

ROLE OF PHARMACIST IN PAIN MANAGEMENT







PAIN DEFINITION

01

An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage¹

02

A basic approach to pain management:

R – Recognise

A - Assess

T - Treat

1) International Association for Study of Pain (2020)







INTRODUCTION

MOH has recognised pain as the 5th vital sign (P5VS) as a core strategy to improve pain management in MOH facilities since 2008.

It is one of requirements for certification as Pain Free Hospital / Health Clinic

General role of pharmacists - an integral role as part of a multidisciplinary team in managing pain at various healthcare settings by advocating and promoting safe, effective and quality use of pain medications.



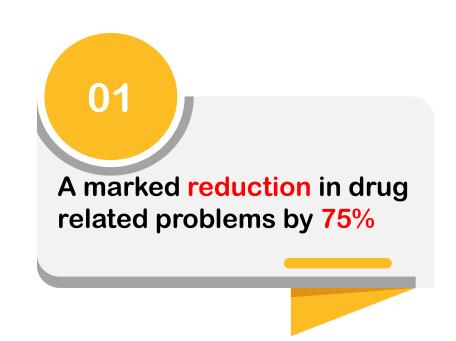




02

03

Study has shown pharmacist involvement in pain management contributed to²:



Significant pain score reduction

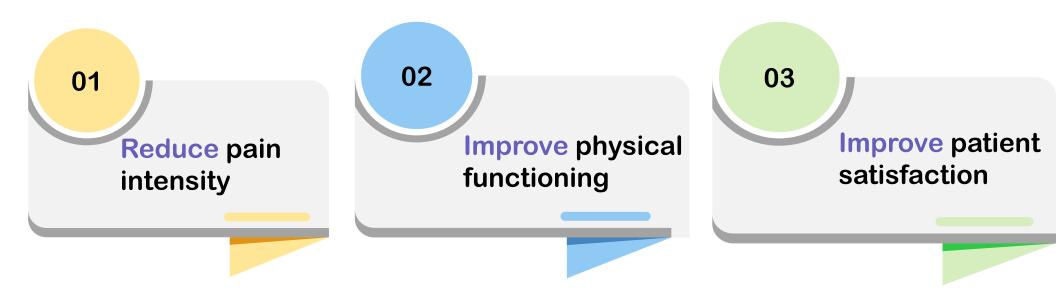
2) Hadi et al. (2014). Effectiveness of Pharmacist-led Medication Review in Chronic Pain Management. *The Clinical Journal of Pain, 30(11), 1006-1014*







A Systematic Review evaluating the effectiveness of pharmacist in chronic pain management has shown significant positive impacts in patient outcome³



3) Liu et al. (2020). Evaluation of Pharmacist Interventions as Part of a Multidisciplinary Cancer Pain Management Team In A Chinese Academic Medical Center. *Journal of the American Pharmacists Association*, 60(1)







A retrospective review at Saint John's Health Center, California from August 2006 to July 2007 showed that Pain Management Pharmacist's discharge

facilitation:

01

Save ~ \$97,200 over 12-month period







A total of 4411 adverse drug reactions (ADR) involving 13 types of NSAIDS had been reported to National Pharmaceutical Regulatory Agency in year 2021. Pharmacist involvement in pain pharmacotherapy is crucial to:

02

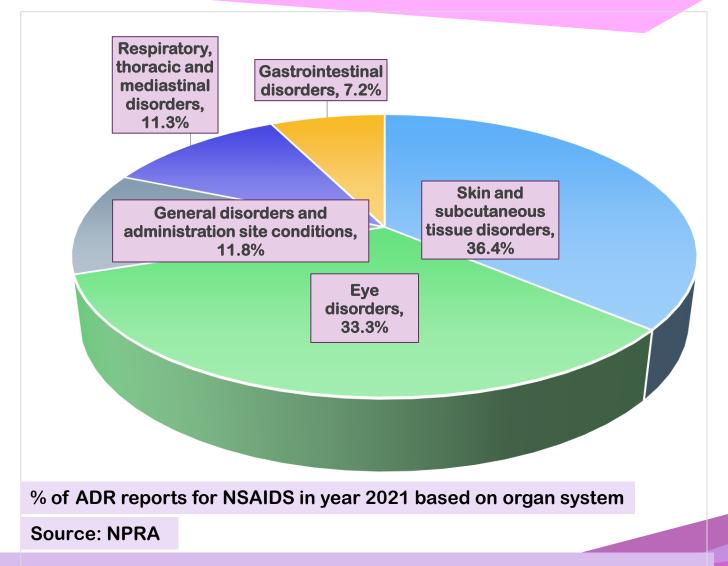
Minimise ADRs by providing proper education to HCP and patients







A total of 4411 ADR cases were reported in year 2021 involving 13 types of NSAIDs









AIMS OF TOT FOR PHARMACIST

To guide pharmacists in Ministry of Health:

O1 Establish Pain Pharmacotherapy Services at their facilities

02

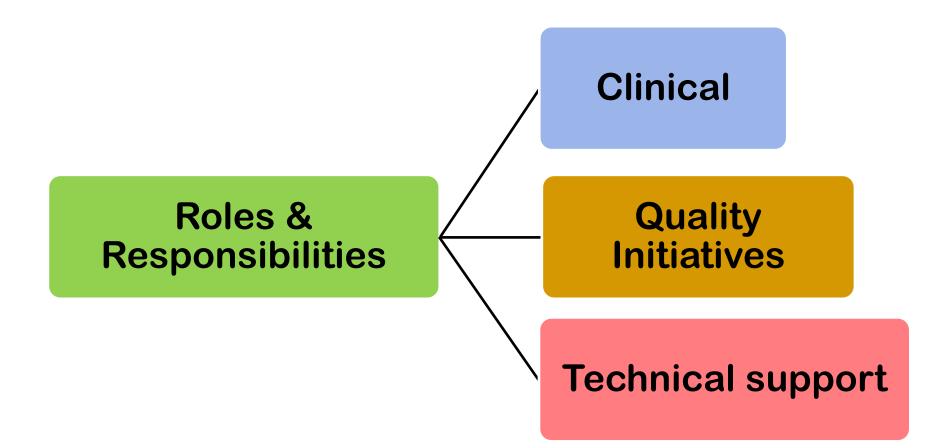
Ensure quality of Pain Pharmacotherapy Services by setting up standard methods of performing various tasks in the services







ROLES & RESPONSIBILITIES OF PHARMACIST IN PAIN PHARMACOTHERAPY









ROLE OF PHARMACIST IN PAIN PHARMACOTHERAPY SERVICES CLINICAL ASPECT







PAIN PHARMACOTHERAPY SERVICES

A provision of extended and specialised pharmacy service

Provided by trained and certified pharmacist using standardised training module developed by Pharmaceutical Services Division MOH

MOH facilities including hospitals and health clinics which implement Pain as 5th Vital Sign







03

OBJECTIVES OF PAIN PHARMACOTHERAPY SERVICES



To optimise pain therapy (controlled/reduce pain) by recommending individualized pain regimen



To minimise adverse events and reduce risk of medication errors by performing medication reconciliation



To counsel patients on appropriate use of pain medications to increase patients' understanding on their medications.



To engage in effective communication with multidisciplinary team in the optimisation of pain management







ROLE OF PHARMACIST IN PAIN MANAGEMENT QUALITY INITIATIVES







QUALITY INITIATIVES

Pharmacists play an integral role in quality improvement initiatives e.g.: quality assurance, R&D & innovation projects:









ROLE OF PHARMACIST IN PAIN MANAGEMENT TECHNICAL SUPPORT







1. DRUG UTILIZATION REVIEW

Perform regular analysis in pain medications:









1. DRUG UTILIZATION REVIEW

Prepare list of pain medications needed for the implementation of pain MTM service:

	01	Unregistered medications a) require Import Permit (under Control of Drug and Cosmetic Regulations 15 (6) 1984)
	02	Listed in MOH Drug Formulary a) Psychotropic and non-psychotropic b) Prescriber categories (A*, A, A/KK)
***	03	Medications requiring Special Approval from Director General of Health a) Not listed in MOH Drug Formulary b) Listed in MOH Drug Formulary but with different indication







2. PAIN MEDICATION PROCUREMENT & SUPPLY

Includes medications from hospital formulary especially needed for Pain Free Hospital (PFH)



01

02

Procurement

- a) Coordinate with logistic pharmacy unit on the quota, usage, slow moving and import permit items
- b) establish contingency plans during shortages of medicines and for purchases in emergencies



Distribution, Preparation & Handling

- a) Stock mobilisation between units / facilities / states
- b) Develop structured work flow for Preparation of IV admixture (PCA and epidural cocktails) and extemporaneous preparation (Syp. morphine 10mg/5ml) with Sterile Manufacturing Unit
- c) Ensure a proper and standardise documentation

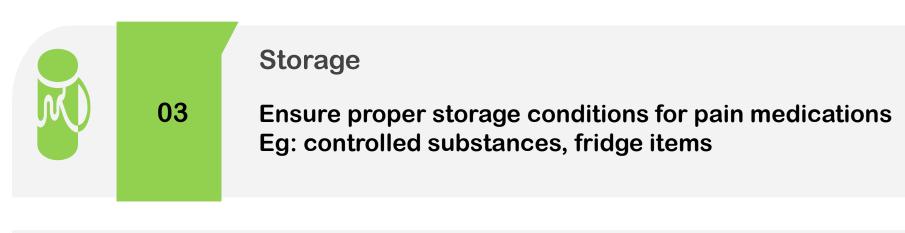






2. PAIN MEDICATION PROCUREMENT & SUPPLY

Includes medications from hospital formulary especially needed for Pain Free Hospital (PFH)





Supply & Dispensing

- a) Ensure access and availability of medicine supply based on indication
- b) Mechanism to differentiate pain prescription Eg: stamp "PAIN FP" on the prescription







Paracetamol

1g/100ml injection 500mg tablet

NSAIDs

Non-selective NSAIDs:

- Diclofenac 50mg tab, 12.5/25/50mg supp, 75mg/3ml injection
- Ibuprofen 200mg tab & 100mg/5ml syr
- Indomethacin 25mg cap & 100mg supp
- Naproxen 275mg & 250mg tab
- Meloxicam 7.5mg tab
- Piroxicam 10mg cap
- Ketorolac 30mg/ml injection

Selective COX2 Inhibitor

- Celecoxib 200mg cap
- Etoricoxib 90mg & 120mg tab
- Parecoxib 40mg injection







Opioids

Weak opioids

- Tramadol 50mg tab & 50mg/ml injection
- Dihydrocodeine 30mg tab

Strong opioids

- Aq Morphine 10mg/5ml
- Morphine SR 10mg, 30mg tab
- Oxynorm 5mg & 10mg cap
- Oxycontin 10mg & 20mg tab
- Oxycodone 10mg/ml injection
- Targin 5/2.5, 10/5, 20/10, 40/20
- Buprenorphine patch 5mcg/hr, 10mcg/hr
- *Methadone 5mg/ml syr







Adjuncts – Neuropathic pain

TCA

- Nortriptyline 10mg & 25mg tab (KPK)
- Amitriptyline 10mg, 25mg

Anticonvulsants

- Gabapentin 100mg, 300mg
- Pregabalin 50mg, 75mg & 150mg cap

SNRI

Duloxetine 30mg & 60mg tab







Others

PCA and Epidural

Anaesthetic

- Ketamine
- Lignocaine

Topical application

- Lignocaine patch
- Ketoprofen patch
- Gels and creams







3. PSYCHOTROPIC SUBSTANCE



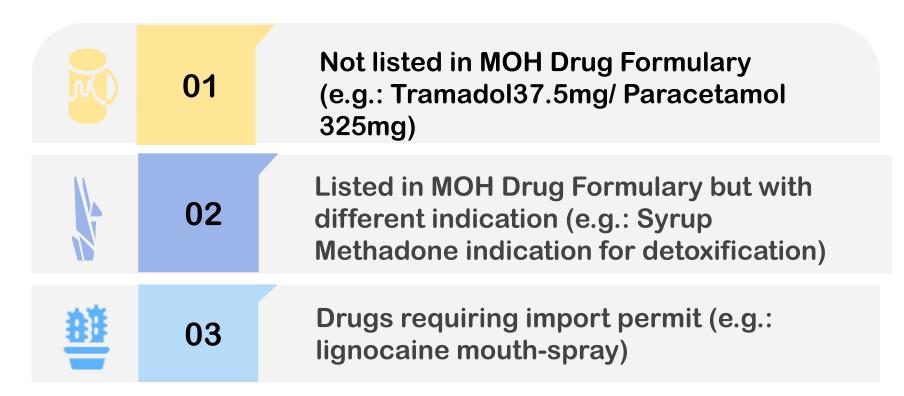






4. MEDICATION REQUIRING SPECIAL APPROVAL

Medications requiring Special Approval from Director General of Health / Senior Director of Pharmaceutical Services:



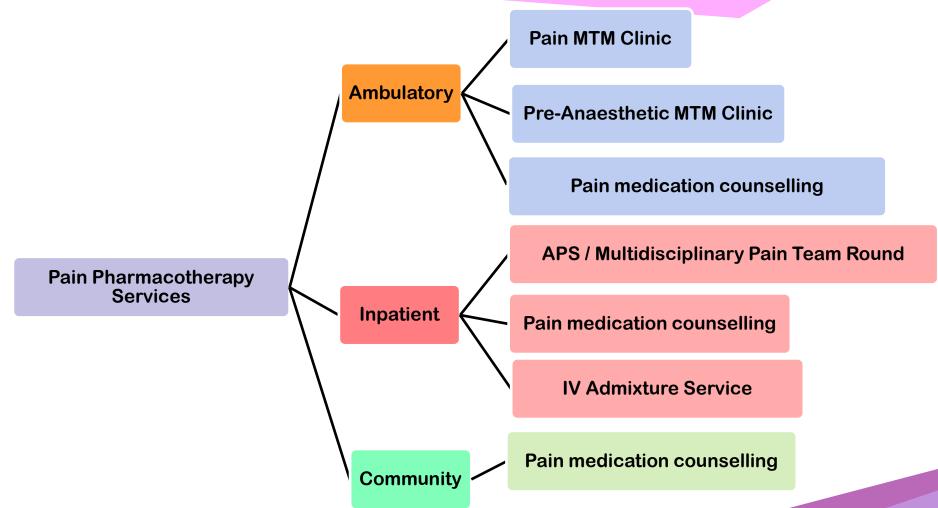
Garis Panduan Permohonan Memperolehi dan Menggunakan Ubat-ubatan yang Memerlukan Kelulusan Khas Pengarah Kesihatan (KPK) / Pengarah Kanan Perkhidmatan Farmasi (PKPF).







PAIN PHARMACOTHERAPY SERVICES









PAIN PHARMACOTHERAPY SERVICES (AMBULATORY) PAIN MEDICATION THERAPY MANAGEMENT (MTM) CLINIC







1. PAIN MTM CLINIC

Patient Recruitment

- •Referred by pain specialist/ Family Medicine Specialist (FMS)
- Identified and selected by pharmacist

Location

 Preferably but not limited to pain clinic area during clinic days.

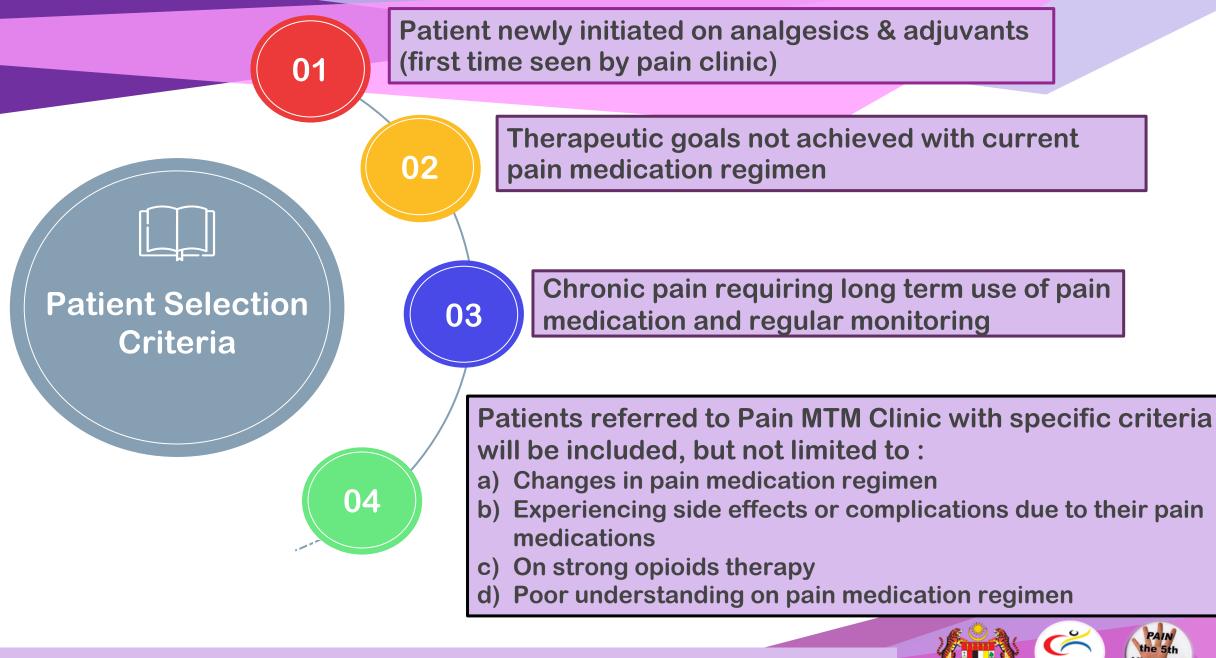
Manpower Requirement

 At least one trained pharmacist shall be on duty during clinic operating hours







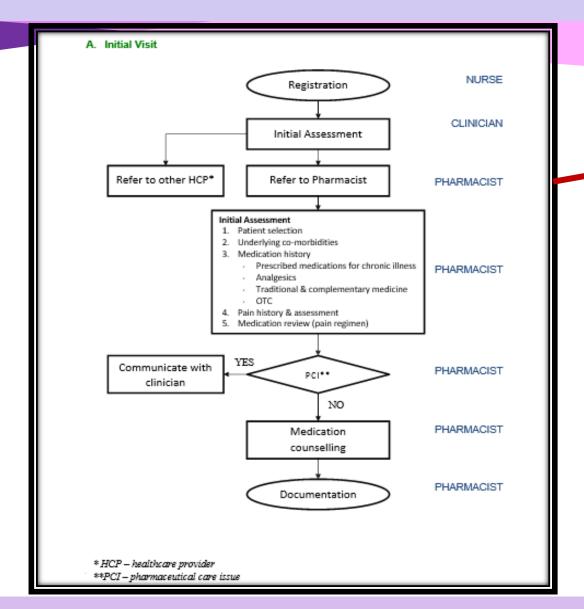


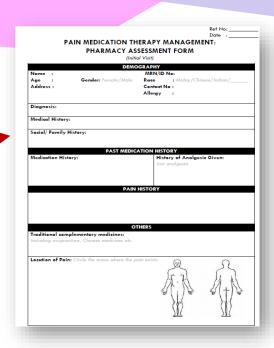






WORKFLOW: INITIAL VISIT



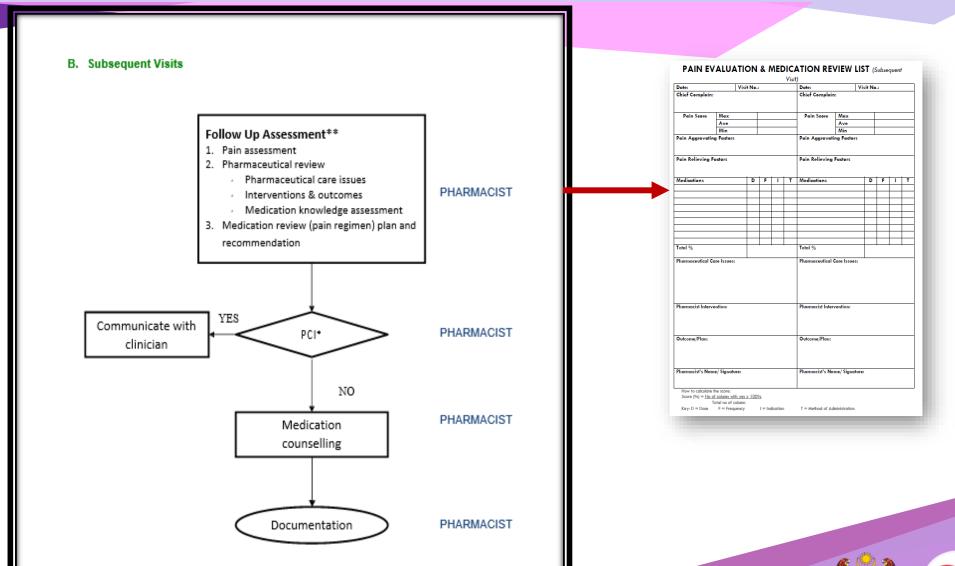








WORKFLOW: SUBSEQUENT VISIT









SUMMARY OF ACTIVITIES

Medication Counselling

- Explain & enforce
- Treatment goal
- Detail of medication
- Side effect & precaution
- Storage
- Missed dose
- Round the clock vs when necessary
- Follow up counselling

Pharmacotherapy Review

- Identify patients with medication related issues
- Assess & intervene
- Drug related problem
- Identify available therapeutic alternative
- Formulate individualized action plan Address safety concern

Pharmacist Recommendation

- Based on
- Intensity of pain
- Desired outcome
- Drug related problem
- Access & availability of medicine
- Collaborate with other HCP
- Interventions: to communicate with prescribers

Discharge Patient

- Discharge criteria:
- Transfer to other hospital
- Wean off pain medicine
- Achieved treatment goal & no other PCI
- Patient requested
- Defaulted follow up for 1 year







PAIN PHARMACOTHERAPY SERVICES (AMBULATORY) PRE-ANAESTHETIC MTM CLINIC







2. PRE-ANAESTHETIC MTM CLINIC

Scope

Medication history taking, medication review and patient counselling on the use of medication prior to surgery.

Location

 Preferably but not limited to Pre-Anaesthetic Clinic area during clinic days.

Manpower Requirement

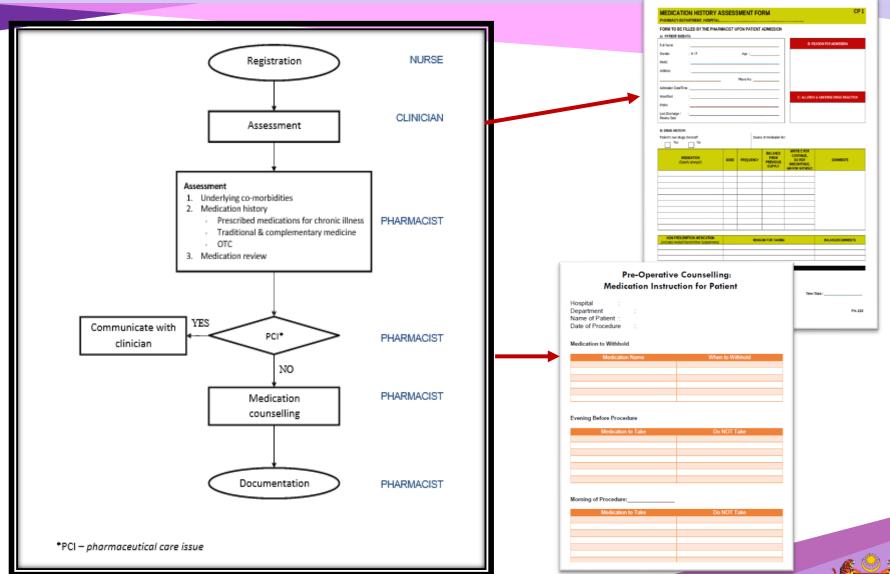
 At least one trained pharmacist needed to provide this service in the Pre-Anaesthetic Clinic.







WORKFLOW: PRE-ANAESTHETIC MTM CLINIC









PAIN PHARMACOTHERAPY SERVICES (INPATIENT) ACUTE PAIN SERVICE (APS)/ MULTIDISPLINARY PAIN TEAM ROUND







3. ACUTE PAIN SERVICE (APS)/ MULTIDISPLINARY PAIN TEAM ROUND

Scope

Participation during APS/
 Multidisciplinary Pain Team Round

Manpower Requirement

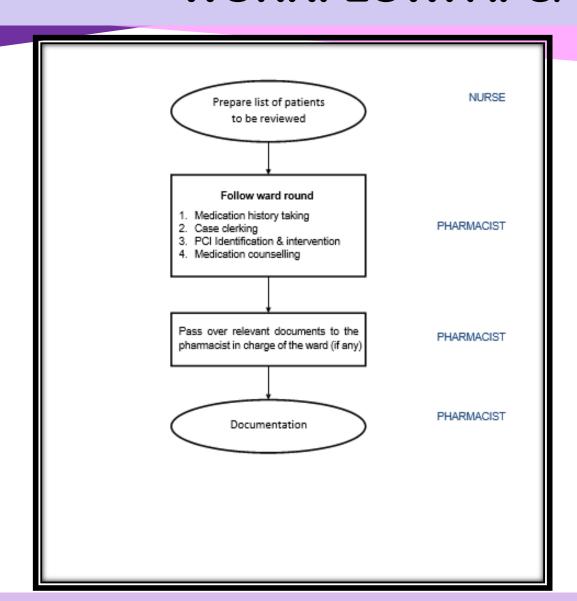
- At least 1 pharmacist (preferably but not limited to pharmacists who are trained in pain pharmacotherapy services).
- Ward pharmacist are advisable to be part of the team.







WORKFLOW: APS/MDT ROUND



Standardised Clinical Pharmacy Services Documentation

- Medication History Assessment
- 2. Pharmacotherapy Review
- 3. Clinical Pharmacy Report Form
- 4. Nota Rujukan Pesakit







PAIN PHARMACOTHERAPY SERVICES (MEDICATION COUNSELLING) AMBULATORY, INPATIENT, COMMUNITY







4. PAIN MEDICATION COUNSELLING

References for the work process and documentation:

01

Garis Panduan Kaunseling Ubat-ubatan Edisi Ketiga (2019) published by the Pharmaceutical Services Programme, MOH.

02

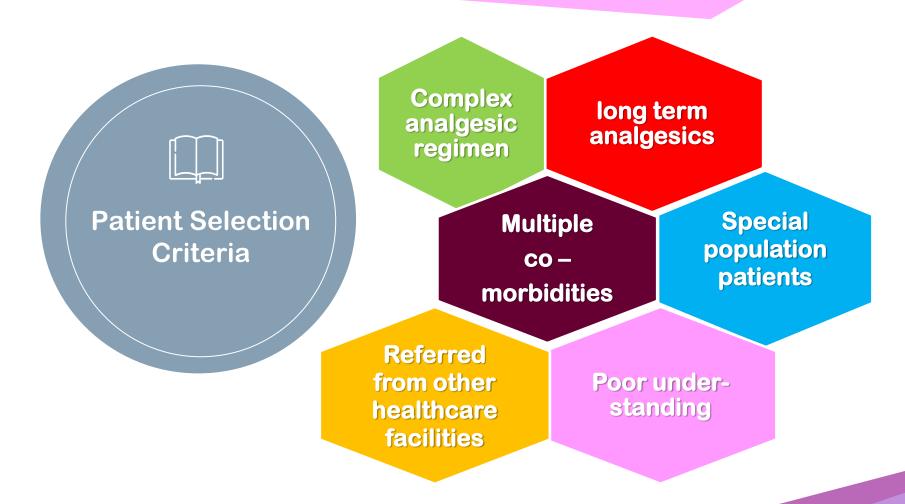
Garis Panduan Pelaksanaan Kaunseling Ubat-Ubatan Secara Maya / Virtual (2021)







4. PAIN MEDICATION COUNSELLING









PAIN PHARMACOTHERAPY SERVICES (MEDICATION COUNSELLING) PAIN MANAGEMENT IN PALLIATIVE CARE







PAIN MANAGEMENT IN PALLIATIVE CARE

01

Medication therapy is often a cornerstone of symptom control in palliative care and an important part of this is pain therapy management.

02

Pharmacist involvement in multidisciplinary palliative care team contributed to the reduction of inappropriate use of analgesics and improved pain control⁶

03

Refer Handbook of Palliative Medicine in Malaysia (2015)

6) Geum, M. J. et al. (2019). Interprofessional Collaboration Between a Multidisciplinary Palliative Care Team and the Team Pharmacist on Pain Management. *The American journal of hospice & palliative care, 36(7), 616–622. https://doi.org/10.1177/1049909119829047*







PHARMACY PAIN MANAGEMENT GUIDELINES

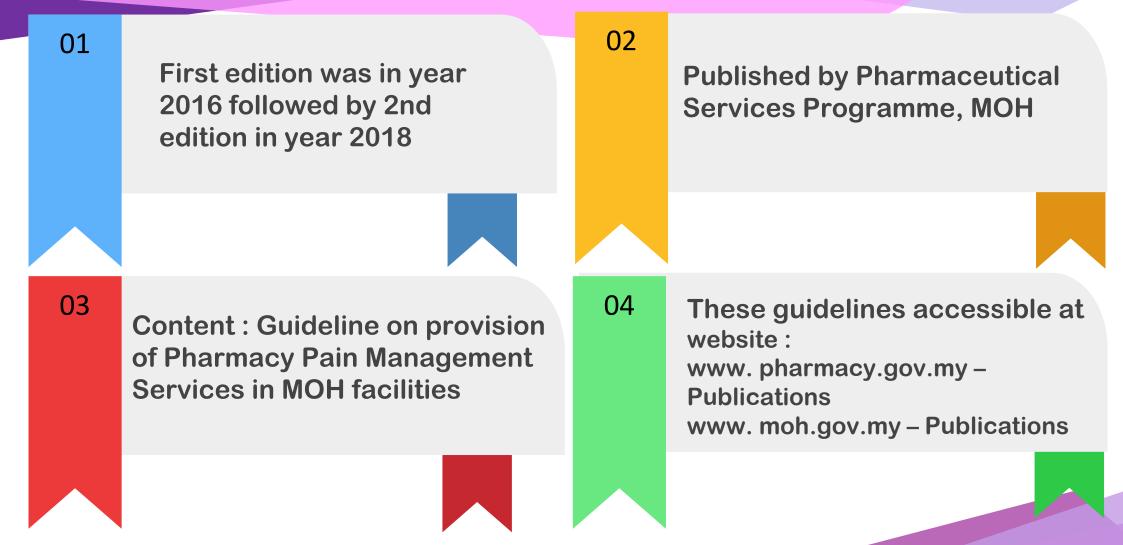
Pharmaceutical Services Programme Ministry of Health Malaysia







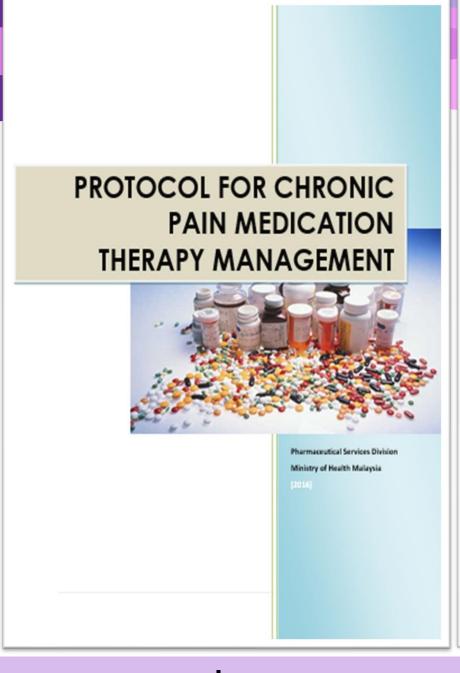
PHARMACY PAIN MANAGEMENT GUIDELINES











PAIN MEDICATION
THERAPY MANAGEMENT SERVICES:
GUIDELINE FOR PHARMACY



Pharmaceutical Services Programme
Ministry of Health Malaysia
[Second Edition 2018]







TRAINING PROGRAMME FOR PAIN PHARMACIST

Pharmaceutical Services Programme Ministry of Health Malaysia







TRAINING MODULE PHARMACIST IN PAIN MANAGEMENT

01

Pain Medication Therapy Management (MTM) for Pharmacy Training Module (2022) has been established by Pharmaceutical Services Programme

02

Aim to train and develop pharmacists with knowledge and skills to strengthen provision of pharmaceutical care in Pain Pharmacotherapy.

 $\left(03\right)$

Trainings options:
Full Training for MOH & non-MOH pharmacist
Echo Training (TOT by trained pharmacist).

04

Duration:

Part 1: 2 weeks attachment at appointed training centres

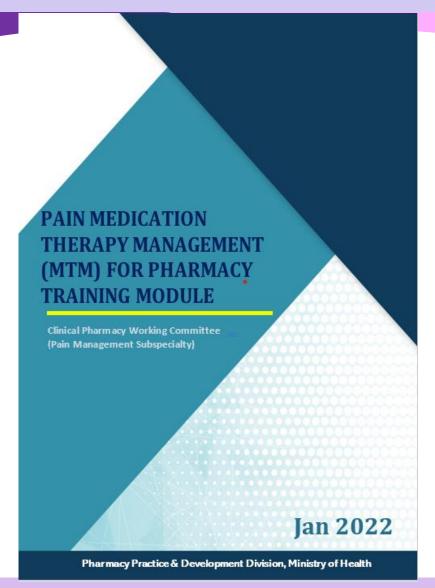
Part 2: 12 - 24 weeks at trainee's own facility







TRAINING MODULE PHARMACIST IN PAIN MANAGEMENT











REPORTING OF PAIN PHARMACOTHERAPY SERVICES

Pharmaceutical Services Programme Ministry of Health Malaysia









KEMENTERIAN KESIHATAN MALAYSIA (Ministry of Health Malaysia) Bahagian Amalan & Perkembangan Farmasi Pharmacy Practice & Development Division) ot 36, Jalan Universiti 46200 Petaling Jaya Selangor MALAYSIA

03 - 7841 3200 / 03 - 7841 3320 No. Faksimili 03 - 7968 2222 https://www.pharmagy.igsv.my

Ruj. Tuan

Ruj. Kami

KKM.600-34/3/11

Tarikh lé Mac 2018

Timbalan Pengarah Kesihatan Negeri (Farmasi)

Jabatan Kesihatan Negeri Perlis/ Kedah/ Pulau Pinang/ Perak/ Selangor/ Negeri Sembilan/ Melaka/ Johor/ Pahang/ Kelantan/ Terengganu/ WP Kuala Lumpur & Putrajaya/ WP Labuan

Ketua Jabatan Farmasi

Hospital Kuala Lumpur/ Institut Kanser Negara

Tuan/Puan,

EDARAN DOKUMENTASI FARMASI UNTUK PROGRAM SEPANJANG TAHUN 2017 - 2018

Dengan hormatnya saya diarah merujuk kepada perkara di atas.

- Sukacita dimaklumkan bahawa Program Perkhidmatan Farmasi, Kementerian Kesihatan Malaysia sedang dalam usaha untuk mempertingkatkan perkhidmatan farmasi dalam penjagaan kesakitan pesakit di hospital-hospital di selluruh negara. Sehubungan dengan itu, satu borang dokumentasi Paln Medication Therapy Management telah diwujudkan bagi mengumpulkan maklumat berkaitan perkhidmatan tersebut.
- Bersama dengan surat ini disertakan Borang Pelaporan Aktiviti Paln Medication Therapy Management (seperti di Lampiran A) untuk rujukan dan tindakan Tuan/Puan selanjutnya. Mohon kerjasama pihak Tuan/Puan memaklumkan fasiliti yang terlibat untuk membuat pelaporan retrospektif bagi tahum 2017 untuk dijadikan data baseline, dan juga pelaporan bagi tahun 2018. Pelaporan 2017 hendaklah dihantar ke Bahagian ini sebelum/pada 31 Mac 2018. Manakata

Letter from Pharmaceutical Services Programme KKM.600-34/3/11(25) Jld 4 dated 16th March 2018







PAIN PHARMACOTHERAPY SERVICES REPORTING

01

All activities of pain pharmacotherapy services has to be well-documented and kept for monthly compilation by the pharmacists and reported in Pain Pharmacotherapy Services Report.

02

This report has to be submitted quarterly by HOD / pharmacist in-charge to Pharmacy Practice and Development Division MOH via State Deputy Health Director (Pharmacy) every 3 months.







PAIN PHARMACOTHERAPY SERVICES REPORTING

LAPORAN AKTIVITI PAIN MEDICATION THERAPY MANAGEMENT (PAIN MTM)

NEGERI : TEMPOH :

Bil	Nama Fasiliti	Klinik <i>Pain MTM</i>		Bilangan Pesakit Dikaunsel Di	Bilangan Kes Yang	Bilangan Kaunseling Ubat-ubatan Tahan Sakit		
		Bil. Pesakit Baru	Bil. Pesakit Susulan	Pre-Anaesthetic Pain Clinic	Dipantau Di Wad	(selain daripada <i>Pain MTM Clinic</i>)		
FASILITI YANG TELAH MENDAPATKAN PENSIJILAN <i>PAIN FREE PROGRAMME/</i> HOSPITAL								
1								
2								
3								
4								
5								
6								
FASILITI YANG BELUM MENDAPATKAN PENSIJILAN PAIN FREE PROGRAMME/ HOSPITAL								
1								
2								
3								
4								
5								
6								

BPF Negeri akan menghantar borang ini ke Seksyen Farmasi Pesakit Dalam, Bahagian Amalan & Perkembangan Farmasi, KKM setiap 3 bulan:

Januari-Mac: sebelum atau pada 15 AprilJanuari-Jun: sebelum atau pada 15 JulaiJanuari-September: sebelum atau pada 15 Oktober

Januari-Disember : sebelum atau pada 15 Januari tahun berikutnya







PAIN PHARMACOTHERAPY







Challenges	Impact	WF	
Current landscape of Pain Pharmacotherapy Services focus primarily on secondary/tertiary facilities	Limited pain pharmacotherapy services in primary and community setting	Expansion of pain pharmacotherapy services to primary care and community	
Limited staffs' knowledge on pain medications: a) Quantity of medications supplied b) Complexity of pain medication regimen	 a) Patient not getting enough pain medications leading to inadequate pain control b) Resistance to conduct pain medications counselling among pharmacists 	Strengthen the foundation on the overall aspects of pain medication management to all healthcare staffs at different settings	
Variation in interpreting prescribing styles	Confusion among healthcare staffs due to different styles of prescribing	To get consensus amongst healthcare providers at facility level	







SCENARIO A Mr. S, 60 years old, retired teacher, diagnosed with prolapsed intervertebral disc was prescribed with:

- T. Paracetamol 1g QID x1/12
- C. Tramadol 50mg TDS x1/12
- C. Gabapentin 300mg TDS x1/12

How many T. Paracetamol 500mg should be supplied to Mr. S?

- a) 240 tablets
- b) 120 tablets
- c) 60 tablets
- d) 20 tablets









SCENARIO B Mr. D, 20 years old, post MVA discharged from ED, pain score upon admission = 8, was given IV Fentanyl 50mcg STAT. Subsequently pain score reduced to 4. The following are discharge medications:

- T. Paracetamol 1g QID x1/52
- C. Tramadol 50mg TDS x1/52
- C. Diclofenac 50mg TDS x1/52

As a pharmacist how are you going to counsel on this regimen?

Ans:

- a) Take paracetamol if you have mild pain, add on diclofenac if pain persist and lastly add on tramadol if inadequate pain control.
- b) Take all together then taper accordingly based on the pain score.
- c) Discuss with prescribers to reach consensus at facility level.









SCENARIO C Ms. T, 22 years old, diagnosed with chronic pain secondary to post herpetic neuralgia was prescribed with:

- T. Paracetamol 1g TDS/PRN x1/12
- C. Tramadol 50mg TDS/PRN x1/12
- C. Gabapentin 300mg ON x1/12

How many C. Tramadol 50mg shall be supplied to Ms. T?

- a) 10 tablets
- b) 30 tablets
- c) 100 tablets
- d) 90 + x tablets (Consensus at facility level)









ACKNOWLEDGEMENT

This is an initiative by the Clinical Pharmacy Working Committee (Pain Management Specialisation) under of Pharmaceutical Services Programme, Ministry of Health Malaysia. Would like to express our heartfelt gratitude the committee members of the reviewers, contributors and all those involved for their valuable and constructive comments in the completion of this guideline.

DISCLOSURE

This presentation slide is developed for the intent of Training of Trainers (TOT) for Pharmacists.









THANK YOU





