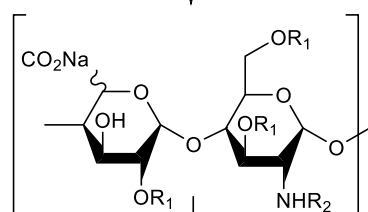


APPENDIX 1

Manufacturing Flow chart of the Heparin Sodium Starting Material

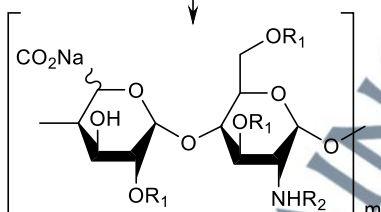
Pooled Porcine Intestinal Mucosae RAW MATERIAL

Stage 1 :
Preparation of
Crude Heparin
sodium



Crude Heparin sodium

Stage 2 :
Purification



Pure Heparin sodium STARTING MATERIAL

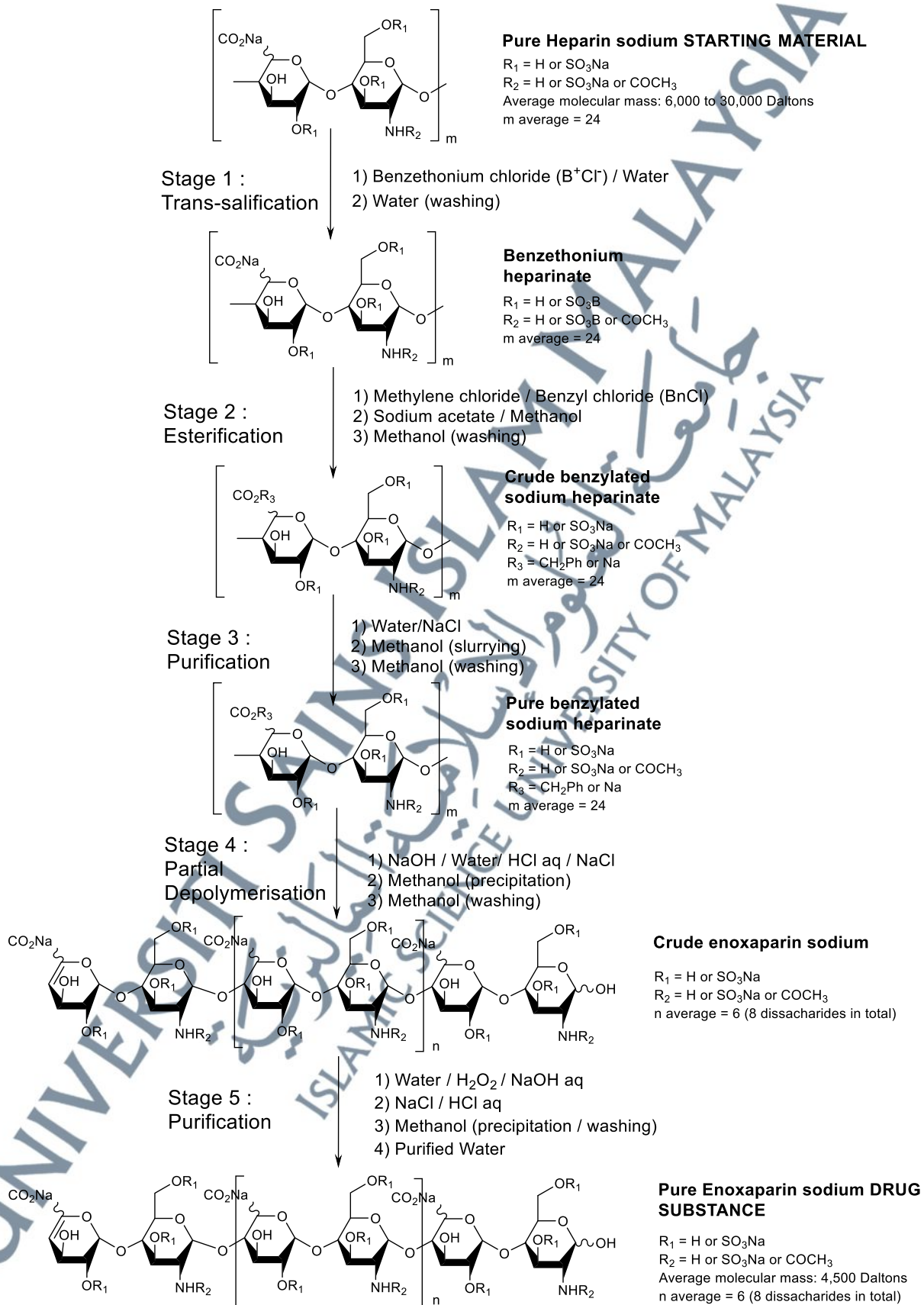
$R_1 = \text{H or } \text{SO}_3\text{Na}$

$R_2 = \text{H or } \text{SO}_3\text{Na or } \text{COCH}_3$

Average molecular mass: 6,000 to 30,000 Daltons

m average = 24

Manufacturing Flow chart of the Enoxaparin Sodium Drug substance



APPENDIX 2



Ploërmel, the 08th December 2017

Object: Porcine content free in Clexane

The purpose of this letter is to confirm that after the manufacturing process, there is no more residue of porcine in the finish product.

Heparin sodium is used as starting material for Enoxaparin sodium synthesis, the active substance used to manufacture Clexane®. The flow chart of Heparin sodium manufacturing process is presented in Table 1.

Table 1: Heparin sodium manufacturing process

Preparation of tissue	
Extraction of heparin from tissue	
Crude heparin sodium	
Purification of heparin	Treatment by heating under controlled basic pH
	Oxidizing and decolorizing treatments
	Precipitation
	Isolation - drying
Pure heparin sodium	

The 2 main chemical steps of the heparin purification process are the oxidation and the decolorization treatment. These 2 steps allow the degradation of the nucleotide and protein impurities. Thus degraded, the impurities are effectively eliminated during the precipitation step that occurs at the end of the purification process.

The Table 2 shows the elimination of the protein and nucleotide impurities throughout the purification process to obtain pure heparin.

Table 2: Analysis results after purification treatments*

	DNA % (w/w)	Nucleotidic impurities (absorbance at 260nm)	Protein impurities (absorbance at 280 nm)
Crude heparin	2.4	1.9	0.6
After oxydation	0.025	0.34	0.2
After decolorization	Not Detected	0.24	0.1
After precipitation	Not Detected	0.06	0.1

*Source: Sanofi Development Report - Ref: CBD2014-1040-01

DNA quantification analyses have been performed by QPCR on pure heparin sodium batches. The Q-PCR amplifies a specific DNA sequence of each species to be studied: porcine, bovine, caprine and ovine. It allows precise quantification of the specific DNA sequence present in the sample and to check the lack of detection of ruminant tissues.

Sanofi Chimie, ZI du Bois Vert, rue Gilles Roberval F- 56800 Ploërmel - Tél.: +33 (0)2 97 73 11 50 Fax : +33 (0)2 97 73 11 51 - www.sanofi.com
Siège social: 8 rue du Président Salvador Allende, 94290 Gentilly, France - S.A. au capital de 524 795 320 euros - RCS Créteil 428 706 204 - Code TVA: FR 86 428 706 204 - Siret 428 706 204 00 107



ANNEX 1

Certificate of Analysis on Clexane

The information contained in this report is the property of Sanofi-Aventis (Malaysia) Sdn Bhd and shall not to be distributed



CERTIFICATE OF ANALYSIS

TPMB/REC/Lab/018

ORIGINAL

CoA No. : LS02142/241/15
Customer : SANOFI-AVENTIS (M) SDN BHD
Sample ID : LS02142 (SC069/02142/01)
Sample Name : **Clexane**
Date of Job Order : 24th July 2015
Date of Issue : 17th August 2015

TEST PARAMETER	TEST METHOD	RESULT
DNA Extraction ²	In House Method TPMB/TMLab/031	Pass ^a
Porcine Detection ¹ via qPCR	In House Method TPMB/TMLab/026	Not Detected ^b

Note:

- The yield reading of nucleic acid obtained showed low value, and the purity at absorbance A260-280 was in a acceptable range (good range 1.5-2.3). To further support the result, Eukaryotic screening by using endogenous 18s rRNA gene detection was performed on the extracted sample that showed sample contain no traces of eukaryotic origin.
- For Porcine detection, no porcine sequence specific DNA was detected.

Disclaimer:

- SAMM Test
- Not SAMM Test
- Sub-contracted Test

Approved by:

Name: **Mr. ZAHARAN ABDUL HALIM**
IC No: **874608-03-5930**

Page 1 of 1

This report refers to the tested sample only it shall not be reproduced in full without written approval of the laboratory.

For any enquiry please contact:

TPM Biotech Sdn Bhd, Ground Floor, Enterprise 4, Lebuhraya Pandong-Sg. Besi, Bukit Jalil, 57000, Kuala Lumpur, Malaysia.
Tel: 03-8998 4018 Fax: 03-8998 2282
Website: <http://www.tpmbiotech.com.my>



The results, presented in Table 3, demonstrate that there is no residual porcine DNA detected in pure heparin.

Table 3: Quantification of porcine DNA on Pure heparin sodium

Batch Number	Porcine DNA
ETA 2903	Not detected*
EP 2910	Not detected*
EW 2918	Not detected*
ECK 2923	Not detected*
EPB 8/0007	Not detected*
EV 2899	Not detected*
EDUS 29998	Not detected*
ES 1037-2420	Not detected*
EDE 28824	Not detected*

*< 0.1 µg of DNA/mg of pure heparin

Additionally, the quantification of porcine DNA performed by a JAKIM accredited laboratory on Clexane and provided in Annex 1 shows that there is no more porcine residue in the final drug product, Clexane®.

Insofar as the absence of porcine DNA has been demonstrated from the pure heparin to the final product, Clexane can be considered as free of any porcine residue.

Valérie MENNECART
Regulatory Site Officer
Sanofi Chimie Ploermel

APPENDIX 3

INTERVIEW QUESTIONS SET FOR MEDICAL PRACTITIONERS

“Thromboprophylaxis with Low Molecular Weight Heparin (Lmwh) such as Clexane for Pregnant and Puerperium Women in Islamic Law”

Introduction

Venous Thrombosis (VTE) or *Thromboembolism* during pregnancy and in the puerperium period are known to cause morbidity and mortality. Generally, according to the Manual Training of prevention and treatment of VTE during pregnancy and puerperium published by MOH, the high risk mothers of VTE mostly prescribed with anticoagulant Low Molecular Weight Heparin (LMWH) such as Clexane in prophylaxis level. Meanwhile, some intermediate risk mothers of VTE shall be offered prophylactic LMWH too, but depending on medical practitioner's advices.

Questions:

1. Demography:
 - a. Name:
 - b. Position:
 - c. Speciality:
 - d. Institution:
 - e. Years of Work Experience:
2. What is *Low Molecular Weight Heparin* (LMWH), its types and functions from the medical perspective?
3. When was LMWH first dispensed/prescribed/administered in Malaysia for the treatment or prevention of VTE during pregnancy and puerperium?
4. According to your experience, do you know which patient has the higher risk to mortality despite being given LMWH prophylaxis treatment?
5. Among the intermediate-risk group patients that are supposed to be on prophylaxis treatment, there are some of them whom refused or are not on the prophylaxis treatment. Between this two groups (on treatment/refuse), which one has a higher risk of getting morbidity or mortality?

6. The following statistics show the maternal mortality caused by embolism based on ethnicity. It seems that the Malays and Indians are at a higher risk. Is there any further studies or data that may elaborate further on this matter? Why are these two ethnicities at a higher risk?

Pulmonary Embolism Deaths: Malaysia 2010-2015 (N=89 cases)

	N	Ratio per 100,000 LB by ethnic grps
Malay	69	3.64
Chinese	3	0.67
Indian	4	2.63
Bumiputra Sabah	4	1.79
Bumiputra Sarawak	3	2.21
Orang Asli	1	2.36
Others	5	2.71

Source: Public Health Physician, Maternal Health Sector, Family Health Development Division, Ministry of Health Malaysia (2017)

7. Do you have the most recent data/statistics regarding the maternal morbidity/mortality caused by thromboembolism in pregnancy i.e. from the Confidential Enquiry Maternal Death (CEMD)?
8. Can you tell your personal experience regarding prophylaxis with anticoagulants i.e. Enoxaparin (Clexane), Fondaparinux (Arixtra) and Heparin for dealing with VTE during pregnancy and puerperium?
9. Is there any local data/published data to show the effectiveness or reduction on incidence of thromboembolism complications (morbidity/mortality) by percentage after the implementation of LMWH for treatment or prophylaxis?
10. Throughout your experience, can you describe a Muslim patient's perception in Malaysia upon the usage of porcine-based medicines like Clexane?

INTERVIEW QUESTION SET FOR SYARIAH PANEL

“Thromboprophylaxis with Low Molecular Weight Heparin (Lmwh) such as Clexane for Pregnant and Puerperium Women in Islamic Law”

Pendahuluan:

Low Molecular Weight Heparin (LMWH) is a type of anticoagulant medication. There are a range of anticoagulants classified within LMWH; for instance, Enoxaparin, Tinzaparin, Bemiparin, Dalteparin, Nadroparin, Reviparin, Certoparin and Parnaparin. However, this research will focus on the use of Enoxaparin (Clexane) during pregnancy and puerperium as a case study because the rate of maternal mortality related to embolism is alarming nowadays in Malaysia. LMWH are consumed in the prevention of blood clots and treatment of venous thromboembolism (VTE), either deep vein thrombosis (DVT) or pulmonary embolism (PE).

According to the National Pharmaceutical Regulatory Agency (NPRA), LMWH (Clexane) is derived mainly from the porcine intestine mucosa. However, according to Sanofi Aventis, the company which produces Clexane, the making of Clexane will go through the process of transformation (*istihalah*) which at the end would be able to exclude 100% porcine DNA.

Since 2003/2004, a *Clinical Practical Guideline* (CPG) was published for the management of VTE generally by MOH. Later, in 2015, the Public Health Physician, Maternal Health Sector, Family Health Development Division, Ministry of Health had produced a guideline specifically for the prevention and treatment of VTE during pregnancy and puerperium. Recently, the Maternal Health Sector had reviewed a new guideline in 2018 regarding that matter also.

The guideline mentioned obstetric VTE will be observed in two levels; prophylaxis and therapeutic. Both levels will be stratified into risk rate such as high-risk, intermediate-risk and low-risk. According to the guideline, some intermediate-risk mothers shall be offered LMWH for prevention provisional to their situations. However, a *fatwa* had been issued in 2009 by Majlis Jawatankuasa Fatwa Majlis Kebangsaan (MJFMK) that LMWH is prohibited except in *darurah* situation due to the presence of a halal alternative called Fondaparinux (Arixtra). Although the function of Arixtra is the same as Clexane, recent evidences have pointed out that Clexane is more effective, accessible, feasible and safer compared to Arixtra.

Questions:

1. Demography:
 - a. Name:
 - b. Position:
 - c. Speciality:
 - d. Institution:
 - e. Years of Work Experience:

1. What is the definition of *istihalah* according to the *fiqh* discipline?
2. Is the *istihalah* instrument accepted to be valid parameter in determining Islamic rulings in Malaysia?
3. What is your opinion (S.S/Prof./Prof. Madya/Dr/Sir/Madam) towards porcine based medicines?
4. Scientific evidences has shown that LMWH like Clexane which had underwent the process of *istihalah* has the ability to prevent and treat VTE during pregnancy and puerperium due to factors such as efficacy, bioavailability, feasibility and safety. What is your opinion with regards to this matter, S.S/Prof./Prof. Madya/Dr/Sir/Madam?
5. According to the producer of Clexane, there is no porcine DNA detected at the final stage of the manufacturing process of Clexane. Is it permitted according to *Fiqh*? What is your opinion with regards to this matter, S.S/Prof./Prof. Madya/Dr/Sir/Madam?
6. Do you think that the use of LMWH like Clexane for high-risk patients, specifically mothers in the high-risk and intermediate-risk groups, as preventive medicine is under the *darurah* category?
7. Do you think that the use of LMWH like Clexane for high-risk patients, specifically mothers in the high-risk and intermediate-risk groups, as preventive medicine is under the *hajah* category?
8. In the matter of LMWH like Clexane, can we apply the *qaedah fihiyyah* namely:

إذا تعارض مفسدتان روعي أعظمهما ضررا بارتكاب أخفهما

Meaning: "When two wrongful acts meet, the remedy of the greater is sought by the doing of the less"

INTERVIEW QUESTIONS SET FOR PHARMACEUTICAL EXPERTS

“Thromboprophylaxis with Low Molecular Weight Heparin (Lmwh) such as Clexane for Pregnant and Puerperium Women in Islamic Law

Introduction

Venous Thrombosis (VTE) or Thromboembolism during pregnancy and in the puerperium, period is known to cause morbidity and mortality. Generally, according to the Manual Training of prevention and treatment of VTE during pregnancy and puerperium published by MOH, the high-risk mothers of VTE mostly prescribed with anticoagulant Low Molecular Weight Heparin (LMWH) such as Clexane in prophylaxis level. Meanwhile, some intermediate risk mothers of VTE shall be offered prophylactic LMWH too but depending on medical practitioner's advices.

Questions:

1. Demography:
 - a. Name:
 - b. Position:
 - c. Speciality:
 - d. Institution:
 - e. Years of Work Experience:
2. What is *Low Molecular Weight Heparin* (LMWH), its types and functions from the medical perspective?
3. What are the ingredients of Clexane?
4. What is your opinion Prof/Dr./Sir regarding biotransformation (*istihalah*) particularly in Malaysia context?
5. When was LMWH first dispensed/prescribed/administered in Malaysia for the treatment or prevention of VTE as preventive medicine in Malaysia?
6. Do you know the fatwa pertains to the usage of *Clexane* and *Fraxiparine* imposed by *Muzakarah Jawatankuasa Fatwa Majlis Kebangsaan Bagi Hal Ehwal Ugama Islam Malaysia*?

7. Are you involve in the meeting of issuing fatwa on *Clexane* Dan *Fraxiparine* in 87th of *Muzakarah Jawatankuasa Fatwa Majlis Kebangsaan Bagi Hal Ehwal Ugama Islam Malaysia* which held on 23rd-25th of June 2009?
8. What is your opinion regarding prevention treatment with LMWH upon pregnancy and puerperium women in Malaysia? Is that prevention treatment upon moderate risk group of mothers is considered tenacious need?
9. Are you agree with a statement which saying *Clexane* is necessarily needed (*darurah*)?
10. What is your opinion regarding *Enoxaparin* (*Clexane*), *Fondaparinux* (*Arixtra*) and *Heparin* as thromboprophylaxis upon pregnancy and puerperium upon women who are at risk? Which one is most effective for that purpose?
11. Do pharmacist is allowed to prescribe medicine without medical doctors' permission?
12. Based on your personal experience, what is the perception of Muslim patients in Malaysia with regard porcine based medicine such as *Clexane*?

APPENDIX 4



UNIVERSITI SAINS ISLAM MALAYSIA
جامعة العلوم الإسلامية الماليزية
ISLAMIC SCIENCE UNIVERSITY OF MALAYSIA

Ruj. Kami: INFAD/LMWH/SANOFI/2019(6) Tarikh: 5 April 2019

DR. J. RAVICHANDRAN JEGANATHAN

Ketua Jabatan,
Jabatan Obstetrik & Ginekologi,
Hospital Sultanah Aminah,
Johor Baharu, Johor.

Y.Bhg. Dr.

TEMUBUAL PAKAR UNTUK KAJIAN

- **Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)**

Perkara di atas dengan segala hormatnya dirujuk.

Saya, Prof. Madya Dr. Irwan bin Mohd Subri merupakan Pengarah, Institut Pengurusan dan Penyelidikan Fatwa Sedunia (INFAD), Universiti Sains Islam Malaysia (USIM). Saya sedang menjalankan perkhidmatan kajian perundingan kepada syarikat SANOFI-AVENTIS (MALAYSIA) SDN. BHD. yang bertajuk "*Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)*". Untuk tujuan itu, saya ingin menemubual pihak Y.Bhg. Dr. seperti maklumat berikut:

Tarikh : 7 April 2019
Masa : 12.30 tengahari
Tempat : Hospital Sultanah Aminah

Tujuan temubual ini ialah untuk mendapatkan input tentang bidang kepakaran Y.Bhg. Dr. yang berkaitan dengan tajuk kajian ini. Bersama ini dilampirkan soalan temubual tersebut untuk rujukan pihak Y.Bhg. Dr.

Persetujuan daripada pihak Y.Bhg. Dr. untuk ditemubual bagi kajian ini, amat saya hargai dan didahului dengan ucapan terima kasih.

Sekian,

Yang benar,

Prof. Madya Dr. Irwan Mohd Subri
Ketua Penyelidik
013-354 3594

Berilmu, Berdisiplin dan Bertakwa

Knowledgeable, Disciplined and Devout



Universiti Sains Islam Malaysia, Bandar Baru Nilai 71800, Negeri Sembilan Darul Khusus, Malaysia
Tel : (+6)06 - 798 8000 Faks : (+6)06 - 798 8204 www.usim.edu.my



17 Mei 2019

Dr. Carol Lim Kar Koong,
Pakar Perunding Obstetrik & Ginekologi,
Jabatan Obstetrik dan Ginekologi ,
Jalan Mewah Utara Pandan Mewah,
Ampang, 68000,
Selangor Darul Ehsan.

Melalui,
Profesor Madya Dr. Irwan Mohd Subri
Pengarah, Institut Pengurusan dan
Penyelidikan Fatwa Sedunia (INFAD),
Universiti Sains Islam Malaysia (USM),
Merangkap Penelia Tesis Doktor Falsafah


PROF. MADYA DR. IRWAN BIN MOHD SUBRI
Pengarah
Institut Pengurusan Dan Penyelidikan Fatwa Sedunia (INFAD)
Universiti Sains Islam Malaysia (USIM)
71800 Bandar Baru Nilai, Negeri Sembilan.
Tel: 06-7988413 / 8590
Fax: 06-7988591

Assalamualaikum Warahmatullah Wabarakatuh and Greetings.

Y.Bhg. Dr.

INTERVIEW SPECIALIST FOR PHD RESEARCH

- **The Implementation of Porcine Based Anticoagulant as Preventive Medicine during Pregnancy and Puerperium from Islamic Perspective: Low Molecular Weight Heparin (LMWH) as a Study Case**

I am Zizi Azlinda, research assistant (RA) doing my PhD under Prof Madya Dr Irwan Mohd Subri, director of World Fatwa Management and Research Institute (INFAD), USIM for a collaborative research project with Sanofi Aventis.

We are honoured to select you as one of our interviewees/ informants representing the medical provider. The interview is aiming to obtain information related to your expert.

Thus, findings from this research are intended to be presented to JAKIM for a proposed review on Clexane fatwa issued in 2009. Attached here is the question set of interview session. Kindly you refer to it.

Regards,

.....
Zizi Azlinda binti Mohd Yusof
(4160207)
019-6280242

Berilmu, Berdisiplin dan Bertakwa

Knowledgeable, Disciplined and Devout



Universiti Sains Islam Malaysia, Bandar Baru Nilai 71800, Negeri Sembilan Darul Khusus, Malaysia
Tel : (+6)06 - 798 8000 Faks : (+6)06 - 798 8204 www.usim.edu.my



DR.HARIS NJOO SUHARJONO@THWAN BING

Perunding Obstetrician&Gynaecologist,
Hospital Umum Sarawak,
Jalan Tun Ahmad Zaidi Adruce,
Kuching 93586,
Sarawak.

Y.Bhg. Dr.

TEMUBUAL PAKAR UNTUK KAJIAN

- **Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)**

Perkara di atas dengan segala hormatnya dirujuk.

Saya, Prof. Madya Dr. Irwan bin Mohd Subri merupakan Pengarah, Institut Pengurusan dan Penyelidikan Fatwa Sedunia (INFAD), Universiti Sains Islam Malaysia (USIM). Saya sedang menjalankan perkhidmatan kajian perundingan kepada syarikat SANOFI-AVENTIS (MALAYSIA) SDN. BHD. yang bertajuk "*Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)*". Untuk tujuan itu, saya ingin menemubual pihak Y.Bhg. Dr. seperti maklumat berikut:

Tarikh : 15 April 2019
Masa : 2pm-3pm
Tempat : Hospital Umum Sarawak, Kuching

Tujuan temubual ini ialah untuk mendapatkan input tentang bidang kepakaran Y.Bhg. Dr. yang berkaitan dengan tajuk kajian ini. Bersama ini dilampirkan soalan temubual tersebut untuk rujukan pihak Y.Bhg. Dr.

Persetujuan daripada pihak Y.Bhg. Dr. untuk ditemubual bagi kajian ini, amat saya hargai dan didahului dengan ucapan terima kasih.

Sekian,

Yang benar,

Prof. Madya Dr. Irwan Mohd Subri
Ketua Penyelidik
013-354 3594



DR. JAMEELA BINTI SATHAR

Perunding Haematology,
Jalan Mewah Utara Pandan Mewah,
Ampang, 68000,
Selangor Darul Ehsan.

Y.Bhg. Dr.

TEMUBUAL PAKAR UNTUK KAJIAN

- **Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)**

Perkara di atas dengan segala hormatnya dirujuk.

Saya, Prof. Madya Dr. Irwan bin Mohd Subri merupakan Pengarah, Institut Pengurusan dan Penyelidikan Fatwa Sedunia (INFAD), Universiti Sains Islam Malaysia (USIM). Saya sedang menjalankan perkhidmatan kajian perundingan kepada syarikat SANOFI-AVENTIS (MALAYSIA) SDN. BHD. yang bertajuk "*Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)*". Untuk tujuan itu, saya ingin menemubual pihak Y.Bhg. Dr. seperti maklumat berikut:

Tarikh : 30 April 2019
Masa : 10am – 11am
Tempat : Hospital Ampang, Selangor.

Tujuan temubual ini ialah untuk mendapatkan input tentang bidang kepakaran Y.Bhg. Dr. yang berkaitan dengan tajuk kajian ini. Bersama ini dilampirkan soalan temubual tersebut untuk rujukan pihak Y.Bhg. Dr.

Persetujuan daripada pihak Y.Bhg. Dr. untuk ditemubual bagi kajian ini, amat saya hargai dan didahului dengan ucapan terima kasih.

Sekian,

Yang benar,

.....
Prof. Madya Dr. Irwan Mohd Subri
Ketua Penyelidik
013-354 3594



DR SUHAZELI BIN ABDULLAH,
Pakar Perubatan Keluarga,
Klinik Kesihatan Ketengah Jaya,
23300 Dungun,
Terengganu.

Y.Bhg. Dr,

TEMU BUAL PAKAR PERUBATAN KELUARGA

-Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)

Perkara di atas dengan segala hormatnya dirujuk.

Saya, Prof. Madya Dr. Irwan bin Mohd Subri merupakan Pengarah, Institut Pengurusan dan Penyelidikan Fatwa Sedunia (INFAD), Universiti Sains Islam Malaysia (USIM). Saya sedang menjalankan perkhidmatan kajian perundingan kepada syarikat SANOFI-AVENTIS (MALAYSIA) SDN. BHD. yang bertajuk "*Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)*".

Sehubungan itu, saya berbesar hati ingin menemubual Y.Bhg. Dr. berkaitan isu tersebut pada butiran berikut:

Tarikh: 18 Jun 2019

Masa: 5.30pm

Tempat: EVERLY HOTEL, PUTRAJAYA

Bersama ini dilampirkan soalan temubual tersebut untuk rujukan pihak Y.Bhg. Dr. Persetujuan daripada pihak Y.Bhg. Dr untuk ditemubual bagi kajian ini, amat saya hargai dan didahului dengan ucapan terima kasih.

Sekian,
Yang benar,

Prof. Madya Dr. Irwan Mohd Subri
Ketua Penyelidik
013-354 3594



PROFESOR DR ZALEHA ABDULLAH MAHDY

Professor & Perunding Senior Obstetrik & Ginekologi,
UKM Medical Centre,
Cheras, Kuala Lumpur.

Y.Bhg. Dr.

TEMUBUAL PAKAR UNTUK KAJIAN

- **Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)**

Perkara di atas dengan segala hormatnya dirujuk.

Saya, Prof. Madya Dr. Irwan bin Mohd Subri merupakan Pengarah, Institut Pengurusan dan Penyelidikan Fatwa Sedunia (INFAD), Universiti Sains Islam Malaysia (USIM). Saya sedang menjalankan perkhidmatan kajian perundingan kepada syarikat SANOFI-AVENTIS (MALAYSIA) SDN. BHD. yang bertajuk "*Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)*". Untuk tujuan itu, saya ingin menemubual pihak Y.Bhg. Dr. seperti maklumat berikut:

Tarikh : 2 Mei 2019
Masa : 3.30pm
Tempat : UKM Medical Centre

Tujuan temubual ini ialah untuk mendapatkan input tentang bidang kepakaran Y.Bhg. Dr. yang berkaitan dengan tajuk kajian ini. Bersama ini dilampirkan soalan temubual tersebut untuk rujukan pihak Y.Bhg. Dr.

Persetujuan daripada pihak Y.Bhg. Dr. untuk ditemubual bagi kajian ini, amat saya hargai dan didahului dengan ucapan terima kasih.

Sekian,

Yang benar,

.....
Prof. Madya Dr. Irwan Mohd Subri
Ketua Penyelidik
013-354 3594



PROF. DR ZAINURRASHID BIN ZAINUDDIN

Profesor Obstetrik & Ginekologi,
IMU clinical campus,
Jalan Rasah,
70300 Seremban.

Y.Bhg. Dr.

TEMUBUAL PAKAR UNTUK KAJIAN

- **Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)**

Perkara di atas dengan segala hormatnya dirujuk.

Saya, Prof. Madya Dr. Irwan bin Mohd Subri merupakan Pengarah, Institut Pengurusan dan Penyelidikan Fatwa Sedunia (INFAD), Universiti Sains Islam Malaysia (USIM). Saya sedang menjalankan perkhidmatan kajian perundingan kepada syarikat SANOFI-AVENTIS (MALAYSIA) SDN. BHD. yang bertajuk "*Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)*". Untuk tujuan itu, saya ingin menemubual pihak Y.Bhg. Dr. seperti maklumat berikut:

Tarikh : 7 Mei 2019
Masa : 3pm
Tempat : IMU Clincial Campus, Seremban.

Tujuan temubual ini ialah untuk mendapatkan input tentang bidang kepakaran Y.Bhg. Dr. yang berkaitan dengan tajuk kajian ini. Bersama ini dilampirkan soalan temubual tersebut untuk rujukan pihak Y.Bhg. Dr.

Persetujuan daripada pihak Y.Bhg. Dr. untuk ditemubual bagi kajian ini, amat saya hargai dan didahului dengan ucapan terima kasih.

Sekian,

Yang benar,

.....
Prof. Madya Dr. Irwan Mohd Subri
Ketua Penyelidik
013-354 3594



DR. AHMAD SHUIB BIN YAHAYA

Pensyarah Perubatan,
Jabatan Obstetrik & Ginekologi,
Fakulti Perubatan & Sains Perubatan UPM,
43400 Serdang, Selangor.

Y.Bhg. Dr.

TEMUBUAL PAKAR UNTUK KAJIAN

- **Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)**

Perkara di atas dengan segala hormatnya dirujuk.

Saya, Prof. Madya Dr. Irwan bin Mohd Subri merupakan Pengarah, Institut Pengurusan dan Penyelidikan Fatwa Sedunia (INFAD), Universiti Sains Islam Malaysia (USIM). Saya sedang menjalankan perkhidmatan kajian perundingan kepada syarikat SANOFI-AVENTIS (MALAYSIA) SDN. BHD. yang bertajuk "*Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)*". Untuk tujuan itu, saya ingin menemubual pihak Y.Bhg. Dr. seperti maklumat berikut:

Tarikh : 16 April 2019
Masa : 2.30pm
Tempat : INFAD, USIM.

Tujuan temubual ini ialah untuk mendapatkan input tentang bidang kepakaran Y.Bhg. Dr. yang berkaitan dengan tajuk kajian ini. Bersama ini dilampirkan soalan temubual tersebut untuk rujukan pihak Y.Bhg. Dr.

Persetujuan daripada pihak Y.Bhg. Dr. untuk ditemubual bagi kajian ini, amat saya hargai dan didahului dengan ucapan terima kasih.

Sekian,

Yang benar,

Prof. Madya Dr. Irwan Mohd Subri
Ketua Penyelidik
013-354 3594



PROF DR ABDUL RASHID ABDUL RAHMAN

Medical Director Internal Medicine,
An- Nur Specialist Hospital.
Bandar Baru Bangi,
Selangor.

Y.Bhg. Dr.

TEMUBUAL PAKAR UNTUK KAJIAN

- Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)

Perkara di atas dengan segala hormatnya dirujuk.

Saya, Prof. Madya Dr. Irwan bin Mohd Subri merupakan Pengarah, Institut Pengurusan dan Penyelidikan Fatwa Sedunia (INFAD), Universiti Sains Islam Malaysia (USIM). Saya sedang menjalankan perkhidmatan kajian perundingan kepada syarikat SANOFI-AVENTIS (MALAYSIA) SDN. BHD. yang bertajuk "*Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)*". Untuk tujuan itu, saya ingin menemubual pihak Y.Bhg. Dr. seperti maklumat berikut:

Tarikh : 23 April 2019
Masa : 10 pagi
Tempat : Hospital Pakar An-Nur, Bandar Baru Bangi

Tujuan temubual ini ialah untuk mendapatkan input tentang bidang kepakaran Y.Bhg. Dr. yang berkaitan dengan tajuk kajian ini. Bersama ini dilampirkan soalan temubual tersebut untuk rujukan pihak Y.Bhg. Dr.

Persetujuan daripada pihak Y.Bhg. Dr. untuk ditemubual bagi kajian ini, amat saya hargai dan didahului dengan ucapan terima kasih.

Sekian,

Yang benar,

Prof. Madya Dr. Irwan Mohd Subri
Ketua Penyelidik
013-354 3594



ASISST. PROF DR MOHAMMAD AIZAT JAMALUDDIN

Head of Science Social & Humanities,
International Institute for Halal Research and Training (INHART),
Level 3, KICT Building, IIUM,
Jalan Gombak 53100,
Selangor.

Y.Bhg. Dr.

**JEMPUTAN MENGHADIRI BENGKEL PERBINCANGAN PAKAR
SHARIAH DAN TEMU BUAL “KAJIAN TERHADAP ISTIHALAH DALAM
LOW MOLECULAR WEIGHT HEPARIN (LMWH)”**

Perkara di atas dengan segala hormatnya dirujuk.

Saya, Prof. Madya Dr. Irwan bin Mohd Subri merupakan Pengarah, Institut Pengurusan dan Penyelidikan Fatwa Sedunia (INFAD), Universiti Sains Islam Malaysia (USIM). Saya sedang menjalankan perkhidmatan kajian perundingan kepada syarikat SANOFI-AVENTIS (MALAYSIA) SDN. BHD. yang bertajuk “*Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)*”.

Sehubungan itu, saya berbesar hati ingin menjemput pihak Y.Bhg. Dr. Menghadiri Bengkel Perbincangan Pakar Syariah berkaitan isu tersebut seperti berikut:

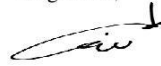
Tarikh : 28 Mei 2019
Masa : 9pm-12.30pm
Tempat : INFAD, USIM

Objektif bengkel tersebut adalah untuk:

- Penerangan tentang dapatan kajian istihalah terhadap Low Molecular Weight Heparin (LMWH) di kalangan ibu-ibu mengandung dan selepas bersalin.
- Temu bual *focus group* panel syariah tentang istihalah terhadap Low Molecular Weight Heparin (LMWH) di kalangan ibu-ibu mengandung dan selepas bersalin untuk pembinaan parameter darurat dan hajat berdasarkan VTE Risk Assessment Semasa Mengandung dan Selepas Bersalin (KKM 2017)

Bersama ini dilampirkan soalan temubual tersebut untuk rujukan pihak Y.Bhg. Dr. Persetujuan daripada pihak Y.Bhg. Dr. untuk menghadiri bengkel dan ditemubual bagi kajian ini, amat saya hargai dan didahului dengan ucapan terima kasih.

Sekian,
Yang benar,



.....
Prof. Madya Dr. Irwan Mohd Subri
Ketua Penyelidik
013-354 3594

UN



PROF MADYA DR SAADAN MAN

Pensyarah Kanan,
Jabatan Fiqh dan Usul Fiqh,
Akademi Pengajian Islam,
Universiti Malaya,
50603 Kuala Lumpur.

Y.Bhg. Tuan,

TEMU BUAL PAKAR SHARIAH UNTUK KAJIAN

-Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)

Perkara di atas dengan segala hormatnya dirujuk.

Saya, Prof. Madya Dr. Irwan bin Mohd Subri merupakan Pengarah, Institut Pengurusan dan Penyelidikan Fatwa Sedunia (INFAD), Universiti Sains Islam Malaysia (USIM). Saya sedang menjalankan perkhidmatan kajian perundingan kepada syarikat SANOFI-AVENTIS (MALAYSIA) SDN. BHD. yang bertajuk "*Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)*".

Sehubungan itu, saya berbesar hati ingin menemubual Y.Bhg. Tuan berkaitan isu tersebut pada butiran berikut:

Tarikh : 21 Jun 2019

Masa : 10am

Tempat: Jabatan Fiqh dan Usul Fiqh, Aras 3 Blok C, Akademi Pengajian Islam UM.

Bersama ini dilampirkan soalan temubual tersebut untuk rujukan pihak Y.Bhg. Dr. Persetujuan daripada pihak Y.Bhg. Dr untuk ditemubual bagi kajian ini, amat saya hargai dan didahului dengan ucapan terima kasih.

Sekian,
Yang benar,

.....
Prof. Madya Dr. Irwan Mohd Subri
Ketua Penyelidik
013-354 3594



DR MUHAMMAD ADIB SAMSUDIN

Pensyarah Kanan,
Jabatan Syariah,
Universiti Kebangsaan Malaysia,
43400, Selangor.

Y.Bhg. Dr.

JEMPUTAN MENGHADIRI BENGKEL PERBINCANGAN PAKAR SHARIAH DAN TEMU BUAL “KAJIAN TERHADAP ISTIHALAH DALAM LOW MOLECULAR WEIGHT HEPARIN (LMWH)”

Perkara di atas dengan segala hormatnya dirujuk.

Saya, Prof. Madya Dr. Irwan bin Mohd Subri merupakan Pengarah, Institut Pengurusan dan Penyelidikan Fatwa Sedunia (INFAD), Universiti Sains Islam Malaysia (USIM). Saya sedang menjalankan perkhidmatan kajian perundingan kepada syarikat SANOFI-AVENTIS (MALAYSIA) SDN. BHD. yang bertajuk “*Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)*”.

Sehubungan itu, saya berbesar hati ingin menjemput pihak Y.Bhg. Dr. Menghadiri Bengkel Perbincangan Pakar Syariah berkaitan isu tersebut seperti berikut:

Tarikh : 28 Mei 2019
Masa : 9am-12.30pm
Tempat : INFAD, USIM

Objektif bengkel tersebut adalah untuk:

- i. Penerangan tentang dapatan kajian istihalah terhadap Low Molecular Weight Heparin (LMWH) di kalangan ibu-ibu mengandung dan selepas bersalin.
- ii. Temu bual *focus group* panel syariah tentang istihalah terhadap Low Molecular Weight Heparin (LMWH) di kalangan ibu-ibu mengandung dan selepas bersalin untuk pembinaan parameter darurat dan hajat berdasarkan VTE Risk Assessment Semasa Mengandung dan Selepas Bersalin (KKM 2017)

Bersama ini dilampirkan soalan temubual tersebut untuk rujukan pihak Y.Bhg. Dr. Persetujuan daripada pihak Y.Bhg. Dr. untuk menghadiri bengkel dan ditemubual bagi kajian ini, amat saya hargai dan didahului dengan ucapan terima kasih.

Sekian,
Yang benar,



.....
Prof. Madya Dr. Irwan Mohd Subri
Ketua Penyelidik
013-354 3594

UN



DATO' DR MOHD IZHAR ARIFF BIN MOHD KASHIM

Pensyarah,
Jabatan Syariah, Fakulti Pengajian Islam,
Universiti Kebangsaan Malaysia,
43600, Bangi,
Selangor.

Y.Bhg. Dato' Dr,

TEMU BUAL PAKAR SHARIAH

-Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)

Perkara di atas dengan segala hormatnya dirujuk.

Saya, Prof. Madya Dr. Irwan bin Mohd Subri merupakan Pengarah, Institut Pengurusan dan Penyelidikan Fatwa Sedunia (INFAD), Universiti Sains Islam Malaysia (USIM). Saya sedang menjalankan perkhidmatan kajian perundingan kepada syarikat SANOFI-AVENTIS (MALAYSIA) SDN. BHD. yang bertajuk "*Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)*".

Sehubungan itu, saya berbesar hati ingin menemubual Y.Bhg. Ustaz berkaitan isu tersebut pada butiran berikut:

Tarikh: 14 Jun 2019
Masa: 10am
Tempat: UKM

Persetujuan daripada pihak Y.Bhg. Dato' Dr untuk ditemubual bagi kajian ini, amat saya hargai dan didahului dengan ucapan terima kasih.

Sekian,
Yang benar,

Prof. Madya Dr. Irwan Mohd Subri
Ketua Penyelidik
013-354 3594



DR MAHYEDDIN BIN MOHD SALLEH,

Pensyarah Kanan,
Fakulti Syariah dan Undang-undang,
Universiti Sains Islam Malaysia,
71800, Nilai,
Negeri Sembilan.

Y.Bhg. Tuan,

TEMU BUAL PAKAR SHARIAH UNTUK KAJIAN

-Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)

Perkara di atas dengan segala hormatnya dirujuk.

Saya, Prof. Madya Dr. Irwan bin Mohd Subri merupakan Pengarah, Institut Pengurusan dan Penyelidikan Fatwa Sedunia (INFAD), Universiti Sains Islam Malaysia (USIM). Saya sedang menjalankan perkhidmatan kajian perundingan kepada syarikat SANOFI-AVENTIS (MALAYSIA) SDN. BHD. yang bertajuk "*Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)*".

Sehubungan itu, saya berbesar hati ingin menemubual Y.Bhg. Tuan berkaitan isu tersebut pada butiran berikut:

Tarikh : 27 Jun 2019

Masa : 10am

Tempat: FSU, USIM

Bersama ini dilampirkan soalan temubual tersebut untuk rujukan pihak Y.Bhg. Dr. Persetujuan daripada pihak Y.Bhg. Dr untuk ditemubual bagi kajian ini, amat saya hargai dan didahului dengan ucapan terima kasih.

Sekian,
Yang benar,

Prof. Madya Dr. Irwan Mohd Subri

Ketua Penyelidik

013-354 3594



DR. MOHD HAFIZ BIN MAHAİYADIN

Pensyarah Kanan,
Akademi Pengajian Islam Kontemporari,
Universiti Teknologi MARA,
Cawangan Pulau Pinang, Kampus Permatang Pauh,
Jalan Permatang Pauh,
13500 Permatang Pauh,
Pulau Pinang.

Y.Bhg. Dr.

**JEMPUTAN MENGHADIRI BENGKEL PERBINCANGAN PAKAR
SHARIAH DAN TEMU BUAL “KAJIAN TERHADAP ISTIHALAH DALAM
LOW MOLECULAR WEIGHT HEPARIN (LMWH)”**

Perkara di atas dengan segala hormatnya dirujuk.

Saya, Prof. Madya Dr. Irwan bin Mohd Subri merupakan Pengarah, Institut Pengurusan dan Penyelidikan Fatwa Sedunia (INFAD), Universiti Sains Islam Malaysia (USIM). Saya sedang menjalankan perkhidmatan kajian perundingan kepada syarikat SANOFI-AVENTIS (MALAYSIA) SDN. BHD. yang bertajuk “*Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)*”.

Sehubungan itu, saya berbesar hati ingin menjemput pihak Y.Bhg. Dr. Menghadiri Bengkel Perbincangan Pakar Syariah berkaitan isu tersebut seperti berikut:

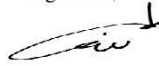
Tarikh : 28 Mei 2019
Masa : 9pm-12.30pm
Tempat : INFAD, USIM

Objektif bengkel tersebut adalah untuk:

- Penerangan tentang dapatan kajian istihalah terhadap Low Molecular Weight Heparin (LMWH) di kalangan ibu-ibu mengandung dan selepas bersalin.
- Temu bual *focus group* panel syariah tentang istihalah terhadap Low Molecular Weight Heparin (LMWH) di kalangan ibu-ibu mengandung dan selepas bersalin untuk pembinaan parameter darurat dan hajat berdasarkan VTE Risk Assessment Semasa Mengandung dan Selepas Bersalin (KKM 2017)

Bersama ini dilampirkan soalan temubual tersebut untuk rujukan pihak Y.Bhg. Dr. Persetujuan daripada pihak Y.Bhg. Dr. untuk menghadiri bengkel dan ditemubual bagi kajian ini, amat saya hargai dan didahului dengan ucapan terima kasih.

Sekian,
Yang benar,



.....
Prof. Madya Dr. Irwan Mohd Subri
Ketua Penyelidik
013-354 3594

UN



PROFESSOR AZIZI BIN AYOB,
Deputy Director,
Commercialisation & Support Department,
School of Medicine,
Institute For Research , development & Innovation,
International Medical University.

Y.Bhg. Tuan,

TEMU BUAL PAKAR FARMASI

-Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)

Perkara di atas dengan segala hormatnya dirujuk.

Saya, Prof. Madya Dr. Irwan bin Mohd Subri merupakan Pengarah, Institut Pengurusan dan Penyelidikan Fatwa Sedunia (INFAD), Universiti Sains Islam Malaysia (USIM). Saya sedang menjalankan perkhidmatan kajian perundingan kepada syarikat SANOFI-AVENTIS (MALAYSIA) SDN. BHD. yang bertajuk “*Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)*”.

Sehubungan itu, saya berbesar hati ingin menemubual Y.Bhg. Tuan berkaitan isu tersebut pada butiran berikut:

Tarikh : 27 Jun 2019

Masa : 3pm

Tempat: IMU BUKIT JALIL, KL

Bersama ini dilampirkan soalan temubual tersebut untuk rujukan pihak Y.Bhg. Dr. Persetujuan daripada pihak Y.Bhg. Dr untuk ditemubual bagi kajian ini, amat saya hargai dan didahului dengan ucapan terima kasih.

Sekian,
Yang benar,

.....
Prof. Madya Dr. Irwan Mohd Subri
Ketua Penyelidik
013-354 3594



TUAN AMRAHI BUANG

Presiden Persatuan Farmasi Malaysia,
Wisma MPS,
16-2, Jalan OP 1/5, 1-Puchong Business Park Off
Jalan Puchong, 47160 Puchong,
Selangor.

Y.Bhg. Tuan,

TEMU BUAL PAKAR FARMASI

-Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)

Perkara di atas dengan segala hormatnya dirujuk.

Saya, Prof. Madya Dr. Irwan bin Mohd Subri merupakan Pengarah, Institut Pengurusan dan Penyelidikan Fatwa Sedunia (INFAD), Universiti Sains Islam Malaysia (USIM). Saya sedang menjalankan perkhidmatan kajian perundingan kepada syarikat SANOFI-AVENTIS (MALAYSIA) SDN. BHD. yang bertajuk "*Kajian Terhadap Istihalah Dalam Low Molecular Weight Heparin (LMWH)*".

Sehubungan itu, saya berbesar hati ingin menemubual Y.Bhg. Tuan berkaitan isu tersebut pada butiran berikut:

Tarikh: 19 Jun 2019

Masa: 11am

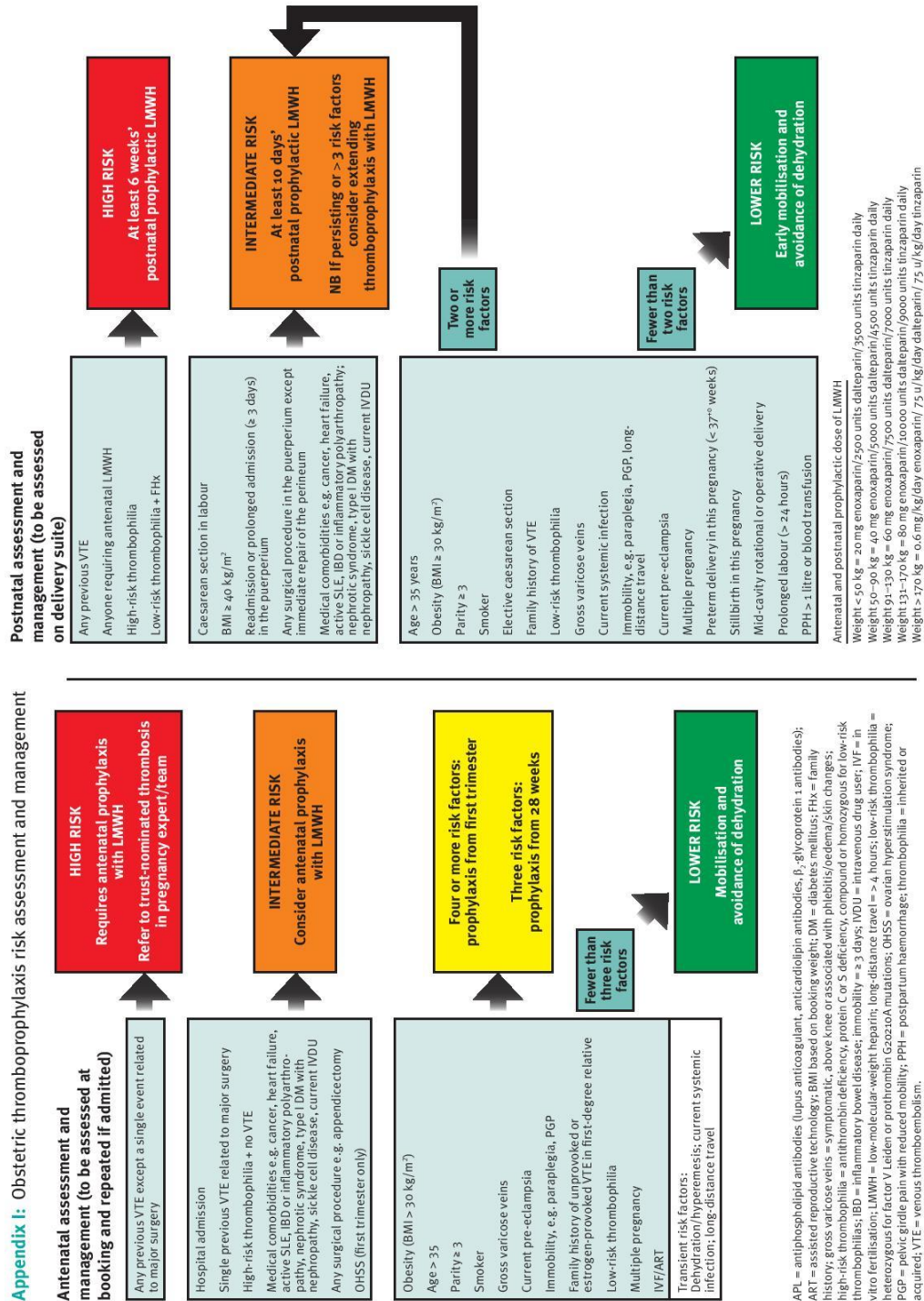
Tempat: AEON AU2, Setiawangsa

Bersama ini dilampirkan soalan temubual tersebut untuk rujukan pihak Y.Bhg. Dr. Persetujuan daripada pihak Y.Bhg. Dr untuk ditemubual bagi kajian ini, amat saya hargai dan didahului dengan ucapan terima kasih.

Sekian,
Yang benar,

Prof. Madya Dr. Irwan Mohd Subri
Ketua Penyelidik
013-354 3594

APPENDIX 5



APPENDIX 6

CLA

Appendix II: Adjusted odds ratios for risk factors for VTE

Risk factor	aOR	95% CI	Comment
Previous VTE ^{15,32}	24.8	17.1–36	
Age > 35 ^{14,16,31}	1.3 ¹⁴	1.0–1.7	n = 603
	1.4 ³¹	1.0–2.0	pn = 256
	1.2 ¹⁶	1.1–1.4	DVT
Obesity	2.65 ⁷	1.09–6.45	n = 143 an PE
BMI ≥ 30 ^{7,16,31–33}	5.3 ³³	2.1–13.5	n = 129
	4.4 ³²	3.4–5.7	
	1.7 ³¹	1.1–2.6	pn = 256
	1.8 ¹⁶	1.2–2.6	DVT
	2.7 ¹⁶	1.6–4.4	PE
BMI ≥ 25 ^{12,31}	1.8 ¹²	1.3–2.4	an n = 268
	2.4 ¹²	1.7–3.3	pn n = 291
	1.7 ³¹	1.2–2.4	pn = 256
Weight 90–120 kg ⁴¹	1.93	1.10–3.39	an
Weight > 120 kg	4.32	1.26–14.84	
Weight gain in pregnancy > 21 kg ¹² (compared to 7–21 kg)	1.6	1.1–2.6	pn n = 291
Parity 1 ⁷	4.03	1.6–9.84	n = 143 an PE
2 ¹⁴	1.5	1.1–1.9	n = 603
≥ 3 ¹⁴	2.4	1.8–3.1	n = 603
Smoking	2.1 ¹²	1.3–3.4	an n = 268
10–30/day ^{12,14,35}	3.4 ¹²	2.0–5.5	pn n = 291
	1.4 ¹⁴	1.1–1.9	n = 603
	2.5 ³⁵	1.3–4.7	n = 90
Current smoker ³³	2.7 ³³	1.5–4.9	n = 129
Sickle cell ^{32,49}	6.7 ³²	4.4–10.1	
	2.5 ⁴⁹	1.5–4.1	DVT
	1.7 ⁴⁹	0.9–3.1	PE
Heart disease ^{16,31,32}	7.1 ³²	6.2–8.3	
	5.4 ³¹	2.6–11.3	pn n = 256
	3.2 ¹⁶	2.2–4.6	DVT
	43.4 ¹⁶	35.0–53.9	PE
Systemic lupus erythematosus ^{16,32}	8.7 ³²	5.8–13	
	2.3 ¹⁶	1.1–4.8	DVT
	3.9 ¹⁶	1.9–7.8	PE
Anaemia ^{16,32}	2.6 ³²	2.2–2.9	
	1.6 ¹⁶	1.4–1.9	DVT
	1.7 ¹⁶	1.3–2.2	PE
Varicose veins ³⁵	2.4	1.04–5.4	
Immobility ¹²	7.7	3.2–19	an
	10.8	4.0–28.8	pn
Pre-eclampsia ^{12,14}	2.9 ¹⁴	2.1–3.9	
	3.1 ¹²	1.8–5.3	pn
Pre-eclampsia plus FGR ¹²	5.8 ¹²	2.1–16	
Hyperemesis ^{16,32}	2.5 ³²	2–3.2	
	4.4 ¹⁶	2.4–8.4	DVT



APPENDIX 7

VTE Risk Assessment in Pregnancy and Puerperium (KKM 2017)



Source: Training manual on the prevention and treatment of venous thromboembolism in pregnancy and puerperium, KKM, 2017

VTE Risk Factors	VTE Score	Pre-pregnancy/Booking	Admission 1	Admission 2	Post Delivery
Date					
Pre-existing Risk Factors					
Previous VTE	4				
High risk thrombophilia (anti thrombin, protein C, protein S deficiency)	3				
Medical comorbidities (malignancies, cardiac failure, active SLE, IVU/ TB, nephrotic syndrome, DM with nephropathy, thalassemia major or intermedia post splenectomy)	3				
Obesity - BMI ≥ 40 kg/m ² - BMI 30-39 kg/m ²	2 1				
Family history of VTE	1				
Low risk thrombophilia (Factor V Leiden, High FVIII)	1				
Current smoker (≥ 10 /day)	1				
Obstetric Risk Factors					
All caesarean sections	2				
Pre-eclampsia	1				
IVF (1 st trimester only)	1				
Mid cavity/ Rotational instrumental delivery	1				
PPH (≥ 1000 mls) or require blood transfusion	1				
Stillbirth (current)	1				
Prolonged labour (> 24 hours)	1				
Transient Risk Factors					
Surgical procedures (excluding episiotomy, 1 st & 2 nd degree perineal repair and ERPOC)	4*				
Hyperemesis gravidarum/ OHSS	4*				
Systemic infection/ infection requiring IV antibiotics	1				
Immobility/ dehydration	1				
Admission beyond 3 days	1				
Non-stop long distance travel (> 4Hrs)	1				
Total score					
Name & stamp					

* Thromboprophylaxis cover is advised until the patient has sufficiently recovered from surgery or her signs and symptoms of hyperemesis gravidarum or OHSS.

SASGM/ENQ17/04/0172

APPENDIX 8

10/26/2019

Consumer Price Guide | Pharmaceutical Services Programme

Registered Pharmacist (PRP)

Bahasa Melayu

English

-A

A

+A

Public

Industry

Staff

PROFILE

SERVICES

DOCUMENT & MEDIA

INFORMATION

PHARMACY BOARD

CONTACT US

[Home](#) » [Services](#) » [e-Services](#)

Consumer Price Guide

All Columns ▼ clexane

Records 1-3 of 3 [reset](#)

Consumer Price Guide (CPG) is a list of medicine prices. It serves as a public reference to purchase medicines in the private sector. The information provide medicine availability and market price guidance for consumers to make informed choices.

Notes:

The Consumer Price Guide (CPG) serves as a guidance only. The retail price in the real market may differ and vary.

Product Type/Jenis Produk	Generic Name>Nama Generik	Brand Name>Nama Dagangan	Unit	Price/unit CPG (RM)	Update Year/Tahun Kemaskini
Controlled Medicines	Enoxaparin Sodium 20 mg Injection	Clexane 2000/0.2ml Anti-XA IU (Prefilled Syringe For Injection)	Pre-filled Syringe	27.00	2015
Controlled Medicines	Enoxaparin Sodium 40 mg Injection	Clexane 4000/0.4ml Anti-XA IU (Prefilled Syringe For Injection)	Pre-filled Syringe	38.40	2015

<https://www.pharmacy.gov.my/v2/en/apps/drug-price>

1/2

10/26/2019

Consumer Price Guide | Pharmaceutical Services Programme

Product Type/Jenis Produk	Generic Name>Nama Generik	Brand Name>Nama Dagangan	Unit	Price/unit CPG (RM)	Update Year/Tahun Kemaskini
Controlled Medicines	Enoxaparin Sodium 60 mg Injection	Clexane 6000/0.6ml Anti-XA IU Pre-Filled Syringe	Pre-filled Syringe	46.40	2015

10 ▼ Entries Per Page Page 1 of 1

Disclaimer : Pharmaceutical Services Programme, Ministry of Health Malaysia shall not be liable for any loss or damage resulting from the use of information in this portal.

<https://www.pharmacy.gov.my/v2/en/apps/drug-price>

2/2

Bahasa Melayu

English

A

A

+A

Public

Industry

Staff

PROFILE

SERVICES

DOCUMENT & MEDIA

INFORMATION

PHARMACY BOARD

CONTACT US

[Home](#) » [Services](#) » [e-Services](#)

Consumer Price Guide

All Columns ▼ heparin

Records 1-10 of 10 [reset](#)

Consumer Price Guide (CPG) is a list of medicine prices. It serves as a public reference to purchase medicines in the private sector. The information provide medicine availability and market price guidance for consumers to make informed choices.

Notes:

The Consumer Price Guide (CPG) serves as a guidance only. The retail price in the real market may differ and vary.

Product Type/Jenis Produk	Generic Name>Nama Generik	Brand Name>Nama Dagangan	Unit	Price/unit CPG (RM)	Update Year/Tahun Kemaskini
Controlled Medicines	Heparin Sodium 10 units in Sodium Chloride Injection	Heparinised Saline Inj 10IU/ml 5ml	Ampoule	3.00	2015
Controlled Medicines	Heparin Sodium 10 units in Sodium Chloride Injection	Heparinised Saline Injection 10 IU/ml in 10ml Plastic Ampoule	Ampoule	2.00	2015

<https://www.pharmacy.gov.my/v2/en/apps/drug-price>

1/2

Product Type/Jenis Produk	Generic Name>Nama Generik	Brand Name>Nama Dagangan	Unit	Price/unit CPG (RM)	Update Year/Tahun Kemaskini
Controlled Medicines	Heparin Sodium 10 units in Sodium Chloride Injection	Heparinol 10	Ampoule	0.60	2017
Controlled Medicines	Heparin 1000 units/ml Injection	Heparinol 1000 IU/ml	Vial	11.80	2017
Controlled Medicines	Heparin 1000 units/ml Injection	Heparinol 1000 IU/ml (Vial of 30 ml)	Vial	7.00	2017
Controlled Medicines	Heparin 1000 units/ml Injection	Heparinol 1000 IU/ml (Vial of 5 ml)	Vial	11.70	2017
Controlled Medicines	Heparin 5000 units/ml Injection	Heparinol 5000 IU/ml	Vial	11.80	2017
Controlled Medicines	Heparin 5000 units/ml Injection	Heparinol 5000 IU/ml (Heparin Sodium (Ovine) 5000 IU/ml Injection BP)	Vial	11.80	2017
Controlled Medicines	Heparin 5000 units/ml Injection	Heparinol 5000 IU/ml (Vial of 5 ml)	Vial	11.70	2017
Controlled Medicines	Heparin 5000 units/ml Injection	Vaxcel Heparin Sodium Injection 5000 IU/ml	Vial	19.50	2016

10 ▼ Entries Per Page Page 1 of 1

Disclaimer : Pharmaceutical Services Programme, Ministry of Health Malaysia shall not be liable for any loss or damage resulting from the use of information in this portal.

<https://www.pharmacy.gov.my/v2/en/apps/drug-price>

2/2

Bahasa Melayu

English

A A A

Public

Industry

Staff

PROFILE

SERVICES

DOCUMENT & MEDIA

INFORMATION

PHARMACY BOARD

CONTACT US

[Home](#) » [Services](#) » [e-Services](#)

Consumer Price Guide

All Columns ▼ fondaparinux

Records 1-2 of 2 [reset](#)

Consumer Price Guide (CPG) is a list of medicine prices. It serves as a public reference to purchase medicines in the private sector. The information provide medicine availability and market price guidance for consumers to make informed choices.

Notes:

The Consumer Price Guide (CPG) serves as a guidance only. The retail price in the real market may differ and vary.

Product Type/Jenis Produk	Generic Name>Nama Generik	Brand Name>Nama Dagangan	Unit	Price/unit CPG (RM)	Update Year/Tahun Kemaskini
Controlled Medicines	Fondaparinux Sodium 12.5 mg/ml Injection	Arixtra 12.5mg/ml Solution For Injection	Syringe	76.90	2016
Controlled Medicines	Fondaparinux Sodium 2.5 mg/0.5 ml Injection	Arixtra 2.5mg/0.5ml Solution For Injection	Syringe	63.90	2016

<https://www.pharmacy.gov.my/v2/en/apps/drug-price>

1/2

UNIVERSITI SAINS ISLAMIC
 ISLAMIC SCIENCE UNIVERSITY OF

APPENDIX 9

TAJUK: PENGGUNAAN UBAT BERASASKAN BABI KEPADA IBU MENGANDUNG DAN SELEPAS BERSALIN: HEPARIN BERMOLEKUL RENDAH (LMWH) SEBAGAI KES KAJIAN.

Table 1: Borang penilaian pakar syariah

No	Item	YES	NO
1	Pencegahan (Thromboprophylaxis) dengan menggunakan ubat Heparin bermolekul rendah (LMWH) seperti Clexane diumumkan <i>darurrah</i> kerana kematian ibu-ibu mengandung disebabkan darah beku (VTE) pembunuhan utama di Malaysia.	✓	
2.	Penilaian risiko darah beku yang dikeluarkan oleh KKM pada tahun 2017 seperti <i>High Risk</i> (skor 4 ke atas), <i>Moderate Risk</i> (Skor 3), <i>Low Risk</i> (skor 1,2) <i>darurrah</i> untuk diimplemkan untuk pencegahan penyakit darah beku berdasarkan kaedah <i>fiqh</i> iaitu <i>Al-Darar yuzal/La Darar wa la dirar</i> "	✓	
3.	Wanita-wanita mengandung dan selepas bersalin yang berisiko mendapat penyakit darah beku perlu diutamakan untuk mendapatkan ubat pencegahan berasaskan babi iaitu dengan ubat Heparin bermolekul rendah (LMWH) seperti Clexane berdasarkan kaedah <i>fiqh</i> iaitu dar' u <i>al-mafasid awla min jabbi al-masalih</i>	✓	
4.	Kumpulan <i>high-risk</i> (skor 4 dan keatas) diklasifikasikan sebagai <i>darurrah</i> untuk menerima rawatan pencegahan dengan LMWH seperti Clexane semasa mengandung dan selepas bersalin berdasarkan kaedah <i>fiqh</i> iaitu <i>Al-darurrah tubih al-mulhura</i> .	✓	
5.	Kumpulan <i>moderate risk</i> (skor 3) diklasifikasikan sebagai keperluan mendesak untuk menerima rawatan pencegahan dengan LMWH seperti Clexane semasa mengandung dan selepas bersalin berdasarkan kaedah <i>fiqh</i> iaitu berdasarkan kaedah <i>fiqh</i> iaitu <i>al-hajjah tunazzal manzilah darurrah</i> .	✓	
6.	Kumpulan <i>Low risk</i> (skor 2) semasa tempoh selepas bersalin yang ada komplikasi seperti pembedahan (<i>caesarean</i>) dan obesiti diklasifikasikan sebagai keperluan mendesak untuk menerima rawatan pencegahan dengan ubat LMWH seperti Clexane berdasarkan kaedah <i>fiqh</i> <i>al-hajjah tunazzal manzilah al-darurrah</i> .	✓	
7.	Kumpulan <i>Low risk</i> (skor 2) semasa mengandung dan selepas bersalin yang tidak ada risiko untuk mendapat penyakit darah beku tidak perlu menerima rawatan pencegahan dengan menggunakan ubat keperluan mendesak untuk menerima rawatan pencegahan dengan ubat LMWH seperti Clexane berdasarkan kaedah <i>kaiflu rubhsah ubihat fi al-hajjah lam tustabih qubla wujubha</i>	✓	

CATATAN			
TANDATANGAN: Dr. Rosli bin Hashim JAWATAN: Pengarah KUIS	sefui dengan perantara ini		

UNIVERSITY

TAJUK: PENGGUNAAN UBAT BERASASKAN BABI KEPADA IBU MENGANDUNG DAN SELEPAS BERSALIN: HEPARIN BERMOLEKUL RENDAH (LMWH) SEBAGAI KES KAJIAN.

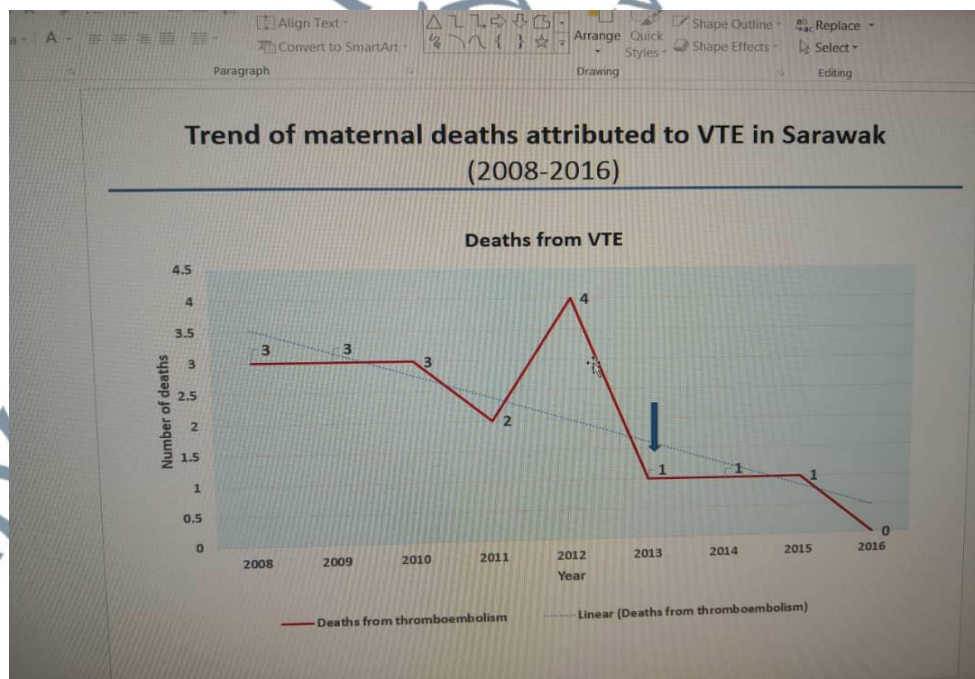
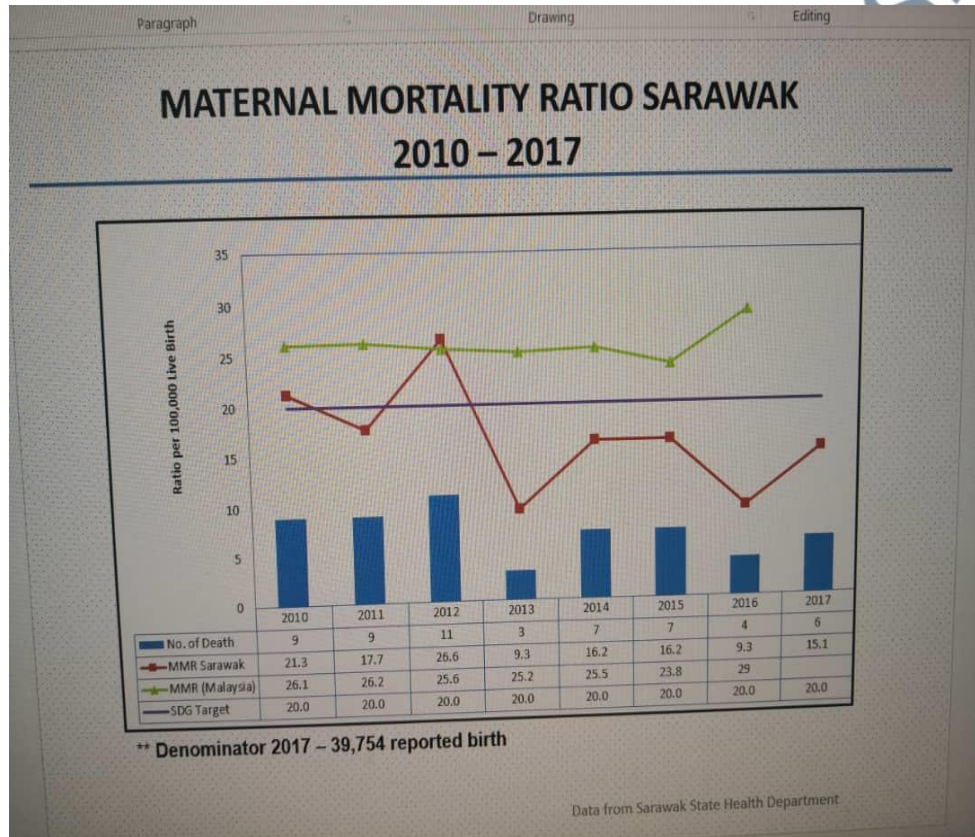
Table 1: Borang penilaian pakar syariah

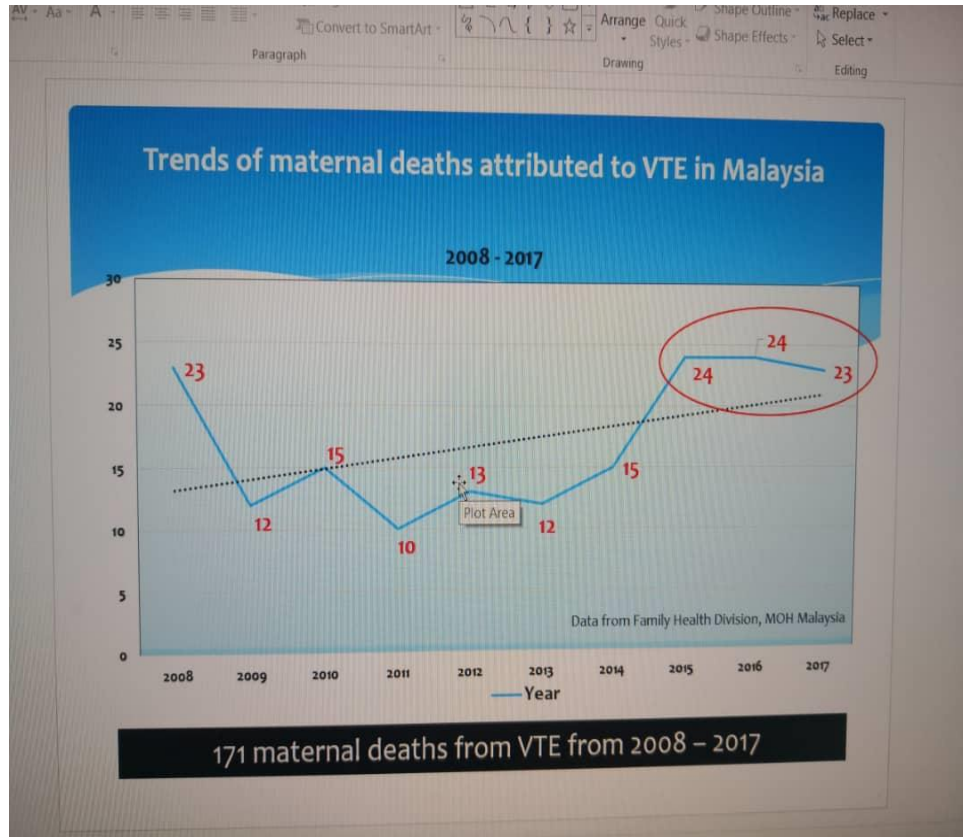
No	Item	YES	NO
1	Pencegahan (Thromboprophylaxis) dengan menggunakan ubat Heparin bermolekul rendah (LMWH) seperti Clexane ditukunkan <i>darurah</i> kerana kematian ibu-ibu mengandung disebabkan darah beku (VTE) pembunuhan utama di Malaysia.	✓	
2	Penilaian risiko darah beku yang dikeluarkan oleh KKM pada tahun 2017 seperti <i>High Risk</i> (skor 4 ke atas), <i>Moderate Risk</i> (skor 3), <i>Low Risk</i> (skor 1.2) <i>darurah</i> untuk diimplementasikan untuk pencegahan penyakit darah beku berdasarkan kaedah <i>fiqh</i> iaitu <i>Al-Darar yuzal/La Darar wa la dirar</i> .	✓	
3	Wanita-wanita mengandung dan selepas bersalin yang berisiko mendapat penyakit darah beku perlu diutamakan untuk mendapatkan ubat pencegahan berasaskan babi iaitu dengan ubat Heparin bermolekul rendah (LMWH) seperti Clexane berdasarkan kaedah <i>fiqh</i> iaitu <i>dar' u al-mufasid awla min julbi al-masullih</i> .	✓	
4	Kumpulan <i>high-risk</i> (skor 4 dan keatas) diklasifikasikan sebagai <i>darurah</i> untuk menerima rawatan pencegahan dengan LMWH seperti Clexane mengandung dan selepas bersalin berdasarkan kaedah <i>fiqh</i> iaitu <i>Al-darurah rahin al-malahzurah</i> .	✓	
5	Kumpulan <i>moderate risk</i> (skor 3) diklasifikasikan sebagai keperluan mendesak untuk menerima rawatan pencegahan dengan LMWH seperti Clexane mengandung dan selepas bersalin berdasarkan kaedah <i>fiqh</i> iaitu berdasarkan kaedah <i>fiqh</i> iaitu <i>al-hajjah tunazzal manzilah darurah</i> .	✓	
6	Kumpulan <i>Low risk</i> (skor 2) semasa tempoh selepas bersalin yang ada komplikasi seperti pembedahan (<i>caesarean</i>) dan obesity diklasifikasikan sebagai keperluan mendesak untuk menerima rawatan pencegahan dengan ubat LMWH seperti Clexane berdasarkan kaedah <i>fiqh</i> <i>al-hajjah tunazzal manzilah al-darurah</i> .	✓	
7	Kumpulan <i>Low risk</i> (skor 2) semasa mengandung dan selepas bersalin yang tidak ada risiko untuk mendapat penyakit darah beku tidak perlu menerima rawatan pencegahan dengan menggunakan ubat keperluan mendesak untuk menerima rawatan pencegahan dengan ubat LMWH seperti Clexane berdasarkan kaedah <i>kullu rukhsah ubihat li al-hajjah lam tustabih qabla wajiduha</i> .	✓	

tiara
x peria

CATATAN	Disbung dengan pengelasan (paslepat ulana dan palur madi). TANDATANGAN: <i>[Signature]</i> Dr. Setyananda K. Gunardi JAWATAN: Pensyarah Bahan Tisu Usim		

APPENDIX 10



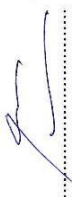


APPENDIX 11

TEMURUAL BERSAMA PAKAR SHARIAH					
OBJEKTIF UTAMA KAJIAN	Mengkaji semula fatwa berkenaan <i>Clexane</i> (<i>Low Molecular Weight Heparin</i>) yang difatwakan pada tahun 2009 dengan menggunakan parameter darurah untuk menentukan status hukum penggunaan <i>Low Molecular Weight Heparin</i> seperti <i>Clexane</i> untuk pencegahan VTE (<i>thromboprophylaxis</i>) semasa mengandung dan selepas bersalin.				
TEMA	HURAIAN TEMA	SETUJU	TIDAK SETUJU	CATATAN	
1. Statistik VTE di kalangan ibu mengandung dan selepas bersalin di Malaysia	1. Pembunuh utama wanita mengandung dan selepas bersalin di Malaysia menurut Jabatan Perangkaan Malaysia 2016/2017	✓			
	2. Data lokalti hospital membuktikan penggunaan LMWH mengurangkan kematian ibu mengandung secara prophylaxis (pencegahan) dan therapeutic (rawatan) berjaya menurunkan kematian ibu mengandung dan selepas bersalin	✓			
2. Pencegahan (Prophylaxis) Penyakit VTE	1. Kebarangkalian pesakit VTE terutama wanita mengandung dan selepas bersalin menghadapi kematian adalah sangat tinggi. Justeru, rawatan pencegahan (Prophylaxis) VTE di kalangan ibu mengandung dan selepas bersalin adalah <i>darurah</i> .	✓			
	2. Risk Assessment of VTE- KKM 2017 iaitu High Risk (Skor 4 ke atas), Moderate Risk (Skor 3), Low Risk (kurang dari skor 2) digunakan peringkat Pencegahan (Prophylaxis) Penyakit VTE	✓			

3. Ubat pencair darah (<i>anticoagulan</i>) yang digunakan untuk mencegah VTE di kalangan ibu mengandung dan selepas bersalin di Malaysia.	1. Low molecular weight heparin yang berasaskan babi (<i>porcine</i>) seperti Enoxparin (Clexane) dan Tinzaparin (Innohep) sangat dipersetujui oleh pakar-pakar perubatan berdasarkan keberkesanan, kemudahan pesakit, mudah didapati.	☒	
	2. Unfractionated Heparin (UFH) yang berasaskan lembu (<i>bovine</i>) diluluskan penggunaan berdasarkan kajian tetapi ada kesan sampingan dan tidak mesra pengguna.	☒	
	3. Fondaparinux (Arixtra) yang dibuat secara sintetik yakni tidak ada unsur syubuh di dalam pembuatannya, tidak dipersetujui penggunaannya kepada ibu mengandung kerana tidak wujud data yang mencukupi untuk mengesahkan keselamatan janin dan sangat mahal.	☒	
4. Prinsip darurah diaplikasikan ke atas kes VTE di kalangan ibu mengandung dan selepas bersalin	1. Darurah yakni mencapai darurah maksimum menjadi hujah kuat ke atas rawatan pencegahan (prophylaxis) VTE di kalangan ibu mengandung dan selepas bersalin tertamanya kumpulan <i>high-risk</i> (skor 4 ke atas)	☒	
	2. <i>Hajah</i> (keperluan) yang mendesak yakni mencapai darurah minimum ke atas rawatan pencegahan (prophylaxis) VTE di kalangan ibu mengandung dan selepas bersalin tertamanya kumpulan <i>moderate risk</i> (skor 3 ke atas).	☒	نعم نعم نعم
5. Istihalah sebagai proses purifikasi	1. Ujian makmal terbaru yang dilakukan oleh syarikat Sanofi pada tahun 2015	☒	

ubat Low molecular weight heparin seperti Clexane	membuktikan tiada lagi DNA babi di dalam ubat Clexane menunjukkan telah melalui proses purifikasi secara istihalah.			
	2. Fatwa antarabangsa terhadap instrument istihalah diharuskan.	✓		
6. Clexane diharuskan kerana penyakit VTE di kalangan wanita mengandung dan selepas bersalin di Malaysia semakin meningkat.	1. Dua faktor risiko yang terhadapan menggalakkan lagi VTE di kalangan ibu mengandung di Malaysia iaitu <i>caesarean birth</i> dan <i>obesity</i> .	✓		
	2. <i>Assessment/screening</i> melalui <i>score sheet</i> yang disediakan oleh KKM sangat perlu diamalkan secara serius oleh pengamal perubatan	✓		
7. Parameter shariah berdasarkan Risk Assessment VTE-KKM 2017	1. Membantu <i>frontliners</i> seperti ulama/mufti, doktor perubatan dan ahli farmasi untuk membuat keputusan penggunaan Low Molecular Weight Heparin seperti Clexane berdasarkan tahap pesakit yang berisiko disorang VTE dikalangan ibu mengandung dan selepas bersalin.	✓		
	2. Ghalib zan daripada ra'yul khabir (pakar perubatan) diaplikasikan serta digandingkan parameter shariah ini membantu keputusan dibuat.	✓		

Tandatangan : 

Nama : Muhammad Ali POK

TEMUBUAL BERSAMA PAKAR SHARIAH				
OBJEKTIF UTAMA KAJIAN		Mengkaji semula fawa berkenaan <i>Clexane</i> (<i>Low Molecular Weight Heparin</i>) yang diwajibkan pada tahun 2009 dengan mengutamakan parameter darurah untuk menentukan status hukum penggunaan <i>Low Molecular Weight Heparin</i> seperti <i>Clexane</i> untuk pencegahan VTE (<i>thromboprophylaxis</i>) semasa mengandung dan selepas bersalin.		
TEMA	HURAIAN TEMA	SETUJU	TIDAK SETUJU	CATATAN
1. Statistik VTE di kalangan ibu mengandung dan selepas bersalin di Malaysia	1. Pembunuh utama wanita mengandung dan selepas bersalin di Malaysia menurut Jabatan Perangkaan Malaysia 2016/2017			
	2. Data lokalti hospital membuktikan penggunaan LMWH mengurangkan kematian ibu mengandung secara prophylaxis (pencegahan) dan therapeutic (rawatan) berjaya menurunkan kematian ibu mengandung dan selepas bersalin			
2. Pencegahan (Prophylaxis) Penyakit VTE	1. Kebarangkalian pesakit VTE terutama wanita mengandung dan selepas bersalin menghadapi kematian adalah sangat tinggi. Justeru, rawatan pencegahan (Prophylaxis) VTE di kalangan ibu mengandung dan selepas bersalin adalah <i>darurah</i> .			
	2. Risk Assessment of VTE- KKM 2017 iaitu High Risk (Skor 4 ke atas), Moderate Risk (Skor 3), Low Risk (kurang dari skor 2) digunakan peringkat Pencegahan (Prophylaxis) Penyakit VTE			

3. Ubat pencair darah (<i>anticoagulant</i>) yang digunakan untuk mencegah VTE di kalangan ibu mengandung dan selepas bersalin di Malaysia.	1. Low molecular weight heparin yang berasaskan babi (<i>porcine</i>) seperti Enoxaparin (Clexane) dan Tinzaparin (Imophep) sangat dipersetujui oleh pakar-pakar perubatan berdasarkan keberkesanan, kemudahan pesakit, mudah didapati.			
	2. Unfractionated Heparin (UFH) yang berasaskan lembu (<i>bovine</i>) diluluskan penggunaan berdasarkan kajian tetapi ada kesan sampingan dan tidak mesra pengguna.			
	3. Fondaparinux (Arixtra) yang dibuat secara sintetik yakni tidak ada unsur syubuh di dalam pembuatannya, tidak dipersetujui penggunaannya kepada ibu mengandung kerana tidak wujud data yang mencukupi untuk mengesahkan keselamatan janin dan sangat mahal.			
4. Prinsip danurah diaplikasikan ke atas kes VTE di kalangan ibu mengandung dan selepas bersalin	1. Darurah yakni mencapai darurah maksimum menjadi hujah kuat ke atas rawatan pencegahan (prophylaxis) VTE di kalangan ibu mengandung dan selepas bersalin tentamannya kumpulan <i>high-risk</i> (skor 4 ke atas)	✓		
	2. <i>Hajah</i> (keperluan) yang mendesak yakni mencapai darurah minimum ke atas rawatan pencegahan (prophylaxis) VTE di kalangan ibu mengandung dan selepas bersalin tentamannya kumpulan <i>moderate risk</i> (skor 3 ke atas).	✓		<i>Not to be used in high risk. use factor prophylaxis. use low risk. use moderate risk.</i>
5. Istilah sebagai proses purifikasi	1. Ujian makmal terbaru yang dilakukan oleh syarikat Sanofi pada tahun 2015	✓		

skor 3 ke atas

ubat Low molecular weight heparin seperti Clexane	membuktikan tiada lagi DNA babi di dalam ubat Clexane menunjukkan telah melalui proses purifikasi secara istihalah.			
	2. Fatwa antarabangsa terhadap instrument istihalah diharuskan.	✓		
6. Clexane diharuskan kerana penyakit VTE di kalangan wanita mengandung dan selepas bersalin di Malaysia semakin meningkat.	1. Dua faktor risiko yang terhadapan menggalakkan lagi VTE di kalangan ibu mengandung di Malaysia iaitu <i>caesarean birth</i> dan <i>obesity</i> .	✓		
	2. <i>Assessment/screening</i> melalui <i>score sheet</i> yang disediakan oleh KKM sangat perlu diamalkan secara serius oleh pengamal perubatan	✓		
7. Parameter shariah berdasarkan Risk Assessment VTE-KKM 2017	1. Membantu <i>frontliners</i> seperti ulama/mufti, doktor perubatan dan ahli farmasi untuk membuat keputusan penggunaan Low Molecular Weight Heparin seperti Clexane berdasarkan tahap pesakit yang berisiko diserang VTE dikalangan ibu mengandung dan selepas bersalin.	✓		
	2. Ghalib zan daripada ra'yul khabir (pakar perubatan) diaplikasikan serta digandingkan parameter shariah ini membantu keputusan dibuat.	✓		

Tandatangan :

Nama :

MOHAMMAD AIDAT JAMALUDDIN

APPENDIX 12

1 **INTERVIEW WITH MEDICAL EXPERT IN O&G, DR HARRIS NJOO SUHARJONO**
2
3 #R1: Sorrylah Prof take your time. I know you are busy...
4 #P: you will to Kuching right?
5 #R1: Supposed we will fly tomorrow.
6 #P: So how about the ticket?
7 #R1: Ummm...Not refundable but later on we can go.
8 #R2: Because maybe in future, maybe in May, we will fly to Kuching again for interviewing mufti.
9 Sarawak Mufti.
10 #P: Oh I see..okay, all right. Coffee..aa..American Black. Okay. So, i think we can start lah. what you
11 want to know...
12 #R1: Okay...haaa..this research you know about the Clexane. LMWH. So, we are conducting research
13 for Sanofi. And they want to review the current fatwa,
14 made by the muzakarah fatwa kebangsaan Malaysia.
15 #P: Okay.
16 #R1: So, the current fatwa stated that clexane is not allowed, prohibited for Muslim. and the new lab
17 test aaa..showed that there is no DNA.
18 #P: Yes
19 #R1: Anymore.
20 #R1: I think in 2015. This information I take from Prof Rashid. So, based on that they want to review
21 the current fatwa, so they asked us..I'm a lecturer
22 from faculty of shariah and law, USIM if you know..at Nilai.. So, we have to interview with doctors
23 and shariah experts.
24 #P: Okay.
25 #R1: Okay. so last last last week, last Sunday, we interviewed Dr Ravi,
26 #P: J. Ravi?
27 #R1: Haah J Ravi.
28 #P: In JB?
29 #R1: haah.
30 #P: Ohh ahha.
31 #R1: So may be the first Question, so if ok if we ask in malay, and you can answer in mix.
32 #R2: Yeah mix..
33 #R1: so before that I ask permission to record this conversation.
34 #P: USIM is aaa...who is there ya? Shamsil?
35 #R1: Yess.
36 #P: He went to Kuching before.
37 #R1: Ohh ok ok..so maybe you can start with your background first.
38 #P: Ok, I'm Dr Harris Njoo Suharjono.. I am a consultant of Obstetric and Gynaecology, head
39 department of Sarawak Hospital in Kuching. I aaa graduated
40 from UKM undergraduate. and MBS in 1994/1996..I'm not so sure. I'm also a reproductive maternal
41 specialist in 2005. and it be become relevant to me because
42 in 2012, in 2012 there is a MDG'S. MDG'S is Millenium Development Goal and the target to reduce
43 maternal mortality by two third because there is until year,
44 when it finished ya? I think 2015. 2015 was the dateline is it? So we have a meeting in the state, and
45 I was looking at maternal death, that occured in Sarawak
46 the previous five years lah. because to reduce it, I have to know why they die and what are these in
47 circles and what I discover was what is commonest
48 causes in maternal death was pulmonary embolism. Aaa..between 2018 to 2012, that five years
49 period, there were 15 maternal deaths. So, that's mean about 3 a year lah.

1 It makes it one of the commonest. Looking at trying to reduce the maternal death, I have to look to
2 find ways which one I can reduce. Which death not involve getting 30 specialist or building specialist
3 hospitals, it's not practical for a very short term. and I realized that through my own reading
4 and research and with my specialist, the best way is to have a program which will screen pregnant
5 women, basically during pregnancy and after delivery,
6 what is their risk for having pulmonary embolism or venous thromboembolism and it can be
7 assessed the risks and if the risk is high, we can intervene
8 by giving advice and also giving thromboprophylaxis. And this thromboprophylaxis if only that
9 score which considered as high-risk or getting PE. This is based on the guideline from the green top
10 guideline Royal College of O&G. So we follow that and I wrote the working paper. some refer to the
11 state and what I planned was
12 serve for to screen because screening in one hospital make no difference. because that would occur
13 anywhere in Sarawak at any hospitals. So, I have a working paper that
14 screen pregnant women initially for all health pregnant women state of sarawak which is... and also
15 23 hospitals. All in one book??? And I will provide training lah
16 before that is implementation in 2013. We are ah...the state Pengarah agreed to do it in the
17 hospitals, in 23 hospitals. They are reluctant to doing it in clinic,
18 because they don't think the nurses can do it. It takes much time to screen it even though I've
19 already done a preliminary testing on the clinic nurses just take
20 them 3 minutes survey to screen. So, the program started in March 2013. *Umm* for all hospitals in
21 Sarawak, and introduces the maternal death from the previous
22 mostly 3 a year to 1. and that one case is happened in Sarawak, general hospital also because a
23 because it's a new program, the patient was admitted to the
24 ward gynae not the maternity ward. And my doctors thought that if you admitted to the gynae, then
25 no need to screen. So that patient had the pregnant lengthy instead of
26 operation. For twisted within macram cyst
27 #R2: What does mean of the screening? assessment, right?
28 #P: Yes..there is a form...
29 #R2: Assessment of VTE, right?
30 #P: This, this, this...assessment whether the score is 1,2,3. So she wasn't scored, actually she would
31 need, so she went back home and died 9 days later, she had pulmonary embolism
32 and died lah. But anyway, the subsequent 5 years, 2008-2012, there were 15 death. and from 2013-
33 2017, until 2017, a there were only 4 death.
34 So, that shows the evidence that, the program work lah. Yeah, the program works and reduces the
35 maternal death. For me, 70% lah.
36 #R2: documentation Dr?
37 #P: Yes, I have.
38 #R2: Oh, it's very good. Masha Allah..
39 #P: No, I have that. With regard thromboprophylaxis, ummm...there is a few type. That is available
40 and you can use it. ummm...when they need it lah. One, it so called
41 unfractionated heparin lah ya, unfractionated heparin is a bovine based. bovine based. But it comes
42 in bottle you know, in Malaysia lah...in KKM, it comes in bottle of 5ml,
43 and 1ml 5000 International Unit. Right? For thromboprophylaxis you need to give 1ml which is
44 5000IU twice a day.
45 #R2: Twice a day
46 #P: Twice a day, twelve hours apart. The...the only thing of course, then you have to esprete into
47 syringe 1 ml, and injected twice a day lah. we use it as well. the only problem is,
48 one issue is, one scientific shows the low molecular weight heparin is more effective than
49 unfractionated heparin lah. more effective in term of..
50 #R1: Before that, can you explain what is low molecular weight heparin?
51 #P: Aaa Ok Ok Ok..let me just finish the unfractionated heparin then I will go to the..

1 #R1: Ok
2 #P: It is less effective and if you use unfractionated heparin after cesarean section, then the risk of
3 haemorrhage you know, haematoma, that means clot blood inside it it is
4 higher lah after cesarean section. Umm..low molecular weight heparin also used for
5 thromboprophylaxis which to prevent the blood clot and it's also a treatment if
6 there is blood clot, meaning deep vein thrombosis and pulmonary embolism, we also give either low
7 molecular weight heparin or unfractionated heparin..ya..ummm...
8 evidences have shown that low molecular weight heparin is superior to unfractionated heparin. Well
9 there are scientific data to suggest and it comes in the pen form. Pen form
10 is convenient and it also given for prophylaxis once a day. So once a day that means a patient is
11 more likely more to be compliantlah. You know sometime they miss it..like..
12 and it's only once a day. If they are taught how to give it, and they can give it themselves at home.
13 they don't have to go clinic. Right? Aaa..Low molecular weight heparin
14 this...how it's created I'm not so sure lah oo..but it requires the intestine of the porcine lah. In the
15 initial to...to make it lah. But the process itself in the end
16 there no molecule of the porcine lah. That has been tested. and it only not applied to Clexane
17 because there is another brand called Tinzaparin. Right? both of them.
18 both of them have the lab data... shows that it doesn't contain porcine molecule but the Clexane one
19 is from Shariah lab Malaysia. The Tinzaparin one they use it at
20 international level lah. That shows lah..that there is no porcine molecule at the end of the...Ok dah
21 faham kot. I'm not so sure lah ya, but the ..aa..unfractionated heparin
22 shorter life span. so that why ya requires twice a day whereas low molecular weight heparin, has a
23 longer life span. I think 12 hours so something like that, just
24 once a day is enough. but treatment dose, it is still twice a day ya, if it's treatment, they have
25 thrombosis or pulmonary embolism, it's still twice a day. Okay,
26 the other thing between the two the..the because you have to compare the two, it's a..for
27 unfractionated heparin, if the weight of the mother is less than 50kilo,
28 or more than 90 kilo, there is no scientific data that show it's effective. clinically lah.
29 #R1: Heparin?
30 #P: Unfractionated heparin. but low molecular weight heparin, they have a range lah because they
31 have doses 20, 40, 60 mg. So based on that, they can cover all kind
32 of weight including 130kilo and above lah. I'm saying this because I'm also in the national
33 confidential enquiry maternal death.
34 #R2: CEMD right?
35 #P: Yeah. We look into all the maternal deaths, there is quite a lot of Malaysian women more than
36 90kilo.
37 #R2: Okay.
38 #P: And yes, I think on Tuesday, I was presenting a case of this mother where at the...booking, that's
39 means at 30 weeks, she's already 91kilo. so she should be more than 91kilo towards, she had
40 cesarean section. Of course, the hospital will not assess lah. But after the cesarean section, she'd
41 been given unfractionated heparin, but 20 hours later she still had pulmonary embolism and she
42 died.
43 #R2: She died?
44 #P: Yeah she died.aaa...of course we can get sued because first of all, the weight you cannot use
45 unfractionated heparin.
46 #R2: During antenatal?
47 #P: Haaa...this is the thing you see..because aaa...because it's a very long story..haha.
48 #R2: Oh okay.
49 #P: Ummm... even though Sarawak has shown the proof, is the only, but the cost is very high! aaa for
50 this program. ummmm when I calculated it, it was aaa it makes

1 at cost 30 million for the whole of Malaysian because 550,000 was delivered....player. so what I've
2 been assigned to do is to look at the guideline again. There was
3 a guideline since 2008. Right? The CPG on thromboembolism already said that all women, pregnant
4 women have to be screened. during the pregnancy, and also after
5 delivery. But it was never carried out lah.
6 #R2: Yeah..that the problem.
7 #P: Yeah, It was not carried out and there is a new one that is 2015, also follow the green top
8 guideline for Malaysia la. umm..well I've been assigned since too
9 expensive, then it's too difficult to implement the program lah. So, a team of us including myself, we
10 look at the guideline again, the green top guideline and we
11 wanted to reduce the usage lah. Meaning that we still screen, we wanted to reduce the number
12 requiring thromboprophylaxis. Right? So we take a risk factor such as age,
13 and number of pregnancy because these are the main one lah you know, and few other things and
14 the usage of the Sarawak is already running then the usage reduces by
15 60%. So it makes the course that so expensive anymore lah. and we run this program based on the
16 usage of low molecular weight heparin, not unfractionated heparin.
17 It doesn't mean that we not use the unfractionated heparin, when I calculated the course for
18 Sarawak, it's based on our usage on unfractionated heparin, as well as
19 low molecular weight heparin. Both! Aaa..we would advice patient to do..to take low molecular
20 weight heparin because it's more effective, and more patient
21 friendly. But if they refuse, then we give unfractionated heparin. we still ask them to do it but we tell
22 them which one is more effective, and in Sarawak also since
23 2015, we have a consent form, and this consent form is aaaa...Dr mardiana from UNIMAS, because I
24 assigned her to create consent form aaa..for Muslim lah.
25 #R1: Yeah..
26 #P: And she has been dialogue with the mufti in Sarawak, to develop this consent form.
27 #R1: Hurmm..okay. okay
28 #P: And I can always email..but do you have already right the consent form? because the whole
29 country are using my consent form.
30 #R2: Aaaa. consent form specifically for VTE?
31 #P: Yeah...specifically for low molecular weight heparin.
32 #R2: Ohhh not yet.
33 #P: So we created this..
34 #R1: Dr..Dr Mardiana UNIMAS?
35 #P: No, I have it.
36 #R1: Oh you have it?
37 #P: Yeah...but I asked her to be responsible to speak to the mufti. and it took about 3 to 4 months,
38 you know go and back, go and back, until it's worded and
39 structured until in a way the mufti is happy with that lah. Actually, no biasness at all. we did say the
40 fatwa and all these things and about the
41 unfractionated heparin, about low molecular weight heparin, and it's up to the patient to decide, we
42 also have the data to show how many percent accepted it. In
43 Sarawak, about 80 to 85 percent accepted it lah. Sometimes they speak to their husband. They say
44 they want to speak the husband first so they will come back later lah.
45 will come back later after speaking to the husband, then we only give to those who signed the
46 consent. This since 2015 lah ooo.
47 #R1: Before that Doctor,
48 #P: Ya?
49 #R1: When aaa LMWH has been used for treatment VTE?
50 #P: Actually, low molecular weight heparin've been around for in the world lah ya, about 3, 4 years,
51 I think 1995. If I'm not mistaken. Very long. But I think it is

UNIMAS

1 introduced to Malaysia probably 1999 to 2000. The main uses of Clexane is cardiology. Because they
2 prefer Clexane compared to Tinzaparin, because there is more research
3 on Clexane compared to Tinzaparin for cardiology. So, for obstetric actually they must using it but
4 not much lah until 2013 when Sarawak introduces the VTE program.
5 then they peaked up in Sarawak aaa ..the other part states in Malaysia, they peak up slowly because
6 first of all, they need to be convinced to try to change policies,
7 I dont Dr Ravi did tell you because I write the chapter for CEMD only, VTE a well. The number of VTE
8 maternal death aaa...with the 2009 oh noo 2012 in every three years,
9 we produced the CEMD REPORT RIGHT? So, 2012 to 2014 there were 41 death,in that 3 years lah, ya
10 41 ya. But the data for 2015, 2016, 2017 every year, the first year
11 2015 is 24 death, the next year 2016 is aaa 24 death, and 2017 23 seat. so that means 70. is it 71
12 hah?
13 #R1: 79
14 # P: 79 hah?is it? ok, 24, 24, 23
15 #R2: tiga belas, empat, lima belas.
16 #R1: 71
17 #P: 71? So it has increased 31 to 71.Why is that so? I'm not really sure. Maybe we human are getting
18 fatter? Sorry boss.
19 #R1:Hahaha
20 #P: You know getting fatter or more over weight I'm not sure.
21 #R2: Dr, I just aa..come across to my mind, why it becomes increased even though we use LMWH
22 as..during prophylaxis?
23 #P:No..not true.
24 #R2: Not true?
25 #P: aaaa...ok, because you have to look into who died.
26 #R2: Who died?
27 #P: I mean, you have to analyze the data who died whether the screen has given? Right. In Sarawak,
28 the number has dropped and it continues to drop like I told you
29 5 years before and 5 years after. it has dropped. But the rest of the country is raising. aaa...we
30 analyzed the data because I also wanted to know before we set
31 the guideline for national guideline, I want to know, who died? right? and what are the features risk
32 factors and the....of those who died, 90% has risk factors.
33 ok, 90% has risk factors, at least 2 risk factor, basically in the assessment, if you have 2 risk factors,
34 that is the score of 2, then after delivery you will need 10 days
35 for prophylaxis, there is 90% of those who has the risk factors. So, that is a very high propotion. In
36 the UK, when they did the assessment, only 70% has risk factors.
37 the women that died from pulmonary embolism. So Malaysia is even higher,90% that's means you
38 can screen them and if you can screen them and give thromboprophylaxis,
39 then you can prevent 70% of death. I'm not saying you can prevent 100%, there are women you give
40 thromboprophylaxis, and they still die. because their risk is so high
41 that dose is not enough. So Malaysia is 90%, and the other interesting thing is the ceaserean section,
42 those who thatdied after delivery, 90% has ceasearean section.
43 So it's veryyy high risk the ceaserean seaction in malaysia, in getting pulmonary embolism. Now if
44 you asked me how many of were actually screened? Less than 10%.
45 very few. so meaning in Malaysia, those women that who still died, they are not still screened. The
46 hospital still not screening. They are not used to doing this
47 program. but over the past one year, they are starting to screen. only very recently. Sarawak just
48 started much earlier. but the rest of the country is only starting
49 to screen it.
50 #R2: Dr, aaa maybe..
51 #P: yess..

1 #R2: Can I ask? Just now, you said that you had written chap..a book chapter. a book chapter of VTE?
2 #P: On the VTE lah..
3 #R2: Can I have that..
4 #P: Nope...It's 2010 to 2012 it is published. already published. already published.
5 #R2: Already publishehd?
6 #P: Yeah, 2012..Oh sorry..sorry..did I say 10 ...no no no..2012 to 2014, It's going be available online
7 within one month. Bahagian Kesihatan Keluarga because
8 the report just finished you know, slow.
9 #R2:we couldnt have it la now?
10 #P:KKM also doesnt have a lot money. So they just only printed it for the states. so very few copies
11 but it is going to be available online and then get it the full
12 report. When exactly on Tuesday, on last week, no this week tuesday, when I attended the meeting,
13 they say very soon because it's ready. and it will be in the
14 Bahagian Kesihatan Keluarga website KKM. so you will get the full report. But this with 41 death,
15 sorry because it's slow, I already have the data for 15, 16 and 17.
16 because that next three years, that is the death 24, 24, 23. But I have not look at the individual data,
17 the 24 12 and 2014/15 in 90% 90% is the data I'm giving you.
18 It's based on 2012 to 2014. I know this because I write those chapters. but 2015 to 2017 I'm not
19 written the chapter so I dont know the details of those cases
20 that rises to 71. So, the breakdown is 2012 to 2014. not 2015 to 2017. except the numbers. They
21 only provided me the numbers not the details of the cases of the
22 2015 to 2017.
23 #R2: Dr, may I know..aa...why Sarawak is advance in using LMWH compared to other states ni
24 Malaysia? Is it in terms of budget or religious perspective?
25 #P:ok. Neither. hahahah.
26 #R2: Neither?
27 #P: Ok, that why I told you initially why I initiated the program, it's because I want to reduce
28 maternal death. To achieve MDG'5.
29 #R2: Yes.
30 #P: That was my terget. So before that, I wasnt also screening, so I started that program because I'm
31 looking at reducing it as what I want to do la for hospital
32 Sarawak. So, I said that Sarawak is huge, there is very few specialist in hospitals, I cannot be saying,
33 reduce post partum of haemorrhage because the number of people
34 I have to train to reduce it not possible within 3 to 5 weeks. So the only way program which can
35 bring it down to make the different is something where you dont need the specialist.
36 You just need a program. A paper to screen and simple procedures to reduce it. So that the easiet
37 way. The easiest to reduce maternal death is preventable,
38 is VTE program. You dont need machine, you dont need..
39 #R2: Dr, I thought in Semenanjung, ummm..the mothers..aa especially Muslim mothers they prone
40 to religious perspective before they make decision to accept..
41 #P: I understand that...If you look at Sarawak general hospital, when I say 80 to 85 percent, it's
42 among of Muslim lah. Of course th non muslim will just take it.
43 Right?
44 #R1: Ya..ya..
45 #P: If you said the number of Muslim come to 60%. It's around 60 to 50 percent la.when I say
46 acceptance 80 to 85 percent is amongst Muslim not in general.
47 In general they will accept because they dont care whether it's porcine or not. And that is one other
48 thing that I must tell you. which is from the data 2012to 2014, which
49 people dont know. You know, when we find out the risk for each race, because of the number of
50 cases you have, then you can based on the number of death within

1 Malays, within Chinese and Indian. you can actually to look what is the risk for each race. Now, I've
2 got interested in this because during 1 of the presentation
3 by Singapore proffesor, during the O&G society and what he put up on the board Singapore cases of
4 maternal death from pulmonary embolism, he says that the Malays
5 have a much higher risk in Singapore, of getting pulmonary embolism. dying of it..
6 #R2: In Singapore?
7 #P: Yes in Singapore. In fact, he says, perhaps being Malay is a risk factor?
8 #R1: Hahaha
9 #R2: Why? haahahaha
10 #P: No..no..I'm not kidding...and when I was told that, I better look at Malaysian data, so I looked at
11 the data of 2012 2014,
12 #R1: This one?
13 #P: Hah? Yeah...Hey how did you get that?
14 #R2: Aaa from KKM.
15 #P: Is it ? I looked at it. I'm the one who give them the data.
16 #R2: This is collection..I thought..hahah
17 #P: I need to look to the data to see why...because this is something which is not common. That why
18 people dont believe in it because aaa the risk of getting
19 deep vein thrombosis and pulmonary embolism is 1 in 1000. Pregnant women, it seems very small.
20 and dying from it just aaa probably is 1 in 100,000. Nobody was
21 true. one of died from it is about 5. so compared to UK, because one thing they say, this is western
22 disease. Ok, Malaysian not Asean.. you know the MMR, maternal
23 death risk ratio or specific for VTE only aaa..for UK and developed country is 1.13 per 100,000 lah.
24 That's mean 1 of 100,000 will die but Malaysia actually 3.5
25 per 100,000. It is aboout..ok I dont know..I forgot the figure but it's 5 times higher. Actually
26 Malaysian women have 5 times higher risk of dying pulmonary
27 embolism compared to UK. So if you say disease of occasion, it is totally not true. right? Maybe they
28 die because when they get it, the management is not so good.
29 maybe it's part of the cause but I cannot say lah. you know what I mean. Basically, the number of
30 those dying is 5 times higher compared to UK in terms of per 100,000.
31 right? And if you look at the risk, then the Malay is much higher the the chinese. Indian I cannot say
32 because the number are too small. out of 100,000 can be 30,000
33 #R1: How do you look Dr? This number or the percentage.
34 #P: No, you have to look like this, because this is based on population. So, if the number of Malay of
35 giving birth, out of 550,000, usually 360,000. so 69 you cannot
36 say of course there is more Malays and definitely more will die. right? So you will look at this
37 because when you look at the ratio, that's mean per 100,000.
38 then everything will change to per 100,000. So you have to look like this. So if you look like, the
39 Malays is 3.64, whereas the Chinese 1.67. So 0.67 is how many
40 hah? I didnt calculate them. The Indian is not true. The reason why when I said the Indian is not
41 true? when the numbers are small, the the number will be excused.
42 right? But I I think it's higher than Chinese right? except I cannot say that 2.63 is very correct. but the
43 Malays is correct because the numbers are huge. and the
44 chinese is the second largest number la..that is how many..?5 times higher. Is it? Ha..It's ok. it's not
45 calculated. so, 5 times higher. so I might look at the 2015 to 2017,
46 data to look at this risk again, and it's consistency like that, I might just add one more, if I review the
47 guideline, I think Malay the race as a score 1 because
48 remember I've been taken out the age and parity to reduce the cost, The lady that Itold you with 91
49 kilo, is I follow the guideline she wwill not being given
50 thromboprophylaxis antanatally. Only post natal,
51 #R2: Because of lower risk?

1 #P: Yeah, because actually her BMI 41. BMI of 41 is a score of two. BMI 30 score 1, right? She is 42
2 years old. There is a score 1 based on green top, and her parity is 5.
3 so actually there is another score, is you follow the guideline from UK guideline, it's a score 4. she
4 need thromboprophylaxis in the time of booking until after delivery.
5 but if you follow my guideline, it's only score of 2 because we've taken age and parity. so she would
6 not been given antenatal thromboprophylaxis, but she will be given after.
7 the only thing is you should give, pect..because of her weight, probably 95, 96, you should be given
8 low molecular weight heparin, because unfractionated heparin is
9 not effective. but I'm not sure even if you give the clexane, whether it prevent the PE? Because 95%
10 of all pulmonary embolism comes from deep vein thrombosis,
11 and that DVT probably occur in antenatal period, it cannot suddenly ceaser in 24 hours ago you
12 develop a clot yet and travel to the lung, right? and the way to prevent the PE,
13 is to prevent DVT, and you know 4 hours ceaser is not enough time because that DVT probably
14 occurs earlier antenatally. but I want to reduce the cost, aaa...so we still going
15 to look at the data, based on the current guideline because it reduces the cost 60% but how many
16 death does it prevent if it's implemented by all.
17 #R1: intermediate?
18 #P: intermediate risk lah..
19 #r2: There is a question about moderate risk. right now they call moderate risk right? score 3. yes?
20 among of those who grouped in moderate risk mothers, aa among of them
21 there are..some of them refuse to get LMWH, even though they need to prescribe with LMWH for
22 prophylaxis term, and some of them, refuse and some of them not prescribed at all,
23 so between these groups which one is higher to get LMWH? Diagnosed LMWH?
24 #p: lmwh?
25 #R2: Aha..
26 #P: I dont understand your question. hahahaha...get confused.
27 #R2: Among of them...among of them of those who refuse LMWH, some of them wont be prescribed
28 at all,
29 #P: Oh both didnt get bah?
30 #R2: Haa..both didnt get, among of them...both of them...how to say aaa..which one..which one is
31 higher to get VTE?
32 p:aaaa..ok, but you say that both of them didnt get the VTE right?
33 R2: Yeah because moderate risk is not required to get LMWH by confirm. Meaning that, doctors will
34 cover with LMWH,
35 P: not anymore.
36 R2: Not anymore?
37 P: This is where people get confused because it high risk, intermediate risk and low risk,
38 R1: Is the term is correct?
39 P: No, there is term like that.
40 R2: Moderate risks, intermediate risk..?
41 P: Yeah..yeah...Ok let me explain it this way. The green top guideline, when they describe this, they
42 describe low risk, no need. then intermediate and high risk. Both of
43 intermediate and high risk need thromboprophylaxis.
44 R2: But as I know before this, some medical specialists O&G said, only some of them from moderate
45 risk will be prescribe with LMWH.
46 P: That is not true.
47 R2: But this what I got from..
48 P: I know... It's doesnt matter what they say, because I've been doing this for while, so I have fret
49 many times, Ok, let me put it this way,...ummm...you know
50 there are a lot of risk of VTE?
51 r2: Yeah..

1 P: So...how the green top guideline trying to make it simple, if you say you have this this this, or you
2 doesnt have this, just few low risk, you have this risk,
3 you called intermediate. and that one there are few. previous episode of VTE, become high risk,
4 right? but people tend to forget combination. some may have one of it
5 of the intermediate, some may have a few. right? and..so that 's why scoring system is how you go
6 with it. not low risk, intermediate and high. then people get
7 confused, aaa the new...I mean the the guideline lah I've created, actually I can give you a book, I
8 have a copy. of the new guideline. aaa...there is no such thing intermediate,
9 low risk and high-risk, because I know it will confuse people, so it just based on scores. because all
10 the list on one side, and beside you just can tick, risk of score
11 of each one. and you just have to tick, when once you tick, you just score
12 R1:there is small score sheet like this one.
13 P: Yeah...when you score you have a number. Of course the score can be zero, 1, 2, 3,4 even higher
14 than 4. But it doesnt matter when it's higher than 4, you just need until 4, right?
15 so antenatal if you tick at booking and it less than 3, you dont need thromboprophylaxis, but if score
16 is 3 or more, if it 3, you have to give thromboprophylaxis,
17 from 28 weeks or pregnancy lah. if the score is 4, then you have to give from the time that you
18 score. that's mean, women come at 12 weeks, for antenatal booking,
19 then she should been given soon after that lah.so that is easier to do, right? so, it's based on score.
20 not as low risks, intermediate or high but if you want to base
21 on scoring you can look at any guideline, the guideline will say intermediate you give, the duration
22 maybe different but you must give. so..the specialist will tell
23 you this, they didnt understand the concept well.so, the Malaysian one following the scoring. we
24 dont follow that, because when people look at that, people might
25 confused and they will misundstand.and the reason why I want to make it simple is because nurses,
26 MOs will have to score, the reason why motehrs continue to die,
27 because it's not implemented universally. That's why I missed. Out of 4 cases die in Sarawak, 3 of
28 them will not screened properly. otherwise, they will be given thromboprophylaxis,
29 but 1 of them was given late lah.so still die. aaa..so the success of this program depends when 99%
30 of the mothers are screened. you get what I'm saying or not?
31 and why mothers still die, because they are not screened. I know..and not screened by the hospital.It
32 is not yet universal.
33 R1: You mean, by screen giving them LMWH?
34 P:Okay. because so many talk about. I dont know where to start.
35 R1: Hahaha
36 P: We are now you know pink antenatal book, I'm also involved in renewing pink antenatal book. The
37 new pink health book will have scoring system.
38 R2: The new one?
39 P: Yeah, because the health side, health clinic plans to implemented nationally lah. eventually
40 whether this year or next year, or mother is coming to the
41 government antenatal clinic will have the score. and once they have to follow the guideline whether
42 they need thromboprophylaxis or not.
43 R2: Dr, I have a question.
44 P: Aha..
45 R2: According to your experience, do you know which patient has higher mortality despite being
46 given LMWH prophylaxis?
47 P: Ok, very good question. I told you when we give, we only prevent 70%. That's because women just
48 like getting cancer la hoo.. some women are at very high risk
49 getting cancer because genetic, that's you need to remove your breast and remove you ovari before
50 the cancer occurs.right? screening alone may not be not enough.

UNN

1 so there are some women who risk of getting blood clot, it is so high, actually the dose that we for
2 thromboprophylaxis is not enough. but we dont know which one.
3 because there are those where we screen for...emmmm...what is the name that
4 factor..aa..suddenly..
5 R2: Factor? Risk factor? Life style ?
6 P: No no ..
7 R2: Age?
8 P: Ok it's biochemical test that need to be done but test cost over 1000 ringgit. so, nobody does this
9 test. but it's a significant risk factor. Malaysian dont know.
10 but in Europe their own lab, they do this test all the time because cost is not problem for them la. so
11 they know the risk. one of the factors I have on the list is
12 antiphospholip..no no not antiphospho...I forgot! but if you look at the risk, it's among the top three.
13 but nobody know it is always empty in Malaysia.
14 because nobody does the testing, if they do in private, it's over than thousand ringgit. this maybe
15 amongst family where they have blood clot, and they want to know
16 their risk, they know and maybe they will take. There are women where the risk is so high, ok let me
17 give you the example.
18 You know Serena Vloom. right?
19 R1:yeah yeha.
20 P: Tennis player? ok, 11 years ago, when she was playing with Bouldan, she developed pulmonary
21 embolism. and she almost die.so she went to hospital there but she
22 survive lah. ok, then I think, one year ago she got pregnant,she married and she got prgenant, and to
23 tell you the truth, because of the episode of pulmonary
24 throughout the pregnancy, she was on thromboprophylaxis, then she had ceaserean section, and
25 after ceaserean section, even though she was on thromboprophylaxis,
26 she had another pulmonary embolism and almost die. I think she had multiple surgery to remove the
27 blood clot and all this thing, and you know the ranking file
28 number one to ten, it took one to one half year before she start playing again. so why does that
29 happened? because the risk is so high, that dose is not enough.
30 if we know that the risk is so high, we usually give three quater of the dose, not not thrombopro..it's
31 between the dose thromboprophylaxis and therapeutic dose,
32 therapeutic pulmonary embolism they need to give this dose la,
33 R2: But just now you said ,the tennis player she already diagnosed?
34 P: Before..eleven years ago. After she pregnant, then she need it because based on the scoring she
35 need. so she was been given. And yet while been given thromboprophylaxis,
36 she still get the pulmonary embolism because what she need is the thromboprophylaxis and high
37 dose to prevent it. Emmm...so that's why I said that it prevents only
38 70%. It does not prevent all. and of course, compliance also dont know whether they injecting
39 themselves or not. Now the different between unfractionated heparin
40 and low molecular weight heparin, it's need to give 10 days, not convenient for 10 days is ok, after
41 delivery la.but if you need it antenatally, to do it for months,
42 twice a day, it's very difficult for that women and because I dont want her to inject themselves, they
43 have to go to clinic, it's very difficult to find the clinic is opened at night.
44 R2: Clexane either should taken for twice a day?
45 P: No. Once a day.
46 R2: Once a day. compared to UFH?
47 p: UFH twice a day. That for thromboprophylaxis.
48 r2: easy than UFH.
49 p: Of courselah, as I told you... it's very difficult to ask women to take it you know, you need to
50 provide them syringe, needle. In Johor, they give that to the patient,

1 in all days they need, If insulin is like that, now insulin comes in pen lah. just easy..click..click..in all
2 dialysis, the patient need to learn to give. More
3 than 10 days lah, you cannot, because ifthe patient makes the mistakes, you tell me you want to
4 blame the patient you yourself instead of injecting it? right?
5 and because of giving twice a day, twelve hours apart, even if she go to the clinic which is next door,
6 the clini will close at 5 o' clock, so..so in Sarawak in
7 places we give 10 hours lah..10 hours before it's closed. Things like that. The problem with the
8 implementing the unfractionated heparin, because the dificulties in those things.
9 and of course the efficacy the loe molecular weight heparin.
10 R2: Dr, if we..if patient being prescribed LMWH for prophylaxis, 70% will succeed. seventy?
11 P: No..70% prevention.
12 R2:70% for prevent..
13 P:I wont say 100% because there are dose even though they need, well, I dont know whether they
14 compliant or not. I have case in Sarawak once, aaa she was on it,
15 antenatal that one, she lies, when we checked her house, there are a lot pen are not used. So, that's
16 mean she's not compliant lah.because she got pulmonary embolism
17 but she didnt die. because she came forward, we diagnosed it and we predict la..so she survive.
18 R2: Dr, do you have most recent data statistitic of CEMD?
19 P: The 2015-2017 I dont have. I only have numbers which is 24,24, 23 because I asked the person
20 incharge of those numbers, but the details of each, I have no. I dont have it.
21 2012-2014 only.
22 R2:Do you have the most recent statistic regarding pulmonary embolism prophylaxis?
23 P: Just now
24 R2:
25 P: 2018 still dont know.
26 R2: So, ca you tell your personal experience regarding propylaxis with anticoagulant which one is
27 most effective amongst of them, clexane, arixtra during...aaa..
28 P: Okay, let's talk about Arixtra la ya, The problem with Aritra is there is no research in pregnant
29 women. So we dont know how effective is it in pregnant women.
30 In non pregnant women, they have the data, Number two, it crosses the placenta. it also crosses the
31 milk, so when it crosses placenta...we dont know what will happen
32 to the baby la. because low molecular weight, it doesnt cross the placenta. so, whatever you inject,
33 it wont get to the baby. so even though the dose is small, the arixtra
34 does cross the placenta and goes to the baby. but whether it gonna causes bleeding or not, I have no
35 idea.so I dont dare to use it.because there is no data. you can get sued if
36 something happen to the baby and you say Arixtra causes it. and because it's not approved for use,
37 so it risky la ya you know for the doctors. For post delivery, it crosses little bit to the milk lah.
38 but what effects on the baby, I dont have any idea probably it's okay. but I dont know.
39 R2: Is there any case, if you use..aaa..if the mothers use the Arixtra, there is bleeding whatever...
40 P:Not than I know.
41 #R1: In case the mothers refuse to the cleaxane, so what do you use?
42 P:I use unfractionaed heparin lah because it's proven. It's approved in preгнаancy and safe.
43 R2: So, Arixtra wont be a better choice?
44 P: No. Arixtra if patient insist on it, you will to sign you will say that, otherwise, I will take the risk.
45 That is what I would say. right? aaaa..aaa..that
46 is what I do lah currently. Now, I know that I dont know whether UMMC still give Arixtra instead of
47 Clexane, Tinzaparin, I'm not so sure.
48 #R2:UMMC UKM?
49 P: UMMC UMIah. I was told lah they may be using it but the reasons...
50 R2: Ok, what's the reason?

UNN

1 P: No, the reason why I'm not using it as what I told you. because there is no data of effectiveness?
2 what dose is effective in pregnancy? that is the important
3 thing you know because you cannot based what isn't in pregnancy. It's different. You know,, in
4 pregnancy they are changes the blood the volume, and the level of drugs.
5 In pregnancy it's different compared to non-pregnancy. So if Arixtra is...does not have data, maybe in
6 the next five year, ten years, I don't know la whether
7 they do have or not but I don't think so. because they won't do research on this. then I don't know
8 what is effective dose. whether what you are giving is effective or
9 is it like heparin? but heparin has been known. Less than 50 kilogram, more than 90, you cannot use
10 because it's not effective. then how is I can give Arixtra
11 when I don't know what is the dose that I should use? and whether it is effective or not?
12 and I might be giving something which is as effective as I hope it could be. so, using it like that would
13 be risky in my opinion. it has to be some evidence based la.
14 R2: Dr, the UFH similar to heparin?
15 P: UFH is heparin lah.
16 R2: Ohh
17 P: Unfractionated heparin is heparin.
18 R2: totally same.
19 P: Yes
20 R2: What is source of it?
21 P: Bovine..in Malaysia.
22 R2: In Malaysia, they use bovine source, they don't use porcine?
23 R1: Based on your expertise, can we conclude that in this case or this problem, aaa Clexane is better
24 than Arixtra?
25 P: Clexane is proven compared to Arixtra. How would I say it? I wouldn't say better because there is
26 no comparison. It's fair to say like that and what I will say is
27 low molecular weight heparin either clexane or tinzaparin is proven, whereas Arixtra is not. That
28 would be the easier way to say.
29 R2: But dr, there are some persons that perceive LMWH aaa..Clexane, then they got allergies in
30 terms of...how do we know..
31 P: Okay, the risk of it..
32 R1: That case I got from Sarawak. hahaa
33 P: Haa..okay, the risk of allergy the same with all injections. all medication. it is possible, but the risk
34 is low la. ok, you can have skin reactions,
35 when they develop that, then we stop it la.
36 R2: what is the choice after that?
37 P: Probably I will try heparin lah. then we will see whether she develop that or not? and also depend
38 on risk. emm but rare lah..now you can have reactions to any drugs lah
39 any injections including heparin, clexane or Tinzaparin or whatever you use lah. There is possible
40 risk.
41 R2: There is...this one. Is there any local data or published data to show the effectiveness or
42 reduction of incidence thromboembolism such as mortality such as
43 after the implementation of the LMWH?
44 P: there is...sarawak lah. the number of death lah. if you say the number of death, Ok, emmm
45 Malaysia is not very good in registry lah ya, you know, but sarawak
46 has the maternal death, so you can use that, before and after as I said five years before 15 cases and
47 after that 4 cases after five years.
48 R2: so can I make Sarawak as my..
49 P: Ya lah..70% dropped.
50 R2: Is that because Sarawak has got big budget?
51 P: No...okay..argghhhh...

1 R2: because..

2 P: This is the thing...Clexane is not a new drug. I told it was introduced in Malaysia in 1999 near 2000

3 right?so it is already rare.right? drug usage is based on

4 how much you use. yes. because the cardiology will use. others will use it and when you have

5 pulmonary embolism you will also have to use it. the only difference is

6 the thromboprophylaxis based VTE program. So, when the state agrees to do that, I also do one step

7 further which is aaaa...sarawak is huge. specialist hospital is few

8 and clexane is specialist item. So, I actually put a small stock available in health clinic. meaning they

9 will have about 10 pens. In clinics, we have FMS.

10 Otherwise patient will be so far. When I've introduced the program, I want easy implemented. So I

11 did that. as the program continues, obviously suddenly the

12 pharmacy rises in the number of usage for the need of clexane and tinzaparin. and so I just say that

13 aaaa it reduces maternal death. So the question would be

14 how much the mothers' life cost? right? and that is what I say it...and fortunate for me, the state

15 Pengarah, Pengarah of the state support. Sarawak's MMR is always

16 lower than the national MMR. Despite being... Sarawak lah. despite all that thing and the...

17 R2: Before introduce clexane, mortality in Sarawak..

18 P: It's just same..

19 R2: same?

20 P: same as the national one. it's about 30, 25,28

21 R2: after LMWH, it proved that mortality dropped.

22 p: Of course it dropped. In 2013, we achieved MDG'3, it's about 9.3 per 100,000.

23 R2:only sarawak?

24 P: Only sarawaklah.

25 R1:Why other state dont follow ?

26 P:They dont follow the program? So I've started the program by a year program, in 2012, Sarawak

27 MMR maternal mortality ratio per 100,000 is 29. in 2013, when I introduced this

28 program, it become 9.3 per 100,000. MDG'5 was 11. Of course, to keep 9.3 all the time is difficult. So

29 after 9.3, the next year is 15 I think. and then after that,

30 it fell to 9.3 again.So, the last five year, it always been much lower. Then the Malaysia MMR, and the

31 size of Sarawak is the size of Peninsular. we've only four

32 specialist hospitals.

33 R2: Sometime, it come across to my mind that aaa why Sarawak is allocated...

34 P: No it's not..it's not..

35 R2:because of big budget..

36 P: That is every state O&G HOD says, why sarawak is special you know, It is not...it is not because

37 R2: Or because the demand is rise and then..

38 P: No. because when you need it, they have to give it. right? The state also asked from KKM, this is

39 the need. and as I said, clexane is not a new drug, it's an old drug

40 same like if you need certain antibiotic ffor example, or let say insulin, and suddenly the need rise

41 because more diabetic for example in the state, then KKM have

42 to supply the money.

43 R2: But there are some specilists said, LMWH such as clexane, they have you know...we need a lot of

44 budget to get that one, so you even though we ask for that LMWH,

45 then government that budget, so they just use heparin.

46 P: Haihhh..why...how should I answer this haa...

47 R1: Hahaha..

48 P: Belum cuba belum tahu.

49 R2: So this is your

50 P: yeah, because what I said is the program brings effect. reduces maternal death and you tell want

51 to build hospital but cant give an extra million, or to buy the drug

1 that you need. So the state pengarah will ask for it. and usually they will get it. Aaa..so everybody is
2 blaming me for this..because of problem like that..but I'm
3 not creating the problem. As I said, nothing new. because since 2008, the CPG said you have to do it.
4 R2: Yes..yes.
5 P: The only thing is I did it la..and when I did it, I know I did it across all clinics and all hospitals, that's
6 why it works. you do it in some hospitals but it won't
7 happen.
8 R1: So dr, how did you deal with Muslim patient who refuse to take...?
9 P: Ok..ok..first of all, counselling. the counselling...my consent form is both in english and malay
10 la..there is in Malay and english...there will be explained as to
11 what their risk? their risk is high. ad what are drug available. that one drug which is clexane? this this.
12 One...I think it's porcine base but the last molecule
13 in the end, there is none. All right, and if say there is alternative, they also return the consent the
14 alternative and the alternative is including unfractionated
15 heparin. and we also explain but the problem with heparin is of course it comes in pile, twice a day
16 and it's very difficult to train patient to do that.
17 that means, they need to do it before clinic to do it. The patient as I said, 15% of them, Ok I know the
18 figure wanted to ask their husband.
19 R1: 15?
20 P: One five lah. so we said, you'll come back later, we ask the husband, and sometimes we explained
21 both to the husband, and the patient. and then they let us know
22 whether they decide with low molecular weight heparin or heparin lah.
23 R2: Which group aaa..the one that you said before that you..
24 P: I don't know loo..
25 R2: Which mother? moderate mother or high risk mother?
26 P: Both..
27 R2: Both?
28 P: Because I based on scoring.
29 R2: How about the low risk? low risk you will..
30 P: Low risk no..I don't..only those who requiring thromboprophylaxis will be explained. Those who
31 don't need, we don't explain. so..antenatally they don't need, we don't explain.
32 but post natally, if they need, we explain. and then once they agree, we train them how to inject the
33 clexane. The pharmacist will come and explain to them how
34 and then they inject themselves then we provide them lah. If they require 10 days, we provide eight
35 of that syringes and they go home, then to make sure they take it,
36 when the nurses do the home visit, we ask them the syringe they need to put inside mineral bottle,
37 you know the used one, so we can calculate whether they compliant
38 or not. That's how we check whether they ready or not, rather they don't give lah. those who doesn't
39 want it, then we prescribed them unfractionated but unless they
40 say they want to try themselves or their doctors or whatever, we give them the pen, the syringe
41 lah..I mean the syringe and the needle. If not, we only provide the ampule
42 of heparin and they have to go to health clinic or their GP for them to take and inject lah 1 ml twice a
43 day.
44 R2: Do you get any help from officer? Jabatan...
45 P: No, because too many, otherwise they will put one person there lah to do it. No we don't.
46 R2: dr, do you have any journals, maybe you can tell us the link to get the free access.
47 to get what?
48 to get free access about journal that you compile cases among pregnant women,
49 Aaaa..
50 Do you have any journal because I...

UNN

1 There are many journals, i think the best one if i give you the link to the green top guideline, 2015,
2 and you will have many link at the end, the references.
3 I mean aaa..regarding the Sarawak case
4 journak of sarawak, I never published that.
5 oh never published. oHH unfortunately...hahaha
6 R1:only cases for KKM
7 P: Haa..yeah..have the data, but actually ai never publish it.
8 How about the consent form? where can
9 I can emailed you.
10 R2:It's ok about the consent form. But now I wanted to prove for my thesis either, for this research
11 sarawak proved to reduct..to experience their reduction after
12 use LMWH among pregnant and puerperium for those who got ya lah VTE. How to cite that? I need
13 the journal, and publsiehd data..
14 P: Haa. ok ok,,unfortunately I not published...CEMD report not specifically say sarawak also. so..i
15 have to publish like that.
16 it's ok
17 it will take a long time to published.
18 Is there any other things you want to ask?
19 Maybe the last one, do know what we call it islamic term istihalah? The transformation
20 The transformation? No, I dont know. Hahaha..
21 R2:the tranformation
22 p: Ha..the transformation of the..
23 R1: The porcine to medicine. hahaha
24 P: Oh i see....no, i dont know
25 R2:You know how clexane being made.
26 P: Aaa. that one you need to talk to ask Sanofi lah. because that process. I font know about all that
27 process, all I know is I asked them for the lab report to
28 show that there is no porcine lah. and I think we show it to the mufti,
29 R1: So you engage with the muft through Dr Mardiana?
30 P: Mardiana.
31 R2:Mariana?
32 P:Mardiana. She's now the head of O&G in UNIMAS lah. Mardiana Kiply...
33 R1: Maybe we can interview her.
34 P: Cannnn..UNIMAS.
35 r1: Ok, So...
36 P: I can give you her number.
37 R1: Thank you very much Dr.
38
39
40
41

UNIMAS

INTERVIEW WITH PHARMACEUTICAL EXPERT, PROF AZIZI AYOB(MMU)

PROF AZIZI: So soalan ini saya akan dapat soalan standard atau saya boleh dapat daripada pihak lain.

ZIZI: Daripada first round kita dah interview 9 orang pakar medic, 8 orang pakar Syariah, 3 orang farmasis. Tapi soalan berbeza ikut bidanglah. Kalau medical, kita tanya berkenaan medical lah. Kalau farmasis, clexane tu dari sudut farmasis. Dari segi Syariah, kita tanya dari segi Syariah lah.

PROF AZIZI: Saya baca tadi saya tak sempat nak buat...saya baru balik dari workshop soalan ni dah baca Cuma tak sempat nak bagi exact..this akan prepare jawapan yang lebih tepat..yang mana saya boleh jawab, saya jawab.

ZIZI: Jadi saya mulakan dengan *introduction* sikit. Aaa kajian ini *disupport* oleh syarikat pengeluar clexane, iaitu Sanofi dia punya induk dekat Franch, dia ada cawangan di Malaysia, Brunei, Singapore lah. Jadi tahun lepas, Prof Dr Irwan, dia dijemput ke Hospital Seremban untuk bercakap dalam satu seminar, tentang istilah dalam perubatan. Jadi Prof Rashid, doktor pakar An-Nur dan Dr Jamilah Satar, ada sekali diorang terangkan clexane digunakan secara meluaslah dan diizinkan oleh KKM. Tapi di sana fatwa sudah dibuktikan bahawa tahun 2009 menyatakan prohibited lah. Jadi Dr Irwan suggest satu kertas kerja dibuat lah oleh KKM untuk review balik fatwa sebab xharmoni. Tapi sebaliknya KKM tak usul, syarikat pengeluar dia yang taja untuk buat kajian ini. Dan kajian ini, dalam masa yang sama tajuk PHD sayalah. Jadi nanti saya mulakan sikit dengan demografi prof.

PROF AZIZI: Jadi tajaan tu macamana?

ZIZI: Tajaan tu geranlah.

PROF AZIZI: Geran research.

ZIZI: Aaa geran research. Dibawa plimji kat USIM.

PROF AZIZI: Nanti nanti jadi conflict of interest ke? Sebab geran daripada...saya tanya je sebab nak faham. Sebab geran dari syarikat tersebut, product dari syarikat tersebut. Tapi kalau result tu tak menyebelahi pihak diorang, tak ke nanti nampak...

ZIZI: Di awal kajian ini Dr Irwan sudah beritahu pada pihak Sanofi, kami akan usulkan kertas kerja, akan buat kajian dan present ke muzakarah fatwa, tapi jika muzakarah fatwa tidak menerima..maksudnya di akhir tak approve juga...itu di luar bidang kuasa kita lah. Dan pihak Sanofi agree dengan perjanjian tu. Mungkin kita mulakan dengan demografi dulu, nama, jawatan,

PROF AZIZI: Nama saya Prof Azizi Ayub. Jawatan Timbalan Pengarah Institute For Research, Development and Innovation, Kepakaran farmotologi bawah School of Medicine. Prof satu dn timbalan pengarah. Kepakaran saya Demical Dermatologi, dan juga saya ada industri experience lebih daripada 10 tahun, disamping saya mengajara, saya juga berkerja di industri farmasitikal. Sekarang lebih kepada penasihat. Pengalaman bekerja lebih daripada 22 tahun. Lebih 10 tahun saya dalam bidang farmasitikal, pembangunaN ubat-ubat, vaksin dan sebagainya. Menang sebahagain daripada area sayalah. Ubat-ubAt daRipada pembangunan ubat, RnD manufacturing, saya dulu sebagai council halal di UUM. Saya banyak terlibat dengan program projek HALAL.

ZIZI: Soalan seterusnya, apakah low molecular weight heparin dari perspektif farmasitikal klinikal, ciri-ciri dan fungsinya untuk apa?

PROF AZIZI: Sebenarnya dari segi definisi, soalan ni mungkin tak tepat soalan ini sebab low molecular weight haperin satu contoh of ubat yang digunakan dalam konteks coagulant kita panggil. Itu grup ubatnya. low molecular weight haperin satu contoh ubat yang digunakan untuk mencairkan darah

dengan Bahasa mudah, dalam bahasa perubatan dipanggil anticoagulant. Ubat ini digunakan sebagai bentuk penyakit atau sama dan untuk penggunaan secara aktif ataupun prevention. Jadi *low molecular weight heparin* digunakan heparin untuk orang yang baru kena contohnya strok, ischemic heart disease aaa..lagi apa..

ZIZI: kardiologi?

PROF AZIZI: Ha tu kardiologi..itu IHD..haa contoh penyakit dalam kardivaskular. Ataupun orang ada kelainan daripada esktririgulation, jantung dia berdegup tidak ikut cara yang normal. Orang yang kena herat attack tadi, ataupun strok ataupun untuk...kalau orang perempuan waktu mengandung pun mereka diberi untuk penyakit-penyakit yang saya nyatakan tadi lah.

ZIZI: Dan kajian kes..study wanita mengandunglah. Fokus wanita mengandung dan selepas bersalin sahaja.

PROF AZIZI: oh ok

ZIZI: Wanita mengandung dan juga...ok...jadi apa kandungan ubat pencair darah clexane ni?

PROF AZIZI: Clexane ni adalah sebahagian daripada...bila kita kata kandungan ubat ni, kandungan ubat cecair ada dua kandungan utama, iaitu bahan aktif ataupun dalam Bahasa perubatannya actiffamostikal ingredient dan juga dia panggil eksipian. Eksipian ni bahan tambahan dalam ubat. Detail tu anti saya akan bagi. Sebab dia..dia punya ni...Jadi clexane...atau juga ada nama lain atau kita panggil fonda? Apa tadi?

ZIZI: Fonda...fondaparinux

PROF AZIZI: fondaparinux yang tidak mengandungi...

ZIZI: Bahan halal..alternatfi...sintetik...

PROF AZIZI: Haa konsep yang sama. Ini semua sintetik. Maksudnya di replicate mengikut system lebih kepada Bahasa-bahasa perubatan....replicate ataupun dicopy.

ZIZI: saling cetak..

PROF AZIZI: di saling cetak...dan diproduce dengan lebih besar. Apa-apa tujuannya, setiap ubat tu ada dua jenis ini lah. Bahan aktif dan bahan bukan aktif. All right, itu secara general. *You guys* ada perbincangan details ke untuk setiap soalan ni? Tak ada? Jadi tahu grup je lah? Apakah tentang istilahah ni? Sebenarnya saya dah buat paper saya. Cek dengan saya punya internet...website saya..memang saya dah buat dalam five pages review mengenai istilahah. Saya tunjukkan. Kat situ saya dah bincang details...aaaa...

ZIZI: tahun bila?

PROF AZIZI: 2016 tak silap.

ZIZI: Oh lima tahun kebelakang.

PROF AZIZI: Ramai yang guna saya punya paper. Ada keluar dalam medic.. ada dalam blog blog lah.

ZIZI: Artikel ke macamana?

PROF AZIZI: Aah artikel. Saya tulis atas nama saya lah.

ZIZI: Kalau jurnal tak ada ke?

UNN

PROF AZIZI: Jurnal tak ada.

ZIZI: Tak apa, saya refer nanti sebagai suggesetion. Pada pandangan prof sendirilah ya. Ok pada pandangan prof ubat-ubatan kat Malaysia sekarang ni, memang akan ada campur tangan manusia, sebab kalau dalam istilah istilah ini...Imam Shafie memang tak akan terima lah sebab ada campurtangan manusia. Pada zaman sekarang ni memang begitulah hakikatnya, akan ada campurtangan manusia. Apa pandangan prof dengan isu ini?

PROF AZIZI: Sebelum tu kita kena faham maksud istilah dulu. Dalam istilah ada dua kaedah..dua kefahaman. Ada yang mengatakan istilah itu mengalami bio-transformation iaitu ia mengalami perubahan dalam bentuk asal kepada bentuk baharu. Jadi berlaku perubahan pada mekanisme dia, daripada struktur dia, bentuk dia, dan juga pada fungsi. Dengan kata lain, benda yang terbentuk dalam proses perubahan ni, dalam Bahasa inggerisnya transformation, bahasa arab istilahah, dengan beberapa perubahan ini, makai akan berbentuk sesuatu yang baru. Dengan kata lain, konsep dia adalah hukum yang berlaku sebelum istilahah tidak boleh digunapakai kepada hukum ataupun perubahan yang baru. Itu satu. Itu adalah satu kaedah. Kaedah yang kedua adalah dalam bentuk perubahan struktur baru, struktur baru itu tidak jumpa unsur-unsur yang asal dalam berlaku istilahah tersebut. Dengan kata lain, unsur yang baru itu adalah dikatakan sebagai unsur baru yang tidak boleh ditrace, dimana asalnya. Dengan kata lain, hukum baru itu mestilah independance. Tetapi menurut syafie, yusuf al-qardawi pun, pada peringkat awal tu saya memang tidak setuju dengan yusuf qardawi lah, bila saya baca balik, sebenarnya saya berpendapat sama dengan dia, sebab macamni, unsur yang baru walaupun berasal dari unsur yang asal dan kefahaman kebanyakan mufti di Malaysia ataupun Jawatankuasa Fatwa, dia menggunakan...juga ada dalilnya...sebab apa asalnya macamni ya, konsep istilahah sebenarnya sumber Al-quran, dan ada sumber-sumbernya lah. Istilahah dan perkembangan sains dan teknologi dia kata...mana-mana pemakanan, ubat, substance...yang asalnya unsur najis, asas tu adalah dikira sebagai najis, walaupun ia tidak dapat membuktikan pada proses asas tu dia ada. Faham ya. Saya campurkan unsur babi, saya tak boleh trace pun sebab usurnya dah tak ada. Jadi dari segi kawan sehingga sekarang ...scholars...struktur eliminated tu masih mengatakan itu bukan istilahah. Jadi dengan kata lain, dalam konsep perubatan istilahah tidak boleh digunapakai. Itu saya nak...aaa kena faham yang itu dululah, Jadi kalau dalam *you* punya PHD ini, sekarang ni *you* nak guna konsep istilahah yang mana? Kena jawab yang itu dulu. Kalau katakana istilahah tadi u ambil part yang pertama tadi, maka, nanti bila u prepare paper nanti, *you* kena justify kan dulu kaedah istilahah. Baru projek ini boleh masuk. Saya bukan nak ajar u...tak..saya nak beritahu supaya u faham dulu. Itu konsep dia. Sebagai persoalan nya, saya nak jawab juga, benda ini bukan aplicabile sahaja kepada heparin, sebab sebahagian ubat-ubatan yang dibuat dalam perubatan moden kita menggunakan unsur-unsur bukan halal sebagai eliminated. Yang tadi saya ceritakan ubat ni ada dua unsur utama aktif...kita panggil esipian. Ini katakan produk akhir..X...tapi dalam proses...ni kita katakan proses ya...unsur-unsur non-halal boleh berlaku di sini...di sini...di sini...tetapi ia tidak semestinya wujud di peringkat akhir. Sebab apa? Benda-benda ni contoh esipian kita gunakan yang non-halal tu sebagai penstabil ...ejen penstabil...penstabil...aaa aaa untuk mengekalkan warna dia. Contoh...statik supplying agen, ada lahi ialah...penstabil supaya menunjukkan sifat yang baik lah. Atau pun, kita gunakan dalam proses sahaja...dia bukan unsur asas. Kita masukkan, supaya struktur ini boleh berubah..supaya saya nak ubahkan unsur asas adalah pepejal, jadi saya kena campur dengan bahan non-halal untuk mengubah ini kepada bentuk serbuk. Tapi ia bukan tujuan untuk memberi kesan tapi untuk tukar struktur sahaja. Haaa...jadi dengan kata lain, ini pun istilahah. Sebab asalnya apa?

ZIZI: Tapi non halal pepejal lah?

PROF AZIZI: Haa ini dia pepejal. Tapi ia bukan aktif tapi kita perlukan dia untuk mengubah sifat dia daripada serbuk. Jadi istilahah ini boleh digunapakai dalam berbagai-bagai keadaan. Samaada, saya

UNIN

cakapkan tadi, unsur asas, atau unsur yang digunakan untuk mengubah sifat. Jadi semua ini kita panggil proses ...kalau berlaku...kita panggil...dalam Bahasa perubatan, bio-transformation lah, berubah sifat. Tapi tidak semua bahan-bahanlah. Berbalik pada soalan tadi...istihalah...apakah konsep istihalah dalam ubat-ubatan di Malaysia? Konsep istihalah ini, perlu digunapakai dan dia akan menyelesaikan banyak maslaah. Untuk penggunaan aplikasi pembuatan berunsurkan gelatin. Habis, selesai masalah. Itu jawapan saya.

ZIZI: Tapi bila prof tunjuka tajuk ini prof, saya teringat...di awal-awal masa saya study saya memang baca dan download letak dalam Mendeley tu...mungkin saya tersalah faham kot, diakhir saya faham prof tak prefer sangat istihalah dalam perubatan kan?

PROF AZIZI: Betul...betul...

ZIZI: Maksudnya, kalau kita tengok pendapat Qardawi tu memang dari Hanafiah lah. Hanafiah ini ia mengharuskan sebarang jenis istihalah, kalau syafiiyyah, dipegang oleh ulamak Malaysia, mufti-mufti muzakarah semua, memang syafieyah lah. Tidak menerima istihalah. Hmmm

PROF AZIZI: Ini maksud saya ni. Saya terikat kat situ. Saya tidak menyatakan saya against mana-mana kat sini ya. Peranan dan gabungan pihak berwajib, JAKIM, majlis fatwa dan para saintis amat penting dalam isu ini supaya umum akan faham bila sesuatu fatwa dikeluarkan...umum hendaklah mengetahui dan beri penerangan sekali lagi, terangkan pandangan atas, memberi kefahaman kepada umum, aplikasi istihalah itu, ruang lingkup dan limitasinya. Maksud saya skop inilah. U nak apply kat mana? Nak apply kepada semua ke? Istihalah tu, ataupun bahan-bahan sahaja, ataupun proses...ataupun apa? Haa tu maksud dia.

ZIZI: Kalau as long dia ada dalam proses perubatan tu?

PROF AZIZI: Kalau benda tu traceable...kita dalam perubatan panggil traceable, itu bukan istihalah. Tidak ada masalah. Tidak termasuk dalam istihalah.

ZIZI: Tapi kalau dia tak traceable?

PROF AZIZI: Kalau tak traceable, dia dah jadi sifat yang baru...

ZIZI: Walaupun ada DNA dalam tu?

PROF AZIZI: Haa DNA traceable. Jadi sekarang ni kalau traceable, sebenarnya defenatelly out. Unsur asas dia masih lagi berada di situ.

ZIZI: Dia kalau clexane ubat...kalau dia traceable DNA

PROF AZIZI: Kalau DNA...kalau saya..sebab sekarang saya sudah faham, kalau DNA saya aconsider sebaba non-traceable.

ZIZI: Non traceable. Haha

PROF AZIZI: Haa sebab dia tak nampak.

ZIZI: Maksudnya kena nampak dengan mata kita.

PROF AZIZI: Nampak...bukan...bukan...dia kena Nampak dari segi fizikal kaedah, pengecman. Kadang pengecman ni banyak. Satu molecular... satu kaedah kimia. Contoh saya nak sukat berapa kandungan yang masuk dalam air ini, selepas saya campurkan satu biji Ppanadol.Saya tak dia punya DNA, DNA hanya applicable untuk unsur-unsur yang menggunakan unsur-unsur biologi. Unsur-unsur kimia tak. Jadi saya boleh visible disitu, kalau unsur biologi, Traceable di sini adalah lebih kepada

kosentrasi...bukan dari segi DNA. Jadi dia ada boundry di situ. Dia kena faham, kat mana level nya untuk katakan istilahah digunapakai pada istilahah dan non istilahah. Contoh, gelatin, berasal dari unsur-unsur protein, dimasuk, direndam...semuanya...dah tengok proses dia?

ZIZI: Tak pernah.

PROF AZIZI: Saya...memang saya tengok proses itu. Saya pergi New Zealand. Saya belajar disana. Berubah. Dia ambil kulit binatang, lembu tulang-tulang muscle dia, direndam, kemudian diawetkan jadi dia memang berubah sifat. Sifat baru. Sifat baru yang memang ada unsur protein tapi penggunaanya berbeza.

ZIZI: Kalau principle ni, apa ciri-ciri dia? Ada warna-warna sikit ke?

PROF AZIZI: Saya lebih kepada struktur kimianya sama. Chemical structure dia. Malaysia. Secara fizikallah.

ZIZI: Apa yang saya faham daripada prof cakap, prof menerima istilahah dari sudut perubatan tapi ada limitasi dia?

PROF AZIZI: Yes

ZIZI: Maksudnya, kalau ada spek pertama, spek kedua, sampai suit je. Kat bawah ni kita tak cek dah?

PROF AZIZI: Haaa

ZIZI: Ok saya faham.

PROF AZIZI: Kalau berapa berapa digunakan tadi, akhirnya...ia memberi satu struktur yang baru, maka itu, dikira istilahah yang sangat-sangat apricable

ZIZI: Tammah lah?

PROF AZIZI: Dan beri manfaat pada pengguna yang baru. Dia dah berubah sifat.

ZIZI: Maksudnya, kalau satu ubat tu, DNA ada lagi...dia berlaku istilahah, walaupun DNA ada?

PROF AZIZI: Haaa ...masih apricable. Boleh digunakan.

ZIZI: Ok, saya dapat jawapan untuk soalan pertama. Seterusnya, sejauh pengetahuan prof, bila LMWH low molecular weight heparin masuk ke Malaysia...digunakan sebagai ubat pencegah dikalangan ibu-ibu mengandung.

PROF AZIZI: Lama dah. Saya tak ingat ecactly tapi dah lebih 20-33- tahun.

ZIZI: Adakah prof tahu hukum LMWH heparin dalam majlis muzakarah jawatankuasa?

PROF AZIZI: Ya.

ZIZI: Dan adakah prof terlibat dalam pembentangan hukum penggunaan ubat.

PROF AZIZI: Tak terlibat. Tapi saya tahu benda tu berlaku. Haa.

ZIZI: Apa pandangan prof tentang ubat anticoagulant ni LMWH, seperti clexane digunakan sebagai pencegah dalam rawatan ibu mengandung terhadap penyakit darah beku VTE? Adakah ia sangat perlu untuk golongan pertengahan ?

PROF AZIZI: Aaa setahu saya, ini memang digunakan dalam...waktu ibu mengandung dan lebih kepada konsep pencegahan berbanding saya katakan tadi...ubat ada dua jenis. Satu, aktif purpose yang kedua untuk prevention. Jadi kalau ibu mengandung ni sebagai prevention.

ZIZI: Kalau saya rujuk dalam buku ini, clinical practice guideline ni, yang dikeluarkan oleh KKM, mereka meletakkan ibu-ibu mengandung yang dalam kategori prevention low risk, intermediate risk dan high risk. Low risk, skor satu dan dua, mereka tidak diberi lagi clexane, kerana tidak perlu. Tapi intermediate risk, mereka cadang perlu consider for prophylaxis with LMWH. Manakala high risk require terus. Tapi tak kena lagi. Macam vaksin la kan? Tak kena lagi.

PROF AZIZI: Ia masih untuk prevention. Semua-semua tu adalah, mereka ada risiko untuk mendapat embolisme due to clotting factor, clot blood dan ia perlu di elakkan. Semua tu prevention.

ZIZI: Soalannya kat sini, kalau kita ikut fahaman *lay man* lah...high risk kita faham, risiko tinggi kan...maksudnya jangan bagi kena, kalau kena memang mati la kan? Bila saya dah interview 9 orang pakar ni, mereka ni bersetuju clexane perlu dicegah dan jangan bagi kena. Sebab tu lah high risk, require clexane. No question la. Yang problem kat sini adalah intermediate risk. Bila kita sebut intermediate ia pertengahan. Bila kami temubual 9 orang pakar ini, mereka kata highly recommended..

PROF AZIZI: Highly recommended.

ZIZI: Jadi persoalan disini kalau kita faham terminologi darurah, sebab dalam fatwa kata prohibited unless darurah kan? Jadi bila kita faham darurah ini...

PROF AZIZI: Middle risk sepatutnya tak perlu la maksudnya?

ZIZI: Haaa. Tak perlu sebab takut...darurah tu sikit lagi nak mati. Darurah maksudnya, dah tak ada makanan, kita ambil yang tu sebab takut mati. Ataupun *qaraba* kalau dalam...*qaraba* ni hampir mati. Jadi bila kita faham darurah ini maksudnya, hampir mati, tapi kalau intermediate ni pertengahan, sebaliknya bila saya interview pakar-pakar 9 orang ni, diorang berkata intermediate risk highly recommended clexane.

PROF AZIZI: Highly jugak?

ZIZI: Highly recommended. Sebab bila tanya prof zainul rashid dari An-Nur, bila saya tanya berapa percent mak-mak ni akan menghadapi kematian, dia tak boleh nak jawab sebab nyawa bagi doktor, doctor akan ambil yang terbaik, start intermediate terus on clexane. Cuma sekarang ni fatwa kata darurat sahaja even high risk ni pun prevention lagi. Dia bukan darurat. Jadi isu dia kat situ.

PROF AZIZI: Aaaa prevention kalau kat sini...prevention untuk ibu mengandung high risk tu ia consider darurat sebab begini, sebab waktu ibu mengandung, possibility untuk darah beku tu lebih tinggi dari orang yang berisiko tinggi yang bukan mengandung.

ZIZI: Maksud kondisi pregnant tu pun dah jadi risiko?

PROF AZIZI: Ya. Sebab apa, bila mengandung, nyawa tu ada dua, ibu dan anak. Jadi possibility untuk dapatkan protein, blood clot lebih tinggi dari mereka yang tidak mengandung, berisiko tinggi daripada orang lain. Tak boleh compare orang mengandung dengan orang tidak mengandung. Jadi yang berisiko tinggi tu bagi saya itu adalah darurat. Darurat yang paling tinggilah.

ZIZI: Kalau intermediate?

PROF AZIZI: Intermediate berdasarkan ilmu yang kita faham, itupun pertengahan maksudnya possibility dia masih tinggi lebih daripada 50%.

UNN

ZIZI: Lebih dari 50%?

PROF AZIZI: Haa.

ZIZI: Kalau dalam aa...bila saya tanya doctor-doktor medik ni, O&G lah memang...doctor lagi dua ini ia termasuk mmm kardiologi dan hermatologi, family medicine dan O&G, tiga orang non muslim, selebihnya muslim, sekarang ni...kiranya apa pandangan prof? Kategori intermediate ni perlu juga ke clexane? Kalau fahaman kita, ia tak sampai darurat?

PROF AZIZI: Saya kalau...saya tak ada data mengenai perkara tersebut. Tapi yang pasti kalau yang high risk tu, wajiblah bagi saya. Intermediate risk ni kalau saya ada data, baru saya boleh komen. Saya pun akan mengatakan benda yang sama lah. Contoh katakan based on Malaysian punya ni, dose yang intermediate risk, high chances to blood clot data tersebut. Tetapi logic speaking, memang doctors akan ambil lebih kepada untuk prevention of death ataupun prevention of being...kita panggil apa tu diseases tu dapat penyakit sebelum...jadi prevention tu adalah salah satu rawatan. Jangan anggap prevention tu saja suka-suka. Macam tu juga konsep vaksin, memang orang tu sihat. Kenapa kita bagi? Sebab sebelum dia kena. Logiknya, risiko tak da. Kenapa jadi risiko tinggi? Sebab dia sudah terdedah. Soalannya? Macamana kita nak control dia terdedah ke tak? Itulah risikonya. Samalah. Konsep yang sama.

ZIZI: Dengan vaksin. Sebab ia pencegahan kan? Jadi seterusnya apa pandangan prof, penggunaan clexane ini adakah dikategorikan sebagai darurat untuk VTE?

PROF AZIZI: Boleh.

ZIZI: Soalan seterusnya, terus ke soalan 11, sebab soalan 10 sebenarnya dah termasuk dalam soalan sebelum ni. Soalan 11, apa pandangan prof penggunaan ketiga-tiga jenis ubat anticoagulant enoxaparin, fondaparinux dan arixtra terhadap ibu-ibu mengandung yang bermasalah, masalah fokus di sini VTE, yang mana satu lebih berkesan untuk farmasitikal.

PROF AZIZI: Sebenarnya kalau ikutkan, kesemua tu memberi kesan yang baik kepada ibu-ibu yang mengandung. Cuma kat sini...ada berdasarkan beberapa literature, reference, mereka mengatakan bahawa clexane ni jauh lebih berkesan berbanding dengan fonda, Saya tak baca detail tapi saya faham sebab hadir beberapa conference sebelum ni. Dari situ bolehkan kita membuat kesimpulan bahawa kenapa tidak mengambil fonda. Sebab fonda tidak ada unsur-unsur bahan terlarang. Jadi berbalik pada tadilah, sebab..saya bukan pakar bahagian ONG, saya lebih kepada peruntukan ubat, kalau katakan pada saya, kesemua itu memberi kesan sebagaimana yang dimintalah kan? Cuma bila fonda compare arixtra, heparin dan juga dibandingkan dengan clexane jadi mungkin ada sedikit perbezaan tapi tidak bermaksud clexane tu jauh lebih tak elok ...fonda tu jauh lebih tak elok daripada clexane. Saya tak maksud demikian. Sebab apa, pemilihan jenis-jenis ubat doktor akan melihat dari segi evidence trial, dan akan mengambil satu ubat tu di mana ada klinikal evidence yang jauh lebih baik tidak bermaksud fonda itu tidak baik. Terlalu rosak atau tidak memberi kesan. Bukan begitu. Dia ada perbezaannya.

ZIZI: Arixtra ni lebih banyak digunakan dalam unit mana? Kardiologi atau...

PROF AZIZI: Ada...campur je....

ZIZI: Sebab dalam fatwa 2009 tu, fatwa suggest apatah lagi...maksudnya clexane diharamkan kecuali darurat apatah lagi ada halal alternatif. Tapi bila saya jumpa dalam scopus punya publication...arixtra tidak disuggest oleh pengeluar syarikat produk tu sendiri kepada ibu-ibu mengandung. Sebab dia boleh cross placenta, dan jugak dia mahallah kat Malaysia ni...jauh lebih mahal dari heparin dan clexane.

UNN

PROF AZIZI: Itu pun mungkin dari segi...aaaa...saya Nampak ini isu yang berbeza lah. Sebab kita katakan untuk ibu mengandung..ubat itu boleh cross placenta, itu lebih kepada isu safety, isu keselamatan. Sebab kalau kita banding kesemua ubat ini, yang pertama, kita kena tengok isu...established dia berkesan atau tak? Dengan kata lain semua berkesan. Tetapi sekiranya fonda itu menyebabkan ubat tu oleh cross plecenta masuk kepada fetus, maka itu lebih mudarat sebenarnya.

ZIZI: Sebab dalam fatwa itu mengatakan....part last tu.. halal alternative Arixtra dan mempunyai kesan setara dengan enoxsheparin.

PROF AZIZI: Saya kalau saya faham fatwa tu lebih kepada nak bagi justifikasi untuk mengurangkan risiko kepada ibu dan anak. Sebab dia tak kat fix kena ambil A atau B. Cuma dia merujuk kepada clexane. Clexane di sini mungkin jauh lebih selamat kalau compare jauh lebih baik, sekadar itu sahaja. Jadi sefaham saya macamtu.

ZIZI: Dia selamat tak untuk ibu mengandung?

PROF AZIZI: Kalau arixtra, generally selamatlah. Masih boleh digunakan. Sebab dalam perubatan ia tak boleh lari daripada masalah, risiko, ataupun manfaat. Risiko tinggi walaupun manfaat tu oleh kita bincang...manfaat baik...dan kalau kata memang ada risikonya...ada lagi risiko tapi manfaat kepada pesakit kita masih lagi bagi. Dia macamtu. Kita tak akan dapat satu ubat tu, yang manfaatnya u dapat 100 peratus. Setiap ubat yang kita ambil ada risikonya. Tapi kita balancekanlah

ZIZI: Jadi prof, sebab kajian ni kita akan present kepada JAKIM, prof setuju tak kalau kita present semula supaya fatwa 2009 ini di review balik, maksudnya bila saya jumpa pakar Syariah, ada pakar Syariah yang tidak bersetuju fatwa tu diubah balik, ada yang setuju.

PROF AZIZI: Fatwa yang mana? Fonda ke clexane?

ZIZI: Clexane. Sebab bagi mereka sudah betul fatwa, Cuma doktor-doktor perlu diberi kefahaman berkenaan darurat. Itu yang pertama. Yang kedua, ada doktor-doktor pakar ini, yang diinterview diorang consider term tu bila dia kata clexane diharuskan kerana darurat, bukan dihalaikan, diharuskan kerana darurat...itu sahaja...dia lebih jelas dan membantu para doktor untu memberi peripski secra reasonably lah. Sebab, setakat ini, bila saya interview 9 orang doctor n, mereka setuju fatwa ni diubah sebab ia agak memberi kesan dari sudut mentally sebab mereka jadi takut-takut..tambah-tambah golongan intermediate risk ini. Jadi mereka rasa bercanggah dengan apa fatwa cakap kan. Tapi hakikat di Malaysia, mereka tak nak mufti-mufti di Malaysia...dia xnak msyarakatterlalu ambil mudah...bila sebut harus, jadi halal semua. Ok tu situasi dia. Kalau prof sendiri macamana? Setuju tak fatwa ini kita ubah supaya ia diharuskan kerana darurat ataupun diharamkan

PROF AZIZI: Saya akan setuju diubah, bila konsep istilahah itu digunapakai.

ZIZI: ohhh

PROF AZIZI: Sebab dia akan tight dengan konsep istilahah tu sendiri. Sebab apa, unsur-unsur tu kita kena justify unsur tu ada ke tak? Sebab ini ada kaitan. Kalau u kata halal digunakan, penggunaan halal tapi unsurnya still haram. Unsur tu ada najis.

ZIZI: kalau kita guna justifikasi darurat? Maksudnya, sebab kalau kita tengok dalam buku tu memang ada unsur tu. Kalau syafieyah memang dia tak akan lepas daripada sumber asal dia, cuma syafieyah ni, dia boleh keluar daripada masalah ini atas justifikasi darurat. Sebat tu tesis saya, istilahah saya tak boleh nak masuk sebagai teori yang support, sebab ia adalah teori yang khilaf, jadi saya tak guna, Cuma support dokumen je lah.

PROF AZIZI: Jadi sekarang ni objektifnya nak tengok ke arah mana?

ZIZI: Ia...justifikasi darurat. Jadi clexane tu...

PROF AZIZI: Kalau macamtu, Saya kena faham dulu apa definition darurat kat situ.

ZIZI: Darurat kat sini, kalau ikut termanologi klasik ...maksudnya...

PROF AZIZI: tak tak...yang u punya tesis ni.

ZIZI: Oh..darurat tu yang boleh membawa maut ataupun hampir dengannya.

PROF AZIZI: membawa maut tu susah juga justifikasinya...susah juga tu..

ZIZI: Memang macam tu. Seberapa dalam klasik books pun kata macamtu. Sebab tu untuk tesis saya ni saya nak cadang buat satu parameter. Parameter darurat ni macamana? Ikut pandangan doctor-doctor O&G supaya fatwa ini boleh selari. Jadi itu antara soalan jugalah ni. Maksudnya yang parameter macamana? Yang saya nak letakkan adalah macamni. Ini pandangan doctor medik...ini pandanagn Syariah...jadi ini high risk..doktor akan bermula dengan skor KKM...skor 4. Skor 4 ke atas high risk. Bagi doctor no question terus on clexane.

PROF AZIZI: Sebelum tu nak tahu lah, skor 4 tu apa evidence dia?

ZIZI: Di sinilah...

PROF AZIZI: Oh dia akan ikut itulah...ok

ZIZI: Maksudnya dia dah ada previous VTE...

PROF AZIZI: Ok ok ok

ZIZI: Jadi berdasarkan assessment ni, saya nak buat satu parameter untuk membantu para ulama di Malaysia...contohnya, high risk dan moderate risk dia termasuk...kalau dalam Syariah kita ada, yakin 100% lah, maksudnya skor 4, dia masuk dalam golongan high risk terus 100% yakin. Tapi kalau medorate risk kita panggil ghalabutu zon. Ghalabatuzzon untuk darurat..maksudnya 61-75%..eh silap-silap 75-99%. Jadi parameter ini hendak dibina untuk membantu para ulamak review fatwalah. Istibat fatwa tu.

PROF AZIZI: Jadi kalau macam tu macam saya cakap tadi eventually u akan...parameter ni akan digunakan untuk guide majlis fatwa ?

ZIZI: Haaa untuk assist je la.

PROF AZIZI: Tapi saya takut nanti parameter ini bertindan dengan keputusan result kat sini. So..

ZIZI: Haaa ni dari segi academically. Saya cuba sumbangkan. Tapi kalau tak terima...saya buat ni...

PROF AZIZI: Tak pe. Saya faham. Saya pernah buat untuk assement para academician. Saya nak tengok dia punya level of qualification dengan bagaimana kita nak appoint dia professor ke non professor...qualification, working experience, teaching tu semua. Saya faham gitu. Eventually dorang follow tapi ia tidak...parameter tui tidak memberikan kesan kepada sama ada orang yang buat decision tu atau tidak. Sebab nanti...ini pandanagn sayalah...ini berkenaan satu penyakit sahaja kan? Cuma saya takut nanti...

ZIZI: Penyakit-penyakit lain..

UNN

PROF AZIZI: Haaa penyakit lain dia guna benda yang sama kan..tak applicable. Sebab kes ini difail untuk risiko ibu mengandung yang tinggi, kes yang pertengahan dan rendah. Dan justifikasi saya adalah untuk ibu mengandung risiko dai tidak sama dengan perempuan yang bukan mengandung. Itu maksud saya. Ini sebagai output nya bagus,tapi ada limitation untuk advise dorang untuk kes-kes lain.

ZIZI: Sebab...ya saya faham maksud prof. Fatwa akan ambil kira semua jenis penaykt. Tak akan spesifik satu sahaja.

PROF AZIZI: Macam ini kan. Macam clexane...bukan untuk ibu mengandung saja.

ZIZI: tapi kalau kajian kes kita...ibu mengandung sahaja?

PROF AZIZI: Jangan..jangan...aaa u kena buat limitation..

ZIZI: Haa haaa memang untuk ibu mengandung sahaja..sebab ni skor inidibuat untuk ibu mengandung sahaja. Jadi sekarang ni maksudnya saya lepas jumpa pakar Syariah dan juga pakar medik dan farmasis saya nampak ada dua cadangan, untuk saya forward kan untuk muzakarah ni. Samaada sighth atau term fatwa itu dikekalkan clexane diharamkan kecuali dalam ibu-ibu menganudn yang berisiko untuk manfaat VTE kardiologi hematologi..

PROF AZIZI: Boleh...tapi berbeza. Saya tak berapa setuju sebab maklumat yang u dapat adalah hanya untuk ibu mengandung tapi ia tak pada yang lain. Mana-mana kajian PHD skop dia. Kalau maklumat u tak dapat sentuh, nanti orang akan urgue balik mana data berkeaan penyakit atau pesakit yang berpenyakit yang boleh support evidence ni. Support finding ni. Itu maksud saya tadi. Contoh u punya study akan jadi lebih strong if u ada interview pesakit yang dah letak low molecular weight heparin dan bila katakan u follow up 2008, contohnya...oo semua yang ambil clexane mendapat kebaikan. Sama da low risk pun dapat kebaikan. Tak ada sorang pun yang dapat penyakit lepas tu Ha itu baru pakar Syariah diyakinkan. Itu dari segi support evidane. Kita nak conviencekan ...bila doctor beri pendapat...pakar farmasi ia melihat kepada bukan nak conviencekan Syariah, atau pakar Syariah atau ajk fatwa, ia lebih kepada kebaikan pesakit. Contoh katakan daripada u punya kajian ini 30 u follow up pesakit ni yang ambil low molecular weight heparin ni semua dapat manfaat yang tak ambil tu semua disaster, memang 100% low risk je boleh bagi. Baru strong dan output ni..

ZIZI: Maksudnya parameter ni...

PROF AZIZI: Sebab saya faham tu yang u bagi ni adalah berdasarkan pendapat yang tidak digunakan kepada pesakit. Ini dua benda berbeza. Kalau saya..saya memang examiner untuk PHD. Saya selalu urgue macam tu lah. Lebeih kepada eventually manfaat kat mana? Tak apalah u dah decide u punya study objektif apa semua kan.

ZIZI: Memang ada doctor pakar suruh pergi jumpa pesakit yang terima clexane interview dia macamana keadaan dia hampir-hampir mati diberi clexane, keadaan dia baik semula, ibu-ibu mengandunglah purposely. Hmm terima kasih prof atas cadangan itu. Jadi soalan ke12, adakah ahli farmasi boleh perskripsi ubat tanpa kebenaran doktor?

PROF AZIZI: Oh tak boleh.

ZIZI: No 13, Apa pendapat prof tentang persepsi pesakit muslim ubat yang berasaskan khinzir?

PROF AZIZI: Mereka masih lagi tidak menerima, tapi bila pakar perubatan yang ada ilmu berkeaan tentang perkara itu, mereka explain pasal darurat, pada masa itu mereka akan terima.

ZIZI: Jadi saya rasa cukup sekadar itu sahaja. Terima kasih prof sudi ditemubual. Terima kasih atas cadangan tadi tentang parameter.

UNN

INTERVIEW WITH SHARIAH EXPERT, MUFTI TERENGGANU, S.S DATO' DR ZULKIFLI MUDA

DR IRWAN: Bismillahirrahmanirrahim. Assalamualaikumwarohmatullahiwbabarokatuh. Aaaa pertamanya, saya Dr Irwan Bin Mohamad Syukri, Pengarah INFAD lah, dari USIM. Sekarang ni kami tengah buat satu kajian untuk pihak Sanofi...

MUFTI: Ini siapa? Prof?

DR IRWAN: Dia pelajar PHD saya.

MUFTI: Oooo

DR IRWAN: Merangkap RA lah. Cerita dia Datuk, pada 2009 pihak Muzakarah Fatwa Kebangsaan telah mengeluarkan satu keputusan hukum mengenai ubat *claxane*. Ubat *claxane* ini adalah ubat pencair darah yang digunakan oleh doktor khususnya kepada ibu-ibu mengandung. Jadi isu dia, *claxane* dibuat daripada sumber *porcine* lah...babi. Keputusan itu keluar pada 2009 mengatakan *claxane* adalah haram kerana adanya alternatif iaitu Arixtra ataupun Fondaparinux. Ok, jadi...bila keputusan itu sudah keluar...

MUFTI: Errr apa nama ubat? Apa?

DR IRWAN: *Clexane*.

MUFTI: *Clexane*. Yang ubat alternatif tu?

DR IRWAN: Aaaa *arixtra* atau Fondaparinux.

MUFTI: Mana ye?

DR IRWAN: Aaaaa

ZIZI: Dalam situ takde rasanya. Dalam fatwa. Dalam kompilasi fatwa.

MUFTI: Tak apa. Tak apa.

DR IRWAN: Aaaa dia ada kat *blood* tu.

MUFTI: Hurm.

DR IRWAN: Ok. Aaaa keputusan dah keluar keputusan rasmi tapi pihak KKM masih pakai sampai sekarang. Bila ana dijemput dalam satu seminar di Hospital Seremban, aaa awal tahun lepas, jadi bincang bab istihalah dalam bab perubatan lah. So, terkeluarlah pasal *claxane* ni. Jadi ana katakan memang tak harmonilah kalau pandangan hukum dengan KKM sekarang ni. Jadi, ana mencadangkan pada pihak KKM untuk dibuat satu *paper* untuk *review* balik keputusan muzakarah itu. Tetapi yang ambil inisiatif itu bukan KKM, tetapi syarikat pengeluar ubat tu sendiri, Sanofi. Sanofi adalah *international* punya *company* tetapi ada cawangan di Malaysia. Jadi pihak Sanofi ni lah yang mengeluarkan ubat Sanofi tu. Jadi bila mereka mengambil inisiatif untuk membuat kajian dan mereka memberi geran lah kepada USIM untuk membuat kajian ini. Jadi kami telah menemuramah, menemubual lebih kurang sembilan orang pakar perubatan, aaa pakar ONG, kardiologi, hematologi

dengan *family medicine* kan? berkenaan dengan *claxane* ini...dan mengikut kepakaran perubatan mereka, mengatakan bahawa, dari segi amalan perubatan *claxane* adalah yang lebih efektif, lebih selamat khusus kepada ibu mengandung berbanding *arixtra*.

MUFTI: Yang alternatif tadi?

DR IRWAN: Yang alternatif tu. Jadi ubat pencair darah ada tiga lah yang utama, yang biasa KKM pakai. Satu *heparin*, satu *arixtra*, satu lagi ialah *claxane*. Tetapi yang kita fokuskan kajian ini adalah ibu mengandung. Yang mana lebih selamat, tidak berbahaya, tidak ada *side effect* adalah *claxane* lah. Sebab itu KKM mengamalkan, mengambil *claxane* ini sebagai pilihan utama. Dan dari segi statistik, untuk pengetahuan sohibusamah Dato'. Ada segi statistik aaa apabila contoh macam Sarawak. Sarawak memang negeri yang mengamalkan polisi *claxane* ini, telah berjaya menurunkan kadar kematian ibu mengandung yang menghadapi masalah darah beku. Darah beku kepada ibu mengandung ini kita panggil aaa antara pembunuh utama ibu mengandung lah. Bila aaa mereka mengamalkan *low molecular weight heparin* dengan *claxane* ni, berjaya menurunkan statistik. Begitu juga di Malaysia, secara umumnya berjaya menurunkan...aaa...jadi kami telah selesai menemuramah pakar-pakar perubatan. So, *second round* ini, kami menemuramah pakar-pakar syariah, ahli-ahli akademi, wakil daripada Jabatan Mufti, termasuk Dato' lah.

MUFTI: Mufti mana lagi *iv* ?

DR IRWAN: Aaa hari Isnin ni Mufti Penang.

MUFTI: Yang telah?

DR IRWAN: Mmm itu belum lagi.

MUFTI: Oh. Kenapa tak...Mufti Wilayah ada dok?

DR IRWAN: Wilayah...sebab kita dah banyak kali ni...kan? Jadi kita nak ambil yang lain sikit.

MUFTI: Jadi saya nak cakap apa?

DR IRWAN: Jadi untuk permulaannya Dato', boleh Dato' nyatakan nama, jawatan, kepakaran bidang dan pengalaman.

MUFTI: Saya Zulkifli Muda. Jap ada kad. (Mufti ambil kad namanya...jeda) Dekat sini dok? Cuma pengalaman kerja takdok lagi ni. Keje di UIA dan UMT lah. Dua tempat.

DR IRWAN: Dengan Jabatan Mufti dah lama ke Dato'?

MUFTI: Baru lagi. Tujuh tahun. 2013.

DR IRWAN: Tak apa. Kita ambil *start* daripada sinilah. Aaaa menurut pandangan Dato', apakah yang dimaksudkan dengan istilahah menurut feqah?

MUFTI: Kalau ikut kajian yang tu? Prof? Prof mesti ada buku ni kan? Doh same ah.

DR IRWAN: Hahahaha.

UNN

MUFTI: Ikut yang tu ah. Tengok. Pakai yang tu je ah dok? Same je. Konsep dia same je. Dia kumpul belaka doh. Ada satu lagi dok? *Majmuk...majmuk buhuth fiqhiyyah...*ada kan buku kan?

DR IRWAN: Ada.

MUFTI: Sama je. Ambil yang ni la.

DR IRWAN: So, pandangan Dato' terhadap ubat tu sendiri kan kalau ubat dikatakan ia bukan *istihalah tammah*. Apa pandangan Dato'? Ubat-ubat yang dibuat daripada sumber *porcine*. Ia *istihalah* tapi tak dikatakan *istihalah tammah* ataupun *kamilah*.

MUFTI: Sebab apa tidak *tammah*?

DR IRWAN: Sebab dikatakan ada lagi...

ZIZI: Ada campuran

MUFTI: Ada lagi?

DR IRWAN: Haa ada lagi.

MUFTI: Babi tu?

DR IRWAN: Ha..

MUFTI: Kat mana?

DR IRWAN: DNA babi tu lah.

MUFTI: DNA? DNA tu istilah lah.

DR IRWAN: Aaa

MUFTI: Istihalah tu, doh takde fizikal kan?

DR IRWAN: Hmmm

MUFTI: Jika takde fizikal, dikira...ustaz pun tahu kan?

DR IRWAN: Hmmm

MUFTI: Hmmm makna dia apa? Apa nama ni...istihalah tu sampai peringkat dia kata *zaba*.

DR IRWAN: Zaba. Hmm.

MUFTI: *Zaba* ni cair. Kamudian dia guna perkataan *istahlak* ataupun *ustuhlak*. Dan *walamyabqa*...dia guna perkataan tiga tu. Rasanya DNA dah ada unsurnya. Ada *zaba*, ada *istihlak*, kemudian ada *lamyabqa*, *adamul baqa'*. *Adamul baqa' fil atharih, wa fi ta'mi wa ra'ihah*. Cukup dah tiga syarat tu. Saya rasa *tammah*.

UNN

DR IRWAN: So, menurut Datuk, ubat tu dah kira *tammah*?

MUFTI: *Tammah*.

DR IRWAN: Kalau dari segi konsep *istihalah*, dalam penentuan hukum atau fatwa di Malaysia diterima, khususnya di Terengganu sendiri lah.

MUFTI: Saya, di Terengganu ni, sejak tujuh tahun tak de lagi fatwa mengenai perkara ini kecuali vaksin lah.

DR IRWAN: Haaa

MUFTI: Vaksin pun kita bergantung pada pandangan doktor. Dr Suhazeli kata, benda tu tak ada unsur haram kecuali ia diproses dalam tempurung lembu. Tak ada masalahkan lembu. Tak lah timbul isu haramkan? Cuma kalau yang *istihlak* itu sendiri, macam biasa, prof pun tahukan? Nama apa tu?

DR IRWAN/ZIZI: Zizi.

MUFTI: Haaa Zizi pun tahu...dia kita kata ada dua aliran kan? Aliran pertama adalah, *istihlah* tu sendiri adalah *dhatu istihlak*. Istihlah itu sendiri kata *masyru'*. Satu hukum yang tersendiri, yang tak ada lagi haramnya, sebab ada tiga unsur tadi tu lah....(ada orang ketuk pintu) tok muat sini. Jadi, aliran pertama itu...semua ustaz tahu kan? Imam Kasani, Imam ibn Hazm, Imam Taymiyah, kemudian imam Nawawi. Cuma Imam Nawawi dia tak cakap pasal masalah tu lah. Kemudian dia buat kesimpulan sendiri pun...ustaz tahukan? Ustaz dah tengokkan kitab ni kan? Dia pun sendiri lebih kepada bahawa bolehkan? Tak ada masalah. Dengan ada tiga unsur tadi kan? Itu aliran pertama.

Yang kedua ialah *istiklah najis hukmi*. Walaupun cair macamana, bau takdok, rasa takdok, warna takdok, tapi dia tak pernah dibasuh. Kawasan tu hukmi kan?

DR IRWAN: Hmmm

MUFTI: Bila hukmi, boleh pasang, najis tetap ada. Cuma Imam Nawawi dalam majmu', dia kata air semayang tak payah basuh, cukup dengan air semayang tu sahaja. Tapi pandangan kedua, pandangan mazhab Shafie kata kena basuh dulu, baru ambil air sembahyang. Kalau kita tengok istiklah istihlah tu, tok luluslah mazhab Shafie tu. Aliran mazhab Shafie tak lulus. Tapi kalau tengok pada imam Nawawi ni macam lulus. Imam Nawawi kata, apabila masak, tiba-tiba ada terjatuh di situ daging manusia, kamudian dia *sara mustahlikan* kan? dia *mustahlikan* tadi...hampir hancur *wa bil qauli wa bi ghayrihi* idha waqa'a fi qullatain seperti mana jatuhnya air kencing dalam air yang dua koloh. Tak najis pun, sekiranya tidak ada apa-apa pertukaran rasa, bau dan warna. Jadi kalau tengok pada Imam Nawawi, seolah-olah macam seolah-olah diiktirafkan istihlah tu. Dia iktiraf istihlah tu, maknanya, makanan tu boleh makan lah. Kalau makan, boleh makan. Kalau ubat yang darjatnya lebih tinggi daripada makan, mestilah boleh. Ia min bab *al-awla* kan?

DR IRWAN: Hmm.

MUFTI: Tapi oleh kerana dalam kitab-kitab feqah shafieyah, mengatakan bahawa wujudnya najis hukmi ini, maka kita railah pandangan najis hukmi ya? Bila najis hukmi, ubat ni...memang najis lah. Sebab ada najis hukmi. Saya ulang apa yang ustaz tahu je. Prof dah tahu...jadi saya ulang. Kita ada

UNN

dua aliran. Aliran pertama zat *mustahlak* tu sendiri dah cukup. Cukup untuk dikatakan halal. Yang kedua, ia tetap najis sebab berdasarkan najis hukmi.

DR IRWAN: Kecuali darurat lah.

MUFTI: Kecuali darurat. Bukan setakat darurat. Hajah. Kalau ikut fatwa sini, hajah cukup dah.

ZIZI: Hmm

MUFTI: Sini nih. Dia kata sekiranya...tapi yang hajah cukup tu kalau tiga perkara tu cukup. Sebab dia kata, kalau darurat tu, *haqqul yaqin* kan?

DR IRWAN: Hmm

MUFTI: Tapi kalau hajah ni, ghalabatuzzon. Jadi terpulang kepada pengkajilah, nok pakai yang mana. Cuma, bagi saya, *siyasatan* dengan *deen* dia lain sikit. Deenan atau qadaa...kalau siyasatan...bagi saya KKM kena...kalau nak pakai pandangan yang longgarlah, pandangan kata istilah tu dah cukup, siyasatan ini tidak boleh menyebarkan perkara itu pada orang. Ikatlah dengan apa-apa akta sekalipun. Tapi munasabah dengan hukumlah. Siyasatan sebab apa tak mahu jadi kelam kabut kepada masyarakat. Tapi *deen*, dari segi ugamanya, aaaa apa nama ni...aaaa ia tetap berpegang kepada halal kan? Kalau dia nak pakai pandangan itulah. *Deenan* dia pakai pandangan halal tapi siyasatan, jangan sebarkan pada orang. Orang ni tahu tahu je lah. Kadang-kadang pakai aliran lain kan? Saya sendiri pun tak tahu nak pilih yang mana. Tapi saya nampak fatwa kebangsaan masa bincang vaksin kecenderungan dorang lebih kepada halus maksudnya, jangan kita nak pakai halal dengan sembarangan kecuali kalau terdesak.

DR IRWAN: Ikhtiyat.

MUFTI: Haa ikhtiyat...terdesak kan? Kalau tengok aliran, saya boleh bacalah aliran-aliran mufti di Malaysia ni. Aaa aliran Muzakarah Fatwa Kebangsaan lebih kepada Mazhab Shafie lah. Napok gitulah. Kalau prof, pilih mana?

DR IRWAN: Hahaha itulah kita buat kajian ini.

MUFTI: Sebab *deen* tu boleh kita pakai, tapi *qadaa* jangan cerita kat orang. Dan apabila kita keluar fatwa mengenai itu, cukup dengan ubat. Tak payah la makanan macam Yusuf Qardawi tu cite bab coklat tu kan? Tu siyasatan tak ada lagi tu. Tak ada siyasah. Bukan kita nak pertikai kebijaksanaan dia. Kenapa dia campur benda-benda gitu? Kenapa diperluaskan sehingga ke makanan.

DR IRWAN: Pandangan-pandangan pakar perubatan tu, nanti saya sebut. Saya nak dapatkan pandangan Datuk juga kan. So kalau ikut ubat-ubatan hakikat realiti semasa kita kat Malaysia bukan kata banyak, tapi ada ubat-ubat termasuk *clethane* dibuat daripada *porsine* tu, yang mana kita tak boleh nak elakkan. Jadi pandangan Datuk?

MUFTI: Dia gini. Prof pun tahu ada hadis. Ustazah pun tahu kan, ada hadis yang melarang kita berubat dengan benda haramkan? Benda haram tu dilarang kita ubatkan, walaupun kita kata benda tu arak sahaja, tapi umumlah. Hadis tu umum. Tak boleh kita berubat dengan benda (InnaAllaha yaj'al daa' fi). Kalau ikut lafaz tu, seolah-olah Allah taala tak izin.

UNN

DR IRWAN: Tak izin.

MUFTI: Dalam masa yang sama, ia kaedah umum, ar-darurah semua tu. Jadi jalan tengahnya macamana? Kita ambil semua nas-nas ini, jalan tengah dia adalah, kalau sekiranya ada darurat dan hajah sahaja, barulah kita boleh guna ubat tu. Bukan darurat sahaja. Hajah pun dah cukup dah. Jadi bila ustaz kata *claxane* tu dah terbukti kekukuhanannya, cukup dah tu sebagai hajah. Tapi jangan longgar sangat. Awal-awal lagi kita pakai pandangan tu, tak la. Sebab apa, sebab kita tak rai hadis tu. Kita nak jawab soalan Allah susah juga tu? Sebab kita tak rai hadis tu. Sekurang-kurangnya kita kata darurat dan hajah. Tapi prof boleh bacalah pandangan saya, pandangan saya gitulah. Saya, kalau orang tanya, serah pada orang lah, tapi pada pandangan saya, kita raikan..mazhab Shafie yang paling baik. Rasa-rasanya lah.

DR IRWAN: So, kalau ikut yang tadi kata, keberkesanan *claxane* tu, ia telah dibuktikan kajian saintifik dan telah dipublish dalam jurnal-jurnal *medic*.

MUFTI: Cukup doh...

DR IRWAN: Dari segi mudah diperolehi, kos murah, lepas tu efektif dan tidak ada kesan sampingan, maka yang tiga tadi, *claxane*, *arixtra* dan juga *heparin*, terbukti *claxane* yang paling baik lah. So, tu lah, pandangan Datuk?

MUFTI: Saya dah sebut nak raikan hadis tu, jadi seolah-olah kita nak raikan hadis tu, ada unsur melarang. Kita juga berdasarkan kepada (baca ayat) maknanya kita kata kecuali darurat. Jadi dua aliran itu, kita kata bahawa sekiranya hajah atau darurat, boleh. Tapi saja saja nak guna, kesan dia sama, maksudnya tak boleh lah, haramlah. Sebab kita nak rai semua.

DR IRWAN: Kalau ikut dapatan lab terbaru, 2015, yang keputusan muzakarah tu 2009, so 2015, telah dibuat satu lagi lab test terbaru, mengatakan ubat *claxane* yang diperbuat daripada *porcine* tu, so *end product* dia dah tak ada DNA dah. No more detected.

MUFTI: Dia DNA ni macamana sebenarnya? Nampak terang gitu? Tak ada kan?

DR IRWAN: Tak ada.

MUFTI: So, tak *istihalah* dah *istihalah* la tu. Dah tak ada DNA, lagilah. Saya rasa dah istihalah tammah semua dah tu.

DR IRWAN: Hmm

MUFTI: Walau ada DNA pun. Sebab cuba tengok perkataan zaaba. Zaaba tu kan cair.

DR IRWAN: Kalau dalam bahasa Melayu tu terurai.

MUFTI: Terurai. Maksudnya, adalagi. Ia lebih terfizikal lagi berbanding DNA dia.

DR IRWAN: Kalau kita ikut hukum feqah kan Datuk, hukum feqah ni yang pertamanya dia tengok *sahih* dia tak pergi sampai mendalam, kena cek ada DNA ke tak kan? Pastu hukum feqah dia banyak *ghalabatuzzon* atau *zan* saja kan? so kalau kita nak pergi sampai le *lab test* tu perlu ke Datuk?

UNN

MUFTI: Dia pakai yang tu lah. Saya kata dah tadi kan? Dia pakai istilahah naqisah, dia tammah. Ok boleh kita kata istilahah naqisah la...istihalah naqisah..nampak ada sikit la kan. Nampak ada warna sikit-sikit. Macam juga perkataan *zaaba*, ada warna sikit sikit.

DR IRWAN: Ambil yang score sheet tu.

MUFTI: Kalau yang tu boleh, kalau ada yang DNA langsung tak dapat kesan dari segi perubahan lagi lah boleh.

DR IRWAN: Ok Datuk, kalau dalam isu *claxane* ni dari segi rawatan ibu mengandung, dia ada satu tahap dia panggil prophylaxis aaupun dia panggil pencegahan. Maksudnya berdasarkan ilmu dan kepakaran doktor perubahan, so bila satu-satu kes datang kepada mereka, mereka akan tengok *history* pesakit tu. Dah pernah *ceaser* ke sebelum ni, ada darah tinggi ke, macam-macam lagi lah. Jadi bila diorang dapat detect ibu nie pernah *ceaser* contohnya, jadi terus dorang akan bagi ubat *claxane* ni kan...untuk menghalang kematian tu lah.

MUFTI: Darurat lah.

DR IRWAN: Jadi langkah pencegahan itu, bolehkah kita menganggap ia situasi darurat?

MUFTI: Pencegahan tu? Saya rasa...aaa...dia masuk dalam hajah. Dia masuk dalam *ghalabatuzzon* la kan?

DR IRWAN: Hmm sebab kaitannya Datuk begini...ini adalah score sheet...

MUFTI: Bukankah perubahan tu adalah *khibrah*? jadi *khibrah* tu adalah suatu jawapan. Suatu jawapan yang boleh kita guna.

DR IRWAN: So, ini adalah *score sheet* yang kita guna untuk nilai dan *diagnose* pesakit itu. So, dia ada 1, 2, 3, 4. So, kalau *score sheet* menunjukkan 1 atau 2, itu kita panggil normal, tak perlu pun *claxane* sebab tidak membahaya dan tidak bawa kepada kematian.

MUFTI: Ya...ya...

DR IRWAN: Tapi bermula 3 dan ke atas, 3 dan 4 ni...aaa walaupun 3 tu kita kategorikan dia sebagai *intermediate*, istilah perubahan kita panggil, *moderate* atau *intermediate*. Kita faham bahawa *intimate* ni mungkin hajah, sederhana. Tetapi, kalau *intermediate* tu memang doktor dah bagi *claxane*.

MUFTI: Ye la sekarang ni, kita nak tafsirkan maksudnya keadaan pesakit mesti sakit dulu, barulah darurat ataupun, dijangkakan berlaku sakit tu. Dijangka sakit tu...cukup dah. Sebab *khibrah*. Perubahan adalah *khibrah*. Perubahan itu adalah pengalaman.

DR IRWAN: Antara hajah dengan darurat, Datuk pilih yang mana?

MUFTI: Situ, saya lebih kepada hajah lagi, tak sampai darurat, kecuali kalau doktor kata, kalau tak guna tu, mati.

UNN

DR IRWAN: Kalau tak ada tu, kebarangkalian akan mati tu tinggi.

MUFTI: Haa cukup dah tu. Darurat dah tu. Ada sampai mati?

DR IRWAN: Dia ubat...err err penyakit darah beku tu memang akan bawa mati.

MUFTI: Darah beku?

DR IRWAN: Dia selalu darah beku, ia berlaku dekat kaki. Bila dia berlaku kat kaki, kadang-kadang dia blok jantung. So memang akan bawa mati. Dan dalam kes...

MUFTI: Dia boleh tahu bawa mati? Macamana boleh tahu?

DR IRWAN: Kemungkinan besar tu mati.

ZIZI: Ada *low risk*, peringkat rendah, peringkat sederhana, peringkat tinggi. Kalau kata peringkat tinggi ni, tak ada *question* dah, memang doktor on. Jadi sekarang ni dekat *moderate risk* tu la. Golongan mak mak pertengahan tu...yang ni, bila ikut CPG ni, clinical practice Guideline yang KKM guna, untuk mak mak mengandung untuk penyakit darah beku. Diorang tulis kat sini *highly recommended* untuk guna *claxane*. Tu yang kata doktor akan guna terus tu, waktu pertengahan tu.

MUFTI: Makna sekarang ni *confirm* mati. Pada adatnya la.

ZIZI: Hahahaha. *Ghalabatuzzon* bawa mati.

MUFTI: Darurat tu. Sebab istilah darurat ini dua kan? Satu, Mati ataupun rosak anggota. Itu yang dikatakan darurat.

DR IRWAN: Dalam isu ni jugak Datuk, sesuai tak kita guna kaedah *idha ta'arada mafsadatani ru'iya birtikabi akhhaffi a'zamuhuma*? Sebab kita tahu, kalau sebut yang imam mazhab Shafie, menggunakan benda haram, ia haram lah. Tapi kalau kita tak ambil benda yang haram ini, ia akan bawa kepada *darar* yang lebih besar. So kita ambil *darar* yang lebih kecil. Sesuai tak Datuk?

MUFTI: Memang sesuai sangatlah. Cuma biasalah, ikut feqah. Pada perkataan *ru'iya* kena ambil kira pandangan doktor. (baca ayat) *ru'iya* ni ..., *idha taarada mafsadatani ru'iya wujuban...ruiya naib fa'il kan? Ruiya naib fa'il. Wujuban tu tambah..wujuban ke nadban* ke... Kalau bentuk tu tak sampai peringkat mudarat, contohnya kita guna perkataan *hassan*. *Ru'iya* tu kena buktikan dengan fakta nombor satu perubatan. nombor 2, 3...

DR IRWAN: Dalam kes ini Dato' kan? Antara golongan ulama dan pakar perubatan yang mana penentu?

MUFTI: Penentu, pakar perubatan lah. Sebab hukum hanya bergantung kepada penerangan pakar perubatan. Sebab kita pun ada istilah *tahqiq al-manat*. *Tahqiq al-manat* tu tak akan berlaku pakar tak cerita. Gantungkan hukum kat mana. Kita nak pasang hukum kat mana? Jadi kalau ulamak dia berfatwa dalam keadaan kita perlu kepakaran dia telah menyalahgunakan kuasa. *Ta'assuf*. Masuk dalam penyalahgun kuasa. Ini fatwa yang paling tak tepat.

UNN

DR IRWAN: Ini soalan yang tak ada dalam ni tapi ada kaitan. Kita dalam menentukan *darurah*, *hajah*, kita akan sebut, kalau darurat benda ini dibolehkan. Tetapi para ulamak tidak meletakkan *benchmark*, atau parameter atau peratus. tapi ana jumpa satu buku yang dikarang oleh Dr Hassan Hitto. Buku Usul fiqh. Dalam buku dia letakkan kalau *yaqin* 100%. Kalau *zan*, dia akan letak antara 51-60 % yang *ghalabah zon* 60-99% lah. Jadi dia letakkan peratus-peratus tu. Apa pandangan Dato' kalau dalam kes ibu-ibu mengandung yang menghadapi masalah darah beku, kita jadikan *score sheet* ini sebagai parameter penentu darurat. *score sheet* 3 itu adalah darurat. 4 pun. *score sheet* ini hanya untuk ibu mengandung sahaja, sebab tidak sama.

MUFTI: Buku ni tak terang. Saya tertinggal ada satu atas meja tadi. Buhuth Fiqhiyyah tu. *Majmu'ah buhuth fiqhiyyah*. Di sebut hak darurat sama ada hak yakin.....gholabatuzzon tapi tak sebut peratus. Sebut *ghalabatuzzon*, dah masuk darurat. Cuma kita nak belapik, kita kata *ghalabatuzzon* hajah lagi. Kita belapik dengan masyarakat. Kalau ikut dia, *ghalabatuzzon* tu cukup dah darurat tapi tak sebut peratus. Hak darurat dia dua. Pertama yakin, kedua *ghalabatuzzon*. Cuma kita tak nak ambil pandangan dia 100%. Kata *ghalabatuzzon* tu hajah lagi la. Sebab nak cerita pada masyarakat.

DR IRWAN: Kalau benda ni kita berjijihadi Dato'? Boleh tak? Maka kita letakkan peratus tu, bukan apa nak mudahkan faham.

MUFTI: *Ta'yin* peratus

DR IRWAN: Bukan apa nak mudahkan faham

MUFTI: *Takyin* peratus tu..bergantung kepada...kan kita ada istilah pertengahan kan...satu darurat, satu hajah, satu lagi *al-hajah tunazzal manzilah al-darurah*. kita nak berhalus. kita tak nak lah terlalu buka ruang, ni darurat...ni darurat. Apa salahnya kita guna istilah pertengahan *al-hajah tunazzal manzilah al-darurah* saya cadang ambil istilah tu. Yang gholabatuzzon kita letak sini. Untuk masyarakat kita jangan buka sangat untuk darurat. Sikit-sikit darurat.

DR IRWAN: Untuk menjustifikasikan dan menghalalkan tindakan.

MUFTI: Hasan Hitto saya ada buku dia al-wajiz..

ZIZI: Kalau para doktor peringkat pertengah tu kira darurat, still kita mention hajah.

MUFTI: Saya ingat kita kena sebut istilah pertengahan lah. Tak payah reka-reka baru lah. Tak tahulah. Saya berhalus sikit benda darurat ni. Masyarakat terlalu mudah sangat sekarang. Sikit- sedikit darurat. Kita ketat sikit perkataan darurat. Hahaha.