Project Title

To reduce fall incidence in Orthopaedics Ward 5A in Hospital Ampang

Group Members

Nama	Jawatan
Dr Sivabalan Panikkar	Pegawai Perubatan Unit Kualiti
Dr Jasmin Bujang	Pegawai Perubatan Unit Kualiti
Dr Izaqirah Ramli	Pegawai Perubatan Unit Kualiti
En Mustafa Kamal Abd Rahim	Ketua Jururawat Wad 5A
Pn Nor Anisa Zainudin	Jururawat Terlatih Wad 5A
Pn Nor Rabiatutadawiah Mohd Hatta	Jururawat Terlatih Wad 5A

OUTLINE OF PROBLEM

PROBLEM IDENTIFIED/ PROBLEM LISTING

- Incidence of Fall
- Thrombophlebitis
- Cancelation of operation
- Bed sores
- Blood transfusion error

PRIORITISATION OF PROBLEM

Problem	S	М	Α	R	Т	Score
To reduce the incidence of inpatient fall in Hospital Ampang	15	15	10	15	15	70
To reduce the incidence of thrombophlebitis among patients in Hospital Ampang	5	15	5	15	15	55
To reduce the rate of cancelation for operation among patients in Hospital Ampang	10	15	5	5	5	40
To reduce the incidence of pressure sore among patients in Hospital Ampang	10	15	10	15	15	65
To reduce the Incidence of Blood Transfusion Error among patients in Hospital Ampang	15	15	15	5	5	55

Group	
members:	5

Score	1	2	3
	Low	Moderate	High

Reason For Choosing

Seriousness	Increase hospital stay
	 Increase cost of hospitalization ie medication, investigation, intervention etc
	Increase mortality rate
Measurable	Fall incidence is measurable through incident reporting
Appropriate	Patient fall is an issue that requires urgent attention and immediate action due to lack of availability of method to seek assistance by patients.
Remedial	Improving nursing care through EPEEP observation programme
	Increasing knowledge and awareness on fall prevention
Timeliness	To reduce incidence of patient fall within a year with a 3 monthly review

SERIOUSNESS



Falls are the second leading cause of unintentional injury deaths worldwide. In Malaysia, falls among elderly incidence are between 15-34%



Each year ~684000 individuals die from falls globally from low to middle-income countries



37.3 million of falls are severe, requiring medical attentions, each year

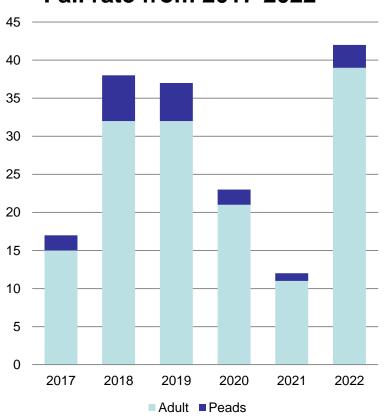


The average cost of fall per patient of 65 years old and older is approximately \$1049 *** (in Australia)**-> to get numbers in Hospital Ampang

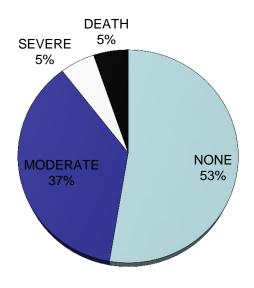
Source: World Health Organization, 2021

FALL RATE IN HOSPITAL AMPANG

Fall rate from 2017-2022



NO OF FALL



PROBLEM STATEMENT

- What: incidence of patient fall
- Who : Inpatients
- When : during admission
- Where: Orthopaedic & Surgical Wards (5A, 5B, 5C & 5D)
- Why: patient safety is compromised
- How: despite SOP is in place for proper monitoring and fall prevention, but % of fall rate still increased.

PROBLEM STATEMENT

Patient fall is a common and devastating incidence as it compromises patient safety as well as reflecting the quality of care of the facilities. Published figures quote a prevalence of 28-35% in the community and in acute care hospitals, the incidence of reported falls varies from 0.6-13 falls per 1000 patient days. There is a myriad of reasons of why fall happens and it is of vital importance to find out why in order to reduce patient fall rate. Among the possible causes of fall in Hospital Ampang are the lack of observation and lack of call bells in the ward. Thereby, by doing a QA Project in this we hope to explore the possible factors as well as coming up with possible remedial measures to overcome this problem.

BUBBLE CHART

MANAGEMENT & ORGANISATIONAL FACTORS

 Understaffing leading to lack of close observations on high risk patients TASK & TECHNOLOGY FACTORS:

- No call bell
- Bed railing unavailable or broken

WORK/CARE ENVIROMENT FACTORS

- Slippery or uneven floor
- Poor lighting at night
- Floor plan of ward whereby nursing station is placed away from patients

PATIENT FALL

EXTERNAL FACTORS •NIL

INDIVIDUAL STAFF FACTORS

- Lack of fall awareness among staff thus no fall orientation to patient
- Lack of knowledge leading to lack of observation for patients with high fall risk

TEAM FACTORS

 Risks of patient fall was not appropriately highlighted during handover patients

PATIENT FACTORS

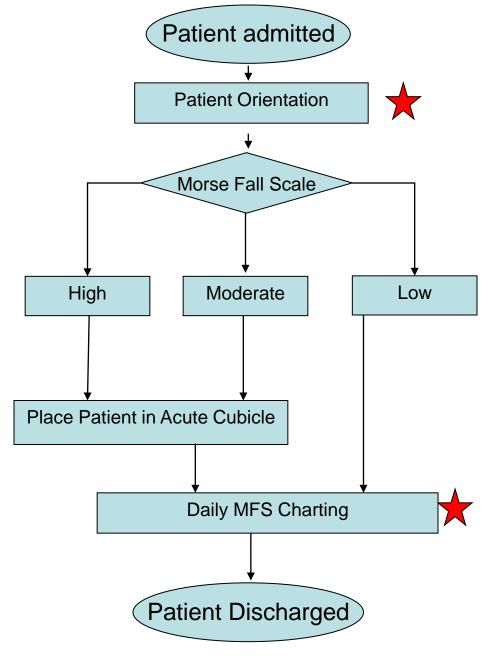
- Side effects of post op analgesic causing drowsiness
- Elderly / psychiatric patients
- Patients needing special assistance such as wheelchair, crutches

OBJECTIVE

- GENERAL OBJECTIVE
 - to reduce incidence of patient fall amongst patient admitted in Hospital Ampang
- SPECIFIC OBJECTIVE
 - To determine the percentage of patient fall.
 - To identify factors contributing to patient fall.
 - To formulate strategies and to implement possible remedial action.
 - To evaluate effectiveness of remedial measures implemented.

KEY MEASURES FOR IMPROVEMENT

Process of care



MODEL OF GOOD CARE

Process	Criteria	Standard
Patient Orientation & Morse Fall Scale Stratification	To conduct training and educate nursing staff on Fall Prevention	100%

MODEL OF GOOD CARE

Process	Criteria	Standard
Daily MFS Charting	To conduct training and educate nursing staff on EPEEP method	100%
	2. To do EPEEP Observation	
	- ENVIRONMENT	100%
	- Introduce Self (every shift)	
	- Ensure bed railing is up (2hourly)	
	- Bed is levelled/lowered (2hourly)	
	- Ensure things are within patient's reach (2hourly)	
	- POSITION	100%
	- To enquire patient's position is comfortable (2hourly)	
	 To change position if required/ every 2 hourly if bed bound patients 	
	- Inspect patients condition (2hourly)	
	- PAIN	1000/
	- Pain score (during vitals signs taking)	100%
	- Check IV line (during vital signs taking)	100%
	- ELIMINATION	100 /0
	 Ask and help patient if need to PU/BO (during vital signs taking) 	
	- To change diaper if needed (during vital signs taking)	
	- PLAN	100%
	- Ask if patient needs anything else (during vital signs taking)	

INDICATOR & STANDARD

Indicator:

Percentage of Patient Fall

Formula:

To use current standard

Standard:

PROCESS OF GATHERING INFORMATION

METHODOLOGY

Study Design	Cross Sectional Study
Study Period	1 year
Study Sample	Patients admitted to Ward 5A
Sample Size	All patients admitted to Ward 5A
Inclusion Criteria	All patients admitted to Ward 5A
Exclusion Criteria	Fall due to events such as seizures, loss of consciousness, paralysis or cardiac arrest and due to external forces Intentional fall due to suicidal attempts

DATA COLLECTION METHOD

NO	FACTORS	WHAT	WHEN	WHERE	WHO	HOW
1	Individual Fx Lack of fall awareness among staff thus no fall orientation to patient Lack of knowledge leading to lack of observation for patients with high fall risk	To conduct training and educate nursing staff on Fall Prevention and EPEEP method	3 Monthly	Ward 5A	Nursing Staff Ward 5A	Attendance List Survey on Staff Knowledge
2	Task & Technology Fx	To do EPEEP Observation	Every day	Ward 5A	All Patients	Borang Pemantauan EPEEP
	No call bell					
	Bed railing unavailable or broken	To conduct Audit on compliance to EPEEP Observation	Every 3 months	Ward 5A	Nursing Staff Ward 5A	Survey on Patient's Perspective
	Patient Factors					Observationa I Audit on Practice & Audit on Documentati on of EPEEP

DATA COLLECTION METHOD

NO	FACTORS	WHAT	WHEN	WHERE	WHO	HOW
3	Team Factors Risks of patient fall was not appropriately highlighted during handover patients Patient Factors	Proper handover between nursing shift for patients with high risk of fall	Every day	Ward 5A, 5B, 5C & 5D	Nursing Staff Quality Unit	Audit on documentati on in nursing report

DATA COLLECTION FORM

(if any)

Nama Pesakit:	MRI	V:					Wad	l/Kati	l No:					DOA	:									
Semakan kad menunggu pesakit (waris)																								
Nama:	Tari	kh:											Tarik	ch:										
	6-8	8-10	10-	12-2	2-4	4-6	6-8	8-10	10- 12	12-2	2-4	4-6	6-8	8-10	10-	12-2	2-4	4-6	6-8	8-10	10-	12-2	2-4	4-6
Masa	am	am	12 am			pm				am		am	am		12 am	pm	pm	pm		-	12 nm	am		am
E : Environment	aiii	aiii	aiii	piii	piii	piii	piii	piii	piii	aiii	aiii	aiii	aiii	aiii	aiii	piii	piii	piii	piii	piii	piii	aiii	aiii	aiii
a) Perkenalkan diri																								
b) Pagar katil dinaikkan	1																							
c) Katil dilaraskan/																								
direndahkan																								
d) Mengalih peralatan untuk mudah dicapai pesakit Eg: Loker/cardaic table/call bell/ bakul sampah dan lain-lain																								
P:Position																								
a)Tanya adakah baringan pesakit selesa. -Bantu jika perlu & ubah kedudukan bantal b)Mengubah posisi baringan 2 jam sekali																								
(Braden scale ≤ 16)																								
c)Memeriksa keadaan kulit pesakit keseluruhan																								
P:Pain																								
a) Bertanya skor tahap pesakit																								
b)Periksa IV line ***																								
E:Elimination																								
a) Tanya & bantu pesakit untuk PU/BO																								
b) Menukar lampin pakai buang.																								
P:Plan																								
a)Tanya jika ada apa-apa lagi yang pesakit perlukan																								
Eg : Masalah semasa pesakit/keperluan lain																								
Nama jururawat yang bertugas			•																					
Disemak oleh																								
Jika berkenaan																								
Tandakan (/) dalam petak berkenaan jika telah dilaksanaka	an																							
Sasaran:Setiap pesakit perlu dibuat nursing round secara ho	to contract				day -1																			

SULIT



MINISTRY OF HEALTH MALAYSIA PATIENT SAFETY INCIDENT REPORTING FORM



IR 2.0/2017 SULIT

Ĭ	DENT DESCRIPTION (PIE	TED BY THE REPORTER OF TH				
	NAME OF FACILITY/	ase minimize element	PAT	IENT'S	-	
	INSTITUTION		NA	ME		
	DATE OF INCIDENT			-	IF UNCERTAI	N
	DATE OF INCIDENT			- 20	APPROXIMAT	E DATE://
] AM/PM		IF UNCERTAI	
0	TIME OF INCIDENT		-		APPROXIMAT	E TIME:: AM /PN
	PATIENT'S RN / OTHER	INDENTIFICATION NUMBER	100	AGE		THNIC:
8	GENDER : MALE / FEM	IALE / UNKNOWN \$1	ATUS : ALIVE / DECEASED			RRIER: YES / NO
_	(please circle)		AGNOSIS :	en III	-	
	TYPE OF PATIENT (pie	ase fick one)	DEPARTMENT(S) INVOLV	D (please		ONCOLOGY
	INPATIENT	DAY CARE	SURGICAL		RMACY	GERIATRIC
	OUTPATIENT	OTHERS: SPECIFY	ORTHOPAEDIC	RADI	OLOGY &	REHABILITATION
8	A&E		PAEDIATRIC	IMAC A&E		ICH/ CCU
	LOCATION/ WARD /	CLINIC :	LABORATORY		HIATRY	100/000
			OTHERS: SPECIFY _	100		
	W		The second contract of	, V . Y		V
	YPE OF INCIDENT please fick one!	Actual	Near Miss	10	10	
a	mples of incidents t	nat need to be reported	d: (Note that this list is r	not exhau	stive)	
	i. Wrong surge	ery/procedure -wrong site	, side or patient	1		
	ii. Unintended	retained foreign body in p	patient after an operation	n/procedu	re	
	iii. Error in trans	fusion of blood/blood pro	duats			
	vi. Medication	error (please fill in MERS fo	rm as well)	M		
	v. Patient fall in	the facility		~		
	vi. Obstetric rel	ated incidents				
	vii. Adverse out	come of clinical procedu	re:			
		the state of the s	the same of the sa			
_	viii, Pre-hospital	care and ambulance ser				
	ix. Radiotherap	by related incident				
	ix. Radiotherap x, Patient suici	by related incident de / attempted suicide				
	ix. Radiotherap x, Patient suici xi. Patient disci	oy related incident de / attempted suicide harged to wrong family m				
	ix. Radiotherap x. Patient suici xi. Patient discl xii. Assault/ bat	by related incident de / attempted suicide harged to wrong family m tery of patient	embers / next-of -kin	or flashes	occurring in the	ocility
	ix. Radiotherap x. Patient suici xi. Patient discl xii. Assault/ bat	by related incident de / attempted suicide harged to wrong family m tery of patient ed Fire - Fire, flame, or und	embers / next-of -kin	or flashes	occurring in the	racility

IR 2.0/2017

PATIENT OUTCOME ID	lease lick offel # It									
	A CONTRACTOR OF THE PARTY OF TH	MMEDIATE ACTION - ONLY FOR ACTUAL INCIDENT								
	NONE									
	MILD									
8. OUTCOME	MODERATE									
OF INCIDENT	SEVERE									
-	DEATH CONTROL OF STATE OF STAT									
-	CURRENTLY CANNOT BE DETERMINED									
9. IMMEDIATE ACTION FOLLOWING INCIDE										
REPORTED BY										
10. DESIGNATION: piece NURSE HOUSE OFFICER MEDICAL OFFICER	se fick one) SPECIALIS PHARMAC OTHERS:									
SECTION B - TO BE CO	MPLETED BY THE BIS	SK MANAGER/ OHAITY MANAGER OF HOSPITAL								
SECTION B : TO BE CO	MPLETED BY THE RIS	SK MANAGER/ QUALITY MANAGER OF HOSPITAL								
SECTION B : TO BE CO	MPLETED BY THE RIS	(Please tick)								
1. ACTION TAKEN:		(Please fick) "PRESCRIPTION SLIP"								
ACTION TAKEN: Mandatory Root Co	ause Analysis:	(Please tick) "PRESCRIPTION SUP" MONITOR THE TREND FIRST								
ACTION TAKEN: Mandatory Root Co I) Incident with Sev	ause Analysis:	(Please fick) "PRESCRIPTION SLIP" MONTOR THE TREND FIRST RCA								
ACTION TAKEN: Mandatory Root Co	ause Analysis; vere or Death	(Please tick) "PRESCRIPTION SUP" MONITOR THE TREND FIRST								
ACTION TAKEN: Mandatory Root Co I) Incident with Sev outcome	ause Analysis; vere or Death ear miss based iger/ Quality nent ofe Health	(Please fick) "PRESCRIPTION SLIP" MONTOR THE TREND FIRST RCA								
1. ACTION TAKEN: Mandatory Root C(1) Incident with Sevoutcome 2) Other incident/non the Risk Mana Manager assessin 3) Directive from 58	ause Analysis; vere or Death ear miss based iger/ Quality nent ofe Health	[Please tick] "PRESCRIPTION SUP" MONITOR THE TREND FIRST RCA MIRCA [Multi-incident Root Cause Analysis]								
ACTION TAKEN: Mandatory Roof C. I) incident with Sevoutcome 2) Other incident/no in the Risk Mana Manager assessing 3) Directive from Sis-Department / Mil	ause Analysis; ere or Death ear miss bated ager/ Quality ment ofer Health nistry,	[Please tick] "PRESCRIPTION SUP" MONITOR THE TREND FIRST RCA MIRCA [Multi-incident Root Cause Analysis]								
ACTION TAKEN: Mandatory Root C. (1) Incident with Sevoutcome 2) Other incident/n on the Risk Mana Manager assess 3) Directive from St. Department / Mi 2. e-IR SUBMITTED? Please submit to e-IR.	ause Analysis; rete or Death ear miss bated ager/ Quality ment ofer Health nistry,	[Please tick] "PRESCRIPTION SUP" MONITOR THE TREND FIRST R.C.A. MIRCA [Multi-incident Root Cause Analysis] Additional comments:								
ACTION TAKEN: Mandatory Root C. (1) Incident with Sevoutcome 2) Other incident/n on the Risk Mana Manager assess 3) Directive from St. Department / Mi 2. e-IR SUBMITTED? Please submit to e-IR.	ause Analysis; were or Death ear miss based ager/ Quality teen earth afe Health histry. within 5 days ncident.	PRESCRIPTION SLIP" MONITOR THE TREND FIRST RCA MIRCA [Multi-incident Root Cause Analysis] Additional comments :								

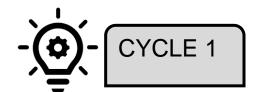
Data processing

Analysis & interpretation

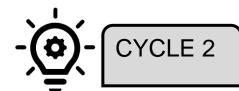
Strategy for change

The goal to reduce rate of patient fall is achievable by implementing measures to prevent fall such as EPEEP programme (Explain, Pain/Position, Elimination/Toilet, Environment and Plan to return).

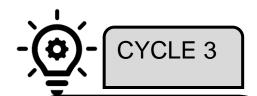
EPEEP programme is carried out by implementing a method of observation and nursing care whereby it involves rounds at each cubicle by nursing staff in a 2 hour interval to address patients need in order to reduce chances of fall



- Conduct CNE session
- EPEEP
 Observation
 Programme in
 Ward 5A
- Distribution & promotion of EPEEP
- Audit on compliance



- Conduct CNE session
- EPEEP
 Observation
 Programme in
 Ward 5B
- Distribution & promotion of EPEEP
- Audit on compliance



- Conduct CNE session
- EPEEP
 Observation
 Programme in
 Ward 5C & D
- Distribution & promotion of EPEEP
- Audit on compliance

Effect of change

The next step

Effect of Change

GANTT CHART

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Verification Study															
Briefing and Training															
Data Collection															
Analysis of Data															
Remedial Measures															
Re-evaluation 2nd Stage															
Report Writing															
Continues Remedial Measures															
Re-evaluation 3 rd Stage															

LITERATURE REVIEW

- Ng, S.C.; Ooi, K.L Improving care through EPEEP nurse rounding in Singapore tertiary hospital. International Journal of Evidence-Based Healthcare 12(3):p 210, September 2014.
- Tinneti ME, Doucette J, Claus E et al. Risk factors for serious injury during falls by older persons in community. J Am Geriatr Soc. 1995;43(11): 1214-21
- Koh SSL, Manias E, Hutchinson AM, Johnston L. Fall incidence and fall prevention practices at acute care hospitals in Singapore: a retrospective audit. J Eval Clin Pract. 2007; 13(5):722-7

THANK YOU