionist (R4)*"

Teenagers' perception of the notion of a toxic relationship is a romantic story experienced by a teenager who has not yet reached the maturity age to enter into a relationship as described in the answer above.

2. Adolescent perceptions of forms of toxic relationships

Table 2 Category keywords regarding adolescent perceptions of forms of toxic relationships

Key Word	Category
Unsupportive partner, frequent harsh words, excessive jealousy or blind jealousy, partner is too controlling, often filled with grudges, dishonest, and constant stress. (R1, R2, R3, R4)	Toxic relationships

Based on the results of interviews with 4 respondents regarding the forms of toxic relationships, there were different opinions expressed that not all forms of toxic relationships are known. The phenomenon of adolescents regarding forms of toxic relationships can be revealed through various respondents' answers.

In your opinion, what are forms of toxic relationships, is that normal?"
"*Usually, in a toxic relationship, your partner never supports good things, is a little bit jealous, thinks a little negatively, isn't even comfortable... (R1)*"

"*Usually too controlling like a security guard, really jealous, like cctv is constantly monitored, it's stressful because if you're honest it's even wrong, lying if you get caught can make it even worse (R2)*"

"*Rude words usually appear frequently, yes, because they are so perfect, the intention is to take full care of them, but instead they make the partner uncomfortable, they are followed all the time, later if they get angry they will even take revenge. Even if you break up, it's even*

more terrible, it can be even more dizzy, not playing games. Including, doing everything that can make the person you crush happy. (R3)

"*Spouse doesn't support him because he's too jealous* (R4)

Teenagers' perceptions about forms of toxic relationships said that 3 out of 4 respondents were normal for teenagers and 4 respondents said stealing glances, feeling high, wanting to make them happy, and always thinking about the person they have an crush on.

3. Adolescent perceptions about the factors that influence toxic relationships
Table 3 Category keywords adolescent perceptions about the factors that influence toxic relationships

Key Word	Category
Excessive possessiveness, control freak, jealousy, too perfect, liar, excessive dependency	Factors influencing a toxic relationship

Based on the results of interviews with 4 respondents regarding the factors that influence toxic relationships, they gave different opinions and said that the environment, family and association, the dissemination of information through the media due to the lack of parental love greatly influences attitudes, especially adolescents.

"In your opinion, what are the factors that influence toxic relationships?"
"*Too much possessiveness can make relationships toxic, insanity, the environment, family and friends because*

the lack of love given by parents can affect relationships, especially teenagers (R1)"

"*A person who is too jealous can be a factor in the end, the relationship becomes toxic* (R2)

"*Individual awareness, excessive dependence, environment and parents because the child's attitude is controlled by parents* (R3)

"*environment, parents, because it can influence children's attitudes, is too perfect* (R4)

Teenagers' perceptions about the factors that can influence toxic relationships say that 4 respondents have different opinions.

4. Adolescents' perceptions of the impact of toxic relationships
Table 4 Key word categories of adolescent perceptions about the impact of toxic relationships

Key Word	Category
Stress, neglect of oneself, lack of self-esteem, anxiety disorders, blocking each other in cyberspace and the real world, mental pressure arises, hate speech at an early age and because of hatred and if there is revenge which results in many cases such as broken hearts, even suicide	Effects of a toxic relationship

Based on the results of interviews with 4 respondents regarding the impact of a toxic relationship, they gave different opinions.

Seen from the results of the interview as follows

"In your opinion, what is the impact of a toxic relationship?"
"*The impact if you already know a toxic relationship usually makes you feel stressed like you have no self-esteem, especially if there is a problem you will block each other in cyberspace, especially in the real world, you will feel very emotional pressure, hate each other at an early age and because of the factor of hatred and if there is a grudge that ends there are many cases of harassment, broken hearts in bikinis, and it also feels like suicide* (R1)"

We can knock each other out of whatever we do, right becomes wrong, wrong ends up getting wrong, we don't feel worthy (R2)

Can be stressed, emotional pressure, heartbreak, lack of confidence, even suicide if the wave does not respond (R3)

Adolescence when you start to get to know a toxic relationship can cause a feeling of enthusiasm in everyday life to weaken, but it can also cause stress if the love does not get what you want, causing a feeling of heartbreak, or attempted suicide (R4)

In principle, the perceptions of adolescents about the impact of toxic relationships from 4 respondents said that the effects were ostracism, pregnancy out of wedlock, a bleak future, sin according to religion, shame, disappointment, abortion, getting aid/hiv.

Based on the data obtained from the research results, this chapter will discuss adolescent perceptions of toxic relationships among female students at sma 2 slawi

CONCLUSION

Perceptions of adolescents about knowledge about toxic relationships are different and have various perceptions from each respondent starting from the definition of toxic relationships, forms of toxic relationships, and stages of toxic relationships.

Perceptions of adolescents about the factors that influence toxic relationships are religious prohibitions, dissemination of information through the media, promiscuity, ways of dressing and individual awareness.

Teenagers' perceptions about the impact of toxic relationships are blocking each other in cyberspace and even in the real world, experiencing emotional stress, hate speech appearing at an early age and because of hatred and if there is revenge which results in many worrying cases such as heartbreak and suicide.

REFERENCE

Felly Philipus Senewe dkk. 2009. Status Kesehatan Remaja Di Indonesia, analisis lanjut data Riskesdas 2007. Puslit Ekologi dan Status Kesehatan, Badan Litbang Kesehatan, Depkes RI, Jakarta

Richards, L. (2017). The effects of parental monitoring, family structure, and sexual abuse on the onset of sexual activity in adolescents (Order No. 10254343). Available from ProQuest Dissertations & Theses Global. (1871695921). Retrieved from https://search.proquest.com/docview/ 1871695921?accountid=17242.

Anggela dan Wanda. 2020. Penggunaan Smartphone Dalam Memberikan Informasi Kesehatan Reproduksi Remaja. Jurnal Penelitian Kesehatan Suara Forikes Volume 11

Survey Kesehatan Reproduksi Remaja Indonesia. 2012. Kesehatan Reproduksi Remaja. Badan Kependudukan dan Keluarga Berencana Nasional. Badan Pusat Statistik. Kementrian Kesehatan. MEASURE DHS.ICF Internasional. Jakarta.Agustus 2013.

BPS, BKKBN, KEMKES, MEASURE DHS, Survei Demografi dan Kesehatan Indonesia (SDKI) 2012: Kesehatan Reproduksi Remaja, Laporan Pendahuluan, Februari 2013.

Putra, Y.S. 2015. Theoritical Review: Teori Perbedaan Generasi. Kupperschmidt (2002). diakses dari https://jurnal.stieama.ac.id/index.php/ama/article/viewFile/%20%20142/133

Maryatun. (tt). Kajian Hubungan toxic pada Remaja. Jurnal. http://www.google.co.id/url?sa=t&source=web&rct=j&url=http://dowload.portalgaruda.org/article.php%3Farticle%3DKAJIAN%2520PRANIKAH%2520PADA%2520REMAJA&ved=0ahUKEwjihJr2Y3MAhXMGpQKHQLJDmEQFggbMAA&usg=AFQjCNGPh-6cTOWQqf-D4xgNjBGGeE_bmg

Indrijati, Herline. Pengguna Internet dan Hubungan toxic Remaja. PROSIDING TEMU ILMIAH X IKATAN PSIKOLOGI PERKEMBANGAN INDONESIA Peran Psikologi Perkembangan dalam Penumbuhan Humanitas pada Era Digital

Survei Demografi dan Kesehatan Indonesia. Kesehatan Reproduksi Remaja. 2012. http://kesga.kemkes.go.id/images/pedoman/SDKI-2012-RemajaIndonesia.pdf

Hidayangsih, PS. 2014 Peilaku Berisiko dan Permasalahan Kesehatan Reproduksi Pada Remaja. Pusat Teknilogi Intervensi Kesehatan Masyarakat Badan Litbangkes, Kemenkes RI.

Chandra, D. A., Rahmawati, I & Hardiani, R. S. (2014). Hubungan Tipe Kepribadian dengan Perilaku Seksual Berisiko Remaja Di SMKN X Jember. Jurnal Pustaka Kesehatan Vol 2 No 3 September 2014.

Moleong, Lexy J. 2013. Metode Penelitian Kualitatif. Edisi Revisi. Bandung : PT Remaja Rosdakarya.

Pratama, E., dkk. 2014. Hubungan Pengetahuan Remaja tentang Pendidikan Seks dengan Perilaku Seks Pranikah pada Remaja di SMK Z Kota Bandung. Jurnal Ilmu Keperawatan. Vol. II. No. 2. September 2014

Kumala, D. 2016. Hubungan Pengetahuan dan Sikap dengan Perilaku Seksual pada Siswi SMK. Jurnal Aisyah: Jurnal Ilmu Kesehatan. Vol. 1. 2016

Ekawati, Y.N., dkk. 2016. Perilaku Berisiko Siswi di Kota Jambi Risk Behavior on Students Jambi. Jurnal Psikologi Jambi. Vol. I. No. 1. Juli 2016. Hal. 19-28

Maisya, I.B., dkk. 2013. Gambaran Perilaku Berisiko Remaja di Kelurahan Kebon Kecamatan Bogir Tengah Kota Bogor Tahun 2013 (Studi Kualitatif). Jurnal Kesehatan Reproduksi. Vol. 4. No. 3. Desember. 2013