#### Peer Review File

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#### **Reviewer** A

**Comment 1:** The manuscript is well written; however, it does not contain any new findings internationally.

**Reply:** Thank you for the comment. This paper aims to increase the awareness of illegal induced unsafe abortion and highlight the issues that preclude safe abortion in the community which is lacking in Malaysia.

For the management of such a case, we have also highlighted the potential benefit of damage control strategy for non-trauma emergency laparotomy, which potentially helps reduce stoma rate and improve the rate of bowel anastomosis (See Page 7, line 156-164).

Changes in the text: -

### **Reviewer B**

Title

**Comment 1:** The word 'resulted' in the title may be inappropriate, rather 'resulting from an illegal...' or 'secondary to an illegal...'

**Reply:** Thank you for the comment. We have modified our text as advised to "resulting from"

Changes in the text: (page 1, line 1)

Introduction

**Comment 2:** It is not clear whether the statistics given for unsafe abortion, 4.7-13.2%, are local (Malaysia) or global.

**Reply:** The statistics given for unsafe abortion is global figure by WHO. The Malaysian data is not available.

**Changes in the text:** We have added in the word "globally". See (page 2, line 25), (page 3, line 52)

Line 60,61

**Comment 3:** What leads to treatment delay here? Uterine perforation and bowel injury or failure to recognize the injuries earlier?

**Reply:** Failure to recognize uterine perforation and bowel injury early will lead to



**IDENTIFY AND EVALUATED AND ACCESS IOURNAL FOR HIGH-OUALITY RESEARCH IN PUBLIC HEALTH AND EMERGENCY** treatment delay. We have modified our sentences (see page 3, line 60-62)

**Changes in the text:** Uterine perforation and bowel injury are rare but potentially life-threatening if we fail to recognize them early, leading to treatment delay.

Line 62

**Comment 4:** The statement should read 'complicated by...' instead of 'complicated with...'

**Reply:** Thank you for the comment.

Changes in the text: We have modified our text as advised. (see page 3, line 62)

Line 75

**Comment 5:** The statement should read 'bleeding for a week' or 'bleeding for 1 week' or 'bleeding for a duration of 1 week' instead of 'bleeding for a 1-week duration'.

**Reply:** Thank you for the comment.

**Changes in the text:** We have modified the text into "bleeding for a week". (see page 4, line 74)

Line 80

**Comment 6:** The statement should read 'other systemic examinations were unremarkable'.

**Reply:** Thank you for the comment. We have modified the text. (see page 4, line 84) **Changes in text:** Other systemic examinations were unremarkable.

**Comment 7:** For the case presentation you present a clinical history, then physical findings then laboratory findings. You then go back to clinical history then ultrasound findings, initial management, intraoperative findings. This is rather disorderly. The suggestion is to present a complete clinical history and then physical findings followed by both laboratory and imaging findings, then initial and definitive management.

**Reply:** Thank you for the comment.

**Changes in the text:** The case presentation has been reorganized as suggested. (see page 4, line 75-86)

Line 97, 98

**Comment 8:** It is not clear what you did with the proximal ileum post resection of the non-viable tissue during damage control before sending the patient to the ICU and doing a re-laparotomy.

**Reply:** Both ends of resected ileum were left behind inside the abdomen, followed by



THE AND PUBLIC HEALTH AND EMERGENCY temporary abdominal closure.

**Changes in the text:** We have added on the description. (see page 5, line 98-99)

Line 131,132

Comment 9: The statement should read 'the uterus and the bowel'.

**Reply:** Thank you for the comment.

**Changes in the text:** We have modified our text as advised. (see page 6, line 132-133)

Line 158

**Comment 10:** The statement should read 'it seemingly helps...'

Reply: Thank for the comment.

Changes in the text: We have modified the text as advised. (see page 7, line 159)

#### Line 158,159

**Comment 11:** The statement 're-exploration at a later period when the patient's physiologic parameters improved' appears to be incomplete.

**Reply:** We have add-in "in terms of acidosis, inotropic support and coagulopathy" into the paragraph. (see page 7, line 160-161)

**Changes in the text:** Re-exploration at a later period when the patient's physiologic parameters improved, in terms of acidosis, inotropic support and blood septic parameters.

Line 175

**Comment 12:** This statement may better be read as 'self-induced abortion'. **Reply:** Thank you for the comment.

**Changes in the text:** We have modified the text as advised. (page 4, line 76) and (page 8, line 181)

Line 189,190

**Comment 13:** This statement gives the impression that the perception of abortion as a sinful act is a social, religious, and cultural construct. One would think that the religious community may view it as a sinful act but socially and culturally it may be viewed otherwise, for example as a taboo rather than a sin.

**Reply:** Thank you for the comment. Indeed, in Malaysia, for a religious perceptive, it is a sinful act; while in cultural and social perceptive, it is a taboo. We have rephrased the sentence by removing the sentences "which is perceived as a sinful act". (see page 9, line 196-197)



**Changes in the text:** Furthermore, social, religious and cultural stigmatization against abortion refrains woman from seeking safe abortion services.

### **Reviewer** C

**Comment 1:** How surprised were the authors of this article that a private facility botched the procedure so terribly? Presumably the person who performed the abortion there is a medical provider; these are complications commonly associated with non-medical providers. I think a primary finding of this article is that even paying for an abortion in a private clinic can be unsafe; a finding that I think will surprise a lot of people. Shouldn't one of the conclusions therefore be that women need better education about where to acquire a safe abortion?

**Reply:** Thank you for the comment. Based on the patient's claim, she had her abortion done in a private clinic. She was unsure whether the performing doctor or the clinic was licensed to provide abortion services. She was offered at a low and affordable price, and the procedure can be done immediately. She was told the service was only provided secretly to those in need. No counseling or informed consent and risk were given. She was given some light sedation prior to the procedure and the procedure was carried out in a minor procedure room. The service provided is high likely illegal and unprofessional.

It is not a surprise for illegal abortion services in Malaysia. As mentioned in the discussion, there are about 240 private clinics in Malaysia that offer abortion services, but not all are well regulated in terms of safety and fees (see page8, line 183-185). We did mention the importance of education and the adequacy of public information about safe abortion. (see page 8, line 193-194). Hence, collaborative efforts from relevant authorities are crucial. This paper aims to increase the awareness of unsafe abortion in Malaysia.

**Comment 2:** "Based on WHO's report (1), it is estimated that 73.3 million induced abortions have occurred worldwide, but about 45% of all abortions were unsafe." In what time frame? "in clinching the diagnosis"—very informal/colloquial. Calling the woman who had an abortion "the mother," is problematic.

Reply: Thank you for the comment. The time frame based on WHO report is from 2010 to 2014, with most of the unsafe abortions happened in developing countries.
Changes in the text: We have changed the word "clinching the diagnosis" to "establishing the diagnosis" (see page 6, line 141) and "mother" to pregnant women. (see page 3, line 57) and (page 6, line 137)



**Comment 3:** Is the article meant to be understandable to non-medical audiences? If so, please define PV.

**Reply:** Thank you for the comment. We do hope non-medical audiences able to understand this article.

We had define the "PV" (see page 4, line 74)

Changes in text: per vaginal

**Comment 4:** How was it that the woman arrived at the health facility where the authors saw her? How difficult was it to get the patient to tell the doctors what she had experienced, and where? Can greater description be added to the traditional medication that the woman took? Is there any fear in this setting of women being prosecuted for attempting an induced abortion?

**Reply:** The patient was brought in to the emergency department by her roommate who lived with her. The patient was ill, septic looking and hypotensive. In the first place, she just told us that she had severe abdominal pain possibly food poisoning. Otherwise, she kept the abortion incident with herself. She did not even disclose the whole incident to her soul mate.

It was tough and challenging for us to obtain the entire history regarding abortion. It required a high index of suspicion, providing empathy with an unprejudiced mindset, and coupled with physical examination, imaging and a urine pregnancy test.

She was unsure about the traditional medication as well. It was some mixture of herbs given by the healer/shaman. The fear of disclosing the whole story is mainly due to stigmatization. She fears to be labelled by others because abortion was taboo culturally and socially. Due to her religion perspective, she also felt it is a sinful act to attempt the abortion.

**Comment 5:** What can the authors say about the resources required to treat this patient, and what such an intensive demand on the resources means for the costs of unsafe abortion to the health facility?

**Reply:** Thank you for the comment. There was a considerable amount of resources used to treat this patient, both tangible and intangible, which are elaborated as follows. Firstly, the utilization of human resources in co-managing this critically ill patient is substantial because it requires a multidisciplinary management by gynecology, general surgery, anesthesiology & critical care, nutrition therapy team, counsellor, rehabilitation and physiotherapy team.



In addition, emergency operation theatre facilities were utilized for emergency laparotomy. As the patient was hemodynamically unstable, invasive hemodynamic monitoring, advanced monitoring with emphasis on physiological parameters was paramount. This resulting in ICU stay for a week. Due to non-continuity of bowel segments from the initial surgery, parental nutrition was required prior to commencement of enteral feeds.

Once stable, she was transferred to the general ward for further rehabilitation, physiotherapy and nutrition support. All of these were of utmost importance, for the recuperation of the patient post major surgery, in order to improve her overall outcome and prevent lung atelectasis, deep vein thrombosis, and pressure sore. The total length of hospitalization was long (2weeks), as the case presented. The overall cost and resources used were substantial, and it definitely will have a significant negative impact on the health economics of our country if unsafe abortion practices is not eliminated.

Thank you for the comment. There is no available data from Malaysia. We have added new statement from WHO. "The annual cost of treating major complications from unsafe abortion is estimated at USD 553 million" (see page 6, line 125-126)

**Comment 6:** What about uterine damage affecting future ability to carry a pregnancy to term?

**Reply:** Thank you for the comment. We have add on a new statement. (see page 7, line 169-173)

**Change in text:** "The risk of uterine rupture in subsequent pregnancy occurred in up to one-third of the patients and is associated with high maternal and perinatal morbidity. Future pregnancy is still possible and with favorable outcomes, provided with good tertiary level antenatal follow up and planned delivery via caesarean section are given"

**Comment 7:** Is the information in the Discussion general information or specific to this case?

"Initially, our patient was not forthcoming with the history of the unsafe abortion, which led to a delay in her diagnosis and treatment. Fortunately, with a high index of suspicion and non-judgmental detailed history taking, a correct diagnosis can be established." This belongs higher up (not just in the Discussion).



**Reply:** Thank you for the comment. The first three paragraphs are more specific to the presentation and management of the case. While for the remaining are general information about abortion in Malaysia.

The statement is for elaboration and correlation with the stigmatization of abortion among women. It is specific for our case.

**Comment 8:** What are the permissive laws in Malaysia regarding abortion that the authors are referring to?

**Reply:** The law we were referring to was the **exception clause stated in the penal code Act 574 (revised 1997) section 312**, whereby induced abortion is illegal in Malaysia, except in cases when continuation of the pregnancy poses risks to the life of the pregnant woman, or affects her physical or mental well-being after a detailed assessment by a medical practitioner registered under the **Medical Act 1971.** (see page 3, line 52-56)

Changes in text: We have made a minor correction as stated above.

**Comment 9:** When the authors say that abortion can cost USD \$800, and that is unreasonably high, they should compare that cost to an average monthly wage in the country to add contextualization.

**Reply:** Thank for the comment. We have added average monthly wage for better contextualization. (see page 8, line 186-187)

**Changes in the text:** The cost is more than an average monthly wage in our country, which is around USD762.

**Comment 10:** The authors should add a description of the availability of misoprostol in the country. Furthermore, they should report on abortion incidence in Malaysia, if the data are available, or if not, specify that such data do not exist.

**Reply:** Thank you for the comment. We have added a description as advised. (See page 9, line 207-216)

No official data regarding the incidence of abortion in Malaysia. (see page 6, line 124-125)



**Changes in the text:** Misoprostol and mifepristone have been used for medical abortion with high efficacy and good safety profile. Effective rate for complete abortion can up to 95% in early pregnancy. However, both mifepristone and misoprostol are not registered in Malaysia for this purpose, even though both drugs have been listed in 21<sup>st</sup> WHO essential medicines list since July 2020 with the aim to prevent unsafe abortion and reduce maternal death. Nevertheless, medical advice should be sought prior use of these medication. Registration of such medications to be used in hospital should be given consideration and proper regulation should be paid attention to prevent illegal trading of these medication.

