

4

INDONESIAN JOURNAL OF OBSTETRICS AND GYNECOLOGY

Majalah Obstetri dan Ginekologi Indonesia

CONTENT

Volume 36, Number 1, Page 1 - 52, January 2012

Editorial

- Budi I. Santoso 2 **Looking Back: What We Have Done and What We Should Do Next**

Research Articles

- Deni W. Suryono
Firman F. Wirakusumah
Anita D. Anwar
Bandung
- 3 **The Correlation between Calcium Serum and Calcium Urine Level with the Blood Pressure in Preeclampsia**
There is a negative correlation between calcium serum level and calcium urine level with systolic and diastolic pressure in preeclampsia, meaning that the lower the calcium serum and calcium urine level is, the higher systolic and diastolic pressure.
- Abi Bazar
Theodorus
Zaimursyaf Aziz
Azhari
Palembang
- 8 **Maternal Mortality and Contributing Risk Factors** ✓
The most contributing risks factors for maternal mortality were maternal education and residence.
- Dewanto Khrisnamurti
John Wantania
Najoan N Warouw
Joseph Tuda
Manado
- 14 **Malaria Detection using Polymerase Chain Reaction (PCR) Method in Pregnant Women's Saliva on Several Hospitals in North Sulawesi Province**
The incidence of malaria in pregnancy at various hospital in North Sulawesi using PCR methods for saliva examination from April 1 - May 31 2008 is 53.49%. In this study malaria are mostly caused by *Plasmodium falciparum* with the largest incidence in primigravida, in the first trimester.
- Jimmy P. Wirawan
Ali Sungkar
Jakarta
- 20 **The Identification of Placental Alpha Micro Globulin-1 (Amnisure®) as a Method to Identify Rupture of Membrane**
For every positive vaginal pooling, nitrazine and Amnisure® will be tested positive. Several studies using Amnisure® have shown similar results. Role of Amnisure® seemed evident in cases of uncertainty such as chronic ROM and severe oligohydramnios due to ROM. Positive results in presence of intact membranes which suggested micro-perforations of the membrane still need further research. Much still needed to be done before implementing Amnisure® in our country, especially in the matter of cost effectiveness.
- Lita R. Astrilanti
Wim T. Pangemanan
Nuswil Bernollian
Kms. Yakub
Palembang
- 24 **Neonatal Haemoglobin and Haematocrit Level on Delayed Cord Clamping**
Delaying cord clamping until at least two minutes after delivery could increase haemoglobin level on newborn babies. Therefore, this method was suggested for every delivery in area where there is a risk of anemia in neonates such as Indonesia.
- Sazili
Theodorus
Kurdi Syamsuri
Zaimursyaf Aziz
Julnar M. Tasli
Palembang
- 28 **Comparison between Vacuum and Forceps Extraction to Neonatal outcome on Prolonged Second Stage of Labor**
There is no difference of effectiveness between forceps extraction and vacuum extraction in the case of prolonged second stage. Physicians are free whether to use the vacuum or forceps according to their own desirability and skill.
- Dwi S. Indrasari
Rizal Sanif
Yusuf Effendi
Irsan Saleh
Palembang
- 32 **The Effect of Polymorphisms of Estrogen Receptor β RS1271572 to the Incidence of Epithelial Ovarian Carcinoma**
Polymorphism of estrogen receptor β may play a role in the risk of epithelial ovarian carcinoma at Dr. Mohammad Hoesin Hospital Palembang.
- Rudy Gunawan
Laila Nuranna
Nana Supriana
Bambang Sutrisna
Kartiwa H. Nuryanto
Jakarta
- 37 **Acute Toxicity and Outcomes of Radiation Alone Versus Concurrent Chemoradiation for Locoregional Advanced Stage Cervical Cancer**
The response to CRT and RT for locoregional advanced cervical cancer was not different in 3 month evaluation. Acute gastrointestinal, genitourinary, and hematologic toxicities found in CRT were higher than in RT ($p=0.000$; $p=0.000$; $p=0.002$).
- Rinto Hariwibowo
Risca Marcelena
Rudy Kurniawan
Sandra Listiarni
Shabrina R. Putri
Silvy Firdaus
Dhika Prabu
Fernandi Moegni
Jakarta
- 43 **Level of Education as the Determinant Factor of Obstetric Outpatients' Knowledge about Intra Uterine Device in Kramat Jati Public Health Center**
Level of education are the determinant factor of obstetric outpatients' knowledge about intra uterine device in Kramat Jati Public Health Center.

Case Report

- Endah Retnoningrum
Damar Prasmusinto
Lucky S. Widyalaksana
Jakarta
- 48 **Manual Reposition of Uterine Inversion with Hemorrhagic Shock in Minimal Facilities Situation**
Uterine inversion can be promptly recognized in the third stage of parturition. Manual manipulation

2. Saifuddin AB. Upaya safe motherhood dan making pregnancy safer. Dalam: Martaadisoebrata D, Sastrawinata S, Saifuddin AB. Bunga rampai obstetri dan ginekologi sosial. Jakarta: Yayasan Bina Pustaka Sarwono Prawirohardjo; 2005. 221-42.
3. Badan Perencanaan Pembangunan Nasional. Laporan perkembangan pencapaian millennium development goals Indonesia. Jakarta: Kementerian Negara Perencanaan Pembangunan Nasional/Badan Perencanaan Pembangunan Nasional; 2007.
4. McCarthy J, Maine D. A framework for analyzing the determinants of maternal mortality. *Study Family Plann.* 1992; 23(1): 23-33.
5. Roeshadi RH. Upaya menurunkan angka kesakitan dan angka kematian ibu pada penderita preeklampsia dan eklampsia. Pidato pengukuhan jabatan guru besar tetap Universitas Sumatera Utara. Medan; 2006.
6. World Health Organization. Reduction of maternal mortality: a joint WHO/UNFPA/UNICEF/World Bank statement. Geneva: World Health Organization; 1999.
7. Karlsen S, Say L, Souza JP, Hogue CJ, Calles DL, Gülmezoglu AM, et al. The relationship between maternal education and mortality among women giving birth in health care institutions: analysis of the cross sectional WHO global survey on maternal and perinatal health. *BMC Public Health.* 2011; 11:606.
8. Mochtar H. Kematian maternal di rumah sakit umum Palembang [tesis]. Palembang: Bagian Kebidanan dan Kandungan Fakultas Kedokteran Universitas Sriwijaya; 1990.
9. Midhet F, Hosang N. Risk factors of maternal mortality in Pakistan: preliminary results from the demographic and health survey (DHS), 2006-2007 [internet]. 2009 [cited 2009 March 15]. Available from URL: <http://paa2009.princeton.edu/download.aspx?submissionId90588>.
10. Mohammed AA, Mahgoub HE, Eltayeb EM, Ahmed SA, Abdelfattah AI. Maternal mortality in Kassala state-eastern Sudan: community based study using reproductive age mortality survey (RAMOS). *BMC Preg Childb.* 2011; 11:102.
11. Budagama DN, Chalid MT, Manoe IM. Kematian maternal di RS Dr. Wahidin Sudirohusodo Makassar periode 1996-1999. Naskah PIT XII POGI Palembang 2001.
12. Fibrina AI. Faktor-faktor risiko yang mempengaruhi kematian maternal (studi kasus di kabupaten Cilacap) [tesis]. Semarang: Program Studi Magister Epidemiologi Program Pasca Sarjana Universitas Diponegoro; 2007.
13. Rahman M, DaVarzo J, Razzaque A, Ahmed K, Hale L. Demographic, programmatic, and socioeconomic correlates of maternal mortality in Matlab, Bangladesh. Paper presented at the annual meeting of the Population Association of America (PAA); 2009 April 30-May 2; Detroit, Michigan, USA. Michigan: Pathfinder International; 2009.
14. Högberg U. Midlevel providers and the fifth millennium goal of reducing maternal mortality. *Sex Reprod Healthc.* 2010; 1:3-5

differences between the MMR in urban and rural areas (369 vs. 872 per 100,000 live births).¹⁰ Mochtar reported that the risk for the occurrence of maternal mortality in patients who resides outside of the city of Palembang was 12 times greater than those who resides in the city.⁸

In our study, most of the research subjects are referred patients (84% case group and 54.7% control group). This is reasonable considering that Dr. Mohammad Hoesin General Hospital, Palembang is a type A referral hospital, so that the cases were mostly referred cases. However, most mortality occurred within <48 hours after hospital admission. This indicates that most referral were delayed referral. Budagama reported that the risk of mortality was 11 times larger when the referral hospital could not be reached within 2 hours.¹¹

In this study, we also found a significant association between the number of ANC visits of less than 4 times with the incidence of maternal mortality. Antenatal care policy states that the ANC should be given according to national standards, at least 4 times during the pregnancy.² Fibriana's research in Cilacap also found the same thing, in which the women without adequate ANC visits has a mortality risk of 22.7 times compared to those who had adequate visits.¹²

Distribution of birth spacing in the study in both groups the majority of pregnancies had intervals ≥ 24 months. Shorter birth spacing can cause morbidity and mortality in both mother and child. The research in various countries shows significant relationship between birth spacing with the risks to both mother and child's health. In the study by Rahman et al. in Bangladesh, maternal mortality risk is found to be higher in the women with pregnancy interval <24 months compared with women with pregnancy intervals of 24-59 months, but found no statistically significant difference.¹³ The same result was found in this study, in which there is no significant relationship between pregnancy interval with maternal mortality.

Only a small group of case subjects with a history of prior disease which is 12%. However, there was a significant association with maternal mortality. Fibriana reported that in women who have a history of disease before pregnancy or during the pregnancy period, are at risk for maternal mortal-

Outcome factors consist of the type of delivery, complications of pregnancy, childbirth and complications of childbirth complications. All the factors have significant associations with the incidence of maternal mortality.

Of all the factors, the most dominant factor affecting maternal mortality were maternal education and residence. Several previous studies showed similar results with this study. Högborg reported that mothers with no education are more likely to die than those who are better educated, thus emphasizing the need for expansion of educational opportunities for women, and the importance of reducing poverty.¹⁴ Midhet in Pakistan stated that women living in remote rural areas without access to transportation and telecommunications will likely die from complications of pregnancy and childbirth.¹⁰ This is related to the "Three Delays", defined as the delay to seek help if a complication arises because of the ignorance to recognize danger signs, and delays in reaching referral places because of the distance from residential area and difficulty in transportation from the point of referral, which will cause a delay for a woman to get help, and resulting in mortality.⁴

CONCLUSIONS

Risk factors that contribute to occurrence of maternal mortality in Dr. Moh. Hoesin General Hospital Palembang during the period of 2005-2009 were categorized as distant factors (maternal education and husband's occupation), intermediate factors (residence, referral status, numbers of ANC visits, first attendant, labor facility and history of prior medical history) and outcome factors (type of delivery, complications of pregnancy, childbirth and puerperal), while the most contributing factor is maternal education and residence.

SUGGESTIONS

Prospective studies are needed to get a more complete and informative data, in order to address whether the effect of risk factors in this study is still a problem in the incidence of maternal mortality.

REFERENCES

1. Surjaningrat S, Saifuddin AB. Kematian maternal. Dalam:

The control group did not have any complications, because intentionally to avoid the confounding factors. There were 34% cases of pregnancy complications, 60% complications of childbirth and 6% puerperal complications. Using Fisher's exact test, there was a significant association between complications of pregnancy, childbirth and puerperal with the incidence of maternal mortality ($p < 0.05$). The relationship between distant, intermediate and outcome factors and maternal mortality is shown on Table 2.

To determine the most contributing risk factors to the occurrence of maternal mortality, we conducted logistic regression to variables that have a significance in the bivariate analysis, avoiding prior history and complications factors due to fact that the control group did not have it. Complete results of logistic regression shown on Table 3.

Table 3. Logistic Regression Results

Factors	Unadjusted			Adjusted		
	B	OR	p	B	OR	p
Education	1.891	8.96	0.001	1.749	5.74	0.001
Residence	1.848	7.41	0.001	1.537	4.65	0.001
Husband's occupation	0.069	3.79	0.001			
Referral status	-0.079	4.01	0.001			
No. of ANC	-0.074	2.98	0.001			
First attendant	20.230	4.65	0.001			
Mode of delivery	23.293	9.33	0.001			
Labor facility	21.841	5.05	0.001			
Constanta	-4.255					

Based on the adjusted logistic regression results, the most contributing factors to the occurrence of maternal mortality in Dr. Moh. Hoesin General Hospital Palembang during 2005-2009 sorted by the value of OR were maternal education and residence ($p < 0.05$).

DISCUSSIONS

This is a case control study which examined 200 subjects, consisted of 50 case subjects (maternal mortality) and 150 control subjects.

The most common cause of maternal mortality are preeclampsia/eclampsia (50%), followed by

nesia is caused by bleeding cases (30%).³ Thanks to advances in anesthesia, surgical techniques, intravenous fluids and transfusions as well as the increasing role of antibiotics, maternal mortality due to bleeding and infection can be markedly reduced. Meanwhile, the patients with preeclampsia are mostly ignorant and it is often too late to seek help after the clinical symptoms progress to severe preeclampsia with all of its complications, thus maternal mortality can not be derived.⁵

Risk factors of maternal mortality were classified into 3 groups of distant, intermediate and outcome factors. Distant factor consists of maternal education and husband's occupation. Our result suggests that there is a significant association between maternal educational level and husband's occupation with the incidence of maternal mortality. Maternal education and husband's occupation will indirectly influence family socioeconomic status. These factors will limit women's access to education, good nutrition, and health services, which would make the threat of maternal mortality even higher.⁶ Karlsen et al. research at 373 medical centers in 24 countries shows that women with the amount of education between 1 and 6 years had a 2-fold risk for mortality compared to those who are educated more than 12 years.⁷ The study by Mochtar also found that women who died in the department of Dr. Mohammad Hoesin General Hospital, Palembang in 1986 to 1989 have spouses who worked as day laborers and do not work. This suggests that the husband's occupation, which is associated with socioeconomic status of a family, is also a risk factor for maternal mortality.⁸

Distant factors consisted of age, parity, residence, referral status, number of ANC visits, first attendant, labor facility, birth spacing and history of the disease. Our results indicate that age and parity did not have a meaningful relationship to the occurrence of maternal mortality. These results are contrary to research Midhet et al. in Pakistan, where they found the risk was significantly higher in pregnant women with less than 20 years of age and over 35 years compared with those between 20-34 years old.⁹

In this study, there is a significant relationship between residence with the incidence of maternal mortality, where those who live outside the city of Palembang has a risk for maternal mortality 7.41

control group) and there is a significant association between the referral status and maternal mortality (OR 4.01, $p=0.001$).

In the case group, 64% had <4 times ANC visits while 62.7% of the control group had ≥ 4 times ANC visits, and there was a significant association between the number of ANC visits and the incidence of maternal mortality (OR 2.98, $p = 0.001$).

On prior medical history factors, the majority of cases had no history of previous illness (88%), while the control group was purposively selected with no history of previous illness. There is a significant association between prior medical history and maternal mortality (OR 4.40, $p=0.001$). Outcome factors consist of the type of delivery, complications of pregnancy, childbirth and puerperal.

Table 2. The Relationship between Distant, Intermediate, and Outcome Factors and Maternal Mortality

Risk Factors	Case Control				OR	95% CI	p
	n	%	n	%			
Distant Factors							
Maternal education							
< 9 years	43	86	61	40.7	8.96	3.78 - 21.23	0.001*
≥ 9 years	7	14	89	59.3			
Husband's occupation					3.79	1.94 - 7.40	0.001*
Laborer	29	58	40	26.7			
Non Laborer	21	42	110	73.3			
Intermediate Factors							
Age (year)					0.86	0.44 - 1.68	0.675*
< 20 and > 35	18	36	59	39.3			
20 - 35	32	64	91	60.7			
Parity					0.54	0.25 - 1.16	0.115*
0 and ≥ 4	37	74	126	84.0			
1 - 3	13	26	24	16.0		3.66 - 15.01	
Residence					7.41		0.001*
Rural	32	64	29	19.3			
Urban	18	36	121	80.7			
Referral status					4.01	1.76 - 9.13	0.001*
Non referral	8	16	65	43.3			
Referred	42	84	85	56.7			
No. of ANC visits					2.98	1.53 - 5.80	0.001*
< 4 times	32	64	56	37.3			
≥ 4 times	18	36	94	62.7			
Interpregnancy interval					1.08	0.57 - 2.05	0.806*
< 24 months	24	48	69	46.0			
≥ 24 months	26	52	81	54.0			
First attendant					4.65	3.55 - 6.11	0.001*
Non PHA	9	18	0	0.0			
PHA	41	82	150	100			
Delivery place					5.05	3.78 - 6.74	0.001**
Outside RSMH	13	26	0	0.0			
RSMH	37	74	150	100			
Prior medical history					4.40	3.40 - 5.71	0.001**
Yes	6	12	0	0.0			
No	44	88	150	100			
Outcome Factors							
Mode of delivery					9.33	6.03 - 14.44	0.001
Assisted	17	48.6	0	0.0			
Non Assisted	18	51.4	150	100			
Complications of pregnancy					5.54	4.07 - 7.55	0.001
Yes	17	34.0	0	0.0			
No	33	66.0	150	100			
Complications of delivery					8.50	5.63 - 12.82	0.001
Yes	30	60.0	0	0.0			
No	20	40.0	150	100			
Complications of puerperal					4.19	3.26 - 5.37	0.001
Yes	3	6.0	0	0.0			
No	47	94.0	150	100			

It is important to understand the factors that affect maternal mortality. According to McCarthy et al, a series of factors that affects maternal mortality can be described in a simple framework. This framework consists of three stages of the factors: distant factors, intermediate factors, and near factors (outcome).⁴ Most of maternal mortality could be prevented, but only little attention given to record the number of women who experienced a fatal complication. Information about the cause of mortality, distribution and its determinant factors are essential in the management of public health. These information are needed to determine the priority health care programs, plan the actions/interventions, and monitor the program's effectiveness. For that, it required the collection of data and research on maternal mortality and the influencing factors in Dr. Mohammad Hoesin General Hospital Palembang for five years (2005-2009).

METHODS

This study is an observational case control study, conducted in the Dr. Mohammad Hoesin General Hospital Palembang from January 1, 2010 through December 31, 2011. Secondary data was collected from medical records, mortality records and reports of maternal mortality in patients hospitalized in the Obstetrics and Gynecology department of Dr. Mohammad Hoesin General Hospital Palembang starting on January 1, 2005 through December 31, 2009. The number of maternal mortality (50 samples) was included in the case group. For the control group, we took physiological labor cases that occurred in the intervening days \pm 60 days of the incident, which matched based on maternal age, a total of 150 cases (cases and controls ratio 1:3). Risk factors were grouped according to the framework made by McCarthy et al, which is distant factor (maternal education and husband's occupation), intermediate factors (subject age, parity, residence, referral status, number of ANC visits, birth spacing, first attendance, labor facility and prior medical history), and near/outcome factors (type of delivery, complications of pregnancy, childbirth and puerperal). We performed bivariate analysis to see what factors are significant. Furthermore, we performed multivariate analysis of the significant factors to determine which factors were the most influential on the occurrence of maternal mortality.

RESULTS

During the five years of 2005-2009, there were 109 maternal mortality and 11,453 live births. The number of maternal mortality in Dr. Mohammad Hoesin General Hospital, Palembang for five years (2005-2009) is shown in Table 1.

Table 1. The Number Of Maternal Mortality and Live Births in Dr. Mohammad Hoesin General Hospital, Palembang for Five Years (2005-2009)

Years	No. of Maternal Mortality	No. of Live Births
2005	13	1398
2006	18	2092
2007	25	2721
2008	25	2438
2009	28	2804
Total	109	11453

Risk factors were grouped into distant, intermediate, and outcome factors. Distant factors consist of maternal education and husband's occupation. We obtained 86% of the cases had education <9 years, while in the control group only 59.3% had \geq 9 years of education. Based on Chi Square statistical test, there was a significant association between maternal education levels with the incidence of maternal mortality, OR 8.96 ($p=0.001$).

We found that in 58% of cases the husband are laborers, while in the control group 73.3% does not work as laborers. Based on Chi Square test there is a significant relationship between the husband's occupation with the incidence of maternal mortality, OR 3.79 ($p=0.001$).

Intermediate factors consist of age, parity, residence, referral status, number of ANC visits, birth spacing, first attendant, birth place and the prior medical history.

Age, parity and birth spacing factors didn't show any significant associations with the incidence of maternal mortality ($p > 0.05$). On the residence factors, we found a significant association with maternal mortality (OR 7.41, $p=0.001$), where 64% of the cases resided in rural area, while 80.7% of the control group residing in urban area.

Guideline for contributors

Indonesian Journal of Obstetrics and Gynecology will be pleased to receive material contributed by anyone interested in obstetrics and gynecology, in the form of research report, literature review, or case report. With condition the material submitted to the Indonesian Journal of Obstetrics and Gynecology should never have been or will not be submitted to any other publication. Manuscript should be written in English. Author should follow the manuscript preparation guide:

1. **Title**, should be brief, specific and informative. Include a short title (not exceeding 40 letters and spaces).
2. **Name of Author(s)**, should include full names of authors, address to which proofs are to be sent, name and address of the Department(s) to which the works should be attributed.
3. **Abstract**, concise description (not more than 250 words) of the background, purpose, methods, results and conclusions required. **Keywords** (3 - 5 words) should be provided below the abstract.
4. **Introduction**, comprises the problem's background, its formulation and purpose of the work and prospect for the future.
5. **Method**, containing clarification on used materials and scheme of experiments. Method to be explained as possible in order to enable other examiners to undertake retrial if necessary. Reference should be given to the unknown method.
6. **Result**, should be presented in logical sequence with minimum number of tables and illustrations necessary for summarizing only important observations. The vertical and horizontal line in the table should be made at the least to simplify the view. **Mathematical equations**, should be clearly stated. **Decimal numbers** should be separated by point (.). **Tables, illustration, and photographs** should be cited in the text in consecutive order. Explain in footnotes all non-standard abbreviations that are used.
7. **Discussion**, explaining the meaning of the examination's results, in what way the reported result can solve the problems, differences and equalities with previous study and development possibilities. This section should include the conclusion of the reported work and suggestion for further studies if necessary.
8. **Conclusion**, answer(s) to the research question, should be written in brief and clear descriptive sentences.
9. **Reference**, should be arranged according to the Vancouver system. References must be identified in the text by the super script Arabic numerals and numbered in consecutive order as they are mentioned in the text. The reference list should appear at the end of the articles in numeric sequence.

I. Research reports preparation guidelines

The text of research report should be divided into the following sections: **title, name of author(s), abstract, objective, method, result** that ended by **conclusion, references**.

II. Reviews article preparation guidelines

The text of literature reviews should be divided into the following sections: **title, name of author(s), abstract, introduction, overview** that ended by **conclusion, references**.

III. Case reports preparation guidelines

The text of case reports should be divided into the following sections: **title, name of author(s), abstract, introduction, case(s), and case management** that completed with photograph/descriptive illustrations, **discussion** that ended by **conclusion, references**.

Each article contains a maximum of three graphs. Colour or black and white photographs must be submitted with clear illustrations and graphs. Photographs should be prepared with the minimum size of 125 x 195 mm².

The manuscript should be submitted in a compact disc and be typed using MS Word program, which are typed 1.5 lines space with wide margins on A4 paper. The length of article should not exceed 12 pages. The left, right, top, and bottom margin should be 2.5 cm or 1 inch length. The editor reserves the right to edit manuscript, fit articles into available, and ensure conciseness, clarity, and stylistic consistency. All accepted manuscript and their accompanying illustration become the permanent property of publisher, and may not be published elsewhere in full or in part, in print or electronically, without written permission from publisher. All data's, opinion or statement appear on the manuscript are the sole responsibility of the contributor. Accordingly, the Publisher, the Editorial board, and their respective employees of the Indonesian Journal of Obstetrics and Gynecology accept no responsibility or liability what so ever for the consequences of any such inaccurate or misleading data, opinion, or statement. Ethical clearance

Pedoman untuk penulis

Indonesian Journal of Obstetrics and Gynecology menerima sumbangan tulisan dari para dokter di seluruh Indonesia yang tertarik dalam kebidanan dan kandungan, dalam bentuk laporan penelitian, tinjauan pustaka, atau laporan kasus. Naskah tersebut belum pernah dan tidak akan diserahkan ke penerbit lain. Naskah harus ditulis dalam bahasa Inggris. Penulis harus mengikuti panduan penulisan naskah sebagai berikut:

1. **Judul**, harus jelas, spesifik, informatif dan singkat (tidak melebihi 40 huruf dan spasi).
2. **Nama Penulis**, harus menyertakan nama lengkap penulis, alamat lengkap, nama dan alamat departemen.
3. **Abstrak**, keterangan ringkas (tidak lebih dari 250 kata) dari latar belakang, tujuan, metode, hasil dan kesimpulan yang diperlukan. **Kata kunci** (3 - 5 kata) harus disediakan di bawah abstrak.
4. **Pendahuluan**, menunjukkan latar belakang masalah, tata cara penelitian, tujuan dilakukannya penelitian, serta prospeknya di masa depan.
5. **Metode**, merupakan penjelasan tentang bahan yang digunakan dan skema percobaan. Metode harus jelas untuk memungkinkan peneliti lain untuk melakukan penelitian ulang. Untuk metode yang kurang jelas harus diberikan penjelasan.
6. **Hasil**, disusun dalam urutan logis. Jumlah tabel dan ilustrasi minimum dan hanya pada hasil penelitian yang sangat penting. Garis vertikal dan horisontal dalam tabel harus dihilangkan. **Persamaan Matematika**, harus diuraikan dengan jelas. **Nomor desimal**, harus dipisahkan oleh koma (.). **Tabel, ilustrasi, dan foto**, harus dikutip berurutan. **Jelaskan** dalam catatan kaki semua singkatan tidak standar yang digunakan.
7. **Diskusi**, menjelaskan makna hasil pembahasan, dengan cara bagaimana hasil dilaporkan dapat memecahkan masalah, perbedaan dan kesamaan-kesamaan dengan studi sebelumnya dan kemungkinan pengembangan. **Bagian ini harus mencakup kesimpulan pembahasan tersebut dan saran untuk studi lebih lanjut jika diperlukan.**
8. **Kesimpulan**, merupakan jawaban atas pertanyaan penelitian. Dituliskan dalam kalimat-kalimat deskriptif yang singkat dan jelas.
9. **Referensi**, harus disusun menurut sistem Vancouver. Referensi harus diidentifikasi dalam teks dengan angka-angka Arab dan nomor superscript agar berturut-turut seperti yang disebutkan dalam teks. **Daftar referensi** harus terlihat diakhir artikel dalam urutan numerik.

1. Pedoman penyusunan laporan penelitian

Laporan penelitian harus ditulis dalam format sebagai berikut: **Judul, nama penulis, abstrak, pendahuluan, tujuan, metode, hasil** yang diakhiri dengan **kesimpulan, referensi**.

II. Pedoman penyusunan tinjauan pustaka

Tinjauan pustaka harus dibagi menjadi bagian berikut: **Judul, nama penulis, abstrak, pendahuluan, tinjauan** yang diakhiri dengan **kesimpulan, referensi**.

III. Pedoman penyusunan laporan kasus

Laporan kasus harus dibagi menjadi bagian berikut: **Judul, nama penulis, abstrak, pendahuluan, kasus, dan manajemen kasus** yang dilengkapi dengan **foto/ilustrasi deskriptif, diskusi** yang diakhiri dengan **kesimpulan, referensi**.

Setiap artikel berisi maksimal tiga grafik. Foto warna atau hitam putih yang diserahkan harus jelas baik ilustrasi atau grafiknya. Foto harus disiapkan dengan ukuran minimum 125 x 195 mm².

Naskah diserahkan dalam compact disc, email, atau flash disc dan diketik menggunakan program MS Word. Ketentuan pengetikan sebagai berikut: jarak baris 1,5 spasi dengan ukuran kertas A4. Panjang artikel tidak boleh lebih dari 12 halaman. Batas kiri, kanan, atas, dan bawah harus 2,5 cm atau 1 inci. Redaksi berhak mempunyai arsip, menyunting artikel, memastikan keringkasan, kejelasan, dan konsistensi gaya sesuai standar penerbitan IJOG. Semua naskah diterima dan ilustrasi yang menyertainya menjadi milik penerbit permanen, dan penulis tidak diperbolehkan mempublikasikan secara penuh atau sebagian, di media cetak atau elektronik selain IJOG, tanpa izin tertulis dari penerbit. Semua data, pendapat atau pernyataan muncul pada naskah merupakan tanggung jawab kontributornya. Oleh karena itu, Penerbit, Dewan redaksi, dan karyawan Indonesian Journal of Obstetrics and Gynecology tidak bertanggung jawab atau berkewajiban apapun atas konsekuensi dari

4

EDITORIAL BOARD
INDONESIAN JOURNAL OF OBSTETRICS AND GYNECOLOGY
Majalah Obstetri dan Ginekologi Indonesia

Chief Editor	Dr. dr. Laila Nuranna, SpOG(K)	
Vice Chief Editor	Dr. dr. Dwiana Ocviyanti, SpOG(K)	Dr. dr. Junita Indarti, SpOG
Managing Editor	Prof. dr. Med. Ali Baziad, SpOG(K) Dr. dr. Budi Iman Santoso, SpOG(K) dr. Wachyu Hadisaputra, SpOG(K) Dr. dr. Noroyono Wibowo, SpOG(K) dr. Omo A. Madjid, SpOG(K) Dr. dr. Eka R. Gunardi, SpOG(K)	dr. Andon Hestiantoro, SpOG(K) Dr. dr. R. Muharam, SpOG(K) dr. Kanadi Sumapraja, SpOG(K), MSc. dr. Herbert Situmorang, SpOG dr. Yuditya Purwosunu, SpOG
Peer Reviewer	Prof. dr. Delfi Luthan, SpOG(K) (<i>Medan, Endokrinologi Imunologi Reproduksi</i>) Prof. dr. A. Kurdi Syamsuri, SpOG(K) (<i>Palembang, Fetomaternal</i>) Prof. Dr. dr. Andrijono, SpOG(K) (<i>Jakarta, Onkologi Ginekologi</i>) Prof. Dr. dr. Djamhoer Martaadisoebrata, SpOG(K), MSPH (<i>Bandung, Obstetri Ginekologi Sosial</i>) Prof. Dr. dr. Johannes C. Mose, SpOG(K) (<i>Bandung, Fetomaternal</i>) Dr. dr. Tono Djuwantono, SpOG(K), M.Kes. (<i>Bandung, Endokrinologi Imunologi Reproduksi</i>) dr. Samodra Suparman, SpOG (<i>Malang, Obstetri Ginekologi Sosial</i>) Prof. dr. Samsulhadi, SpOG(K) (<i>Surabaya, Endokrinologi Imunologi Reproduksi</i>) dr. Amru Sofian, SpOG(K) (<i>Pekanbaru, Onkologi Ginekologi</i>) dr. Pribakti Budinurdjaja, SpOG(K) (<i>Banjarmasin, Uroginekologi</i>) Prof. Dr. dr. Eddy Suparman, SpOG(K) (<i>Manado, Endokrinologi imunologi Reproduksi</i>) dr. Maria Flavia Loha, SpOG(K) (<i>Manado, Endokrinologi Imunologi Reproduksi</i>)	
International Peer Reviewer	Prof. Togas Tulandi, MD, MHCM (<i>Milton Leong Chair in Reproductive Medicine, McGill University, Montreal Canada</i>)	
English Consultant	dr. Anesia Tania	
Administrative Staff	Gretha Basuki, Frachma Della Siregar, Eko Subaktiansyah	
Publisher	Indonesian Society of Obstetrics and Gynecology	
First Published	July 1 st 1974	
Legal	Information Ministers Decision Republic of Indonesia No. 016/KHS/DIT.P/II.1a/74	
Secretariat Address	PKMI Building, Ground Floor Kramat Sentiong Street 49A, Central Jakarta, 10450, Indonesia Telephone: 021-3916670, Facsimile: 021-3916671 E-mail: ijog.indonesia@gmail.com ; majalah_mogi@yahoo.com www.indonesia.digitaljournals.org/index.php/IJOG	