

# GROUP- 5 ADVERSE DRUG REACTIONS



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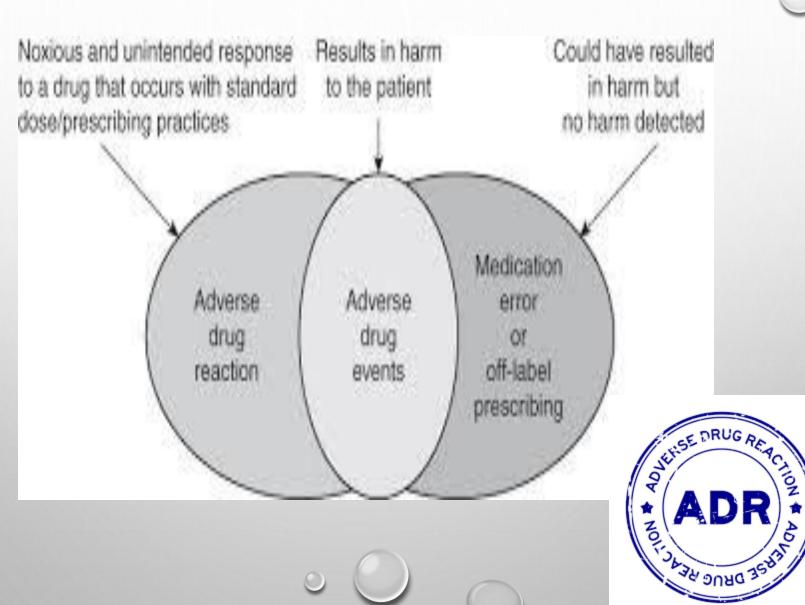
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# 1st Step

### DEFINITIONS



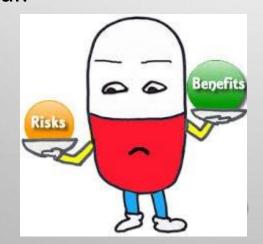
#### WHAT ARE ADVERSE DRUG REACTIONS?

'Cured yesterday of my disease

I died last night of my physician'

So ALWAYS the important question is:

Do the potential benefits of the medication outweigh the potential risks for the individual?







#### ADR'S DOES NOT INCLUDE

- Non therapeutic overdosage
- Lack of efficacy of drug
- Drug abuse
- Medication errors



#### CONSEQUENCES OF ADR

- Adversely affect patient's quality of life
- Complicate drug therapy
- Decrease compliance and delay cure
- Increase in cost of treatment
- Lack of confidence on their doctors
- Mimics disease and lead to unnecessary investigations



## WHO MIGHT GET AFFECTED BY ADVERSE DRUG REACTION?

Anyone who takes the medicine



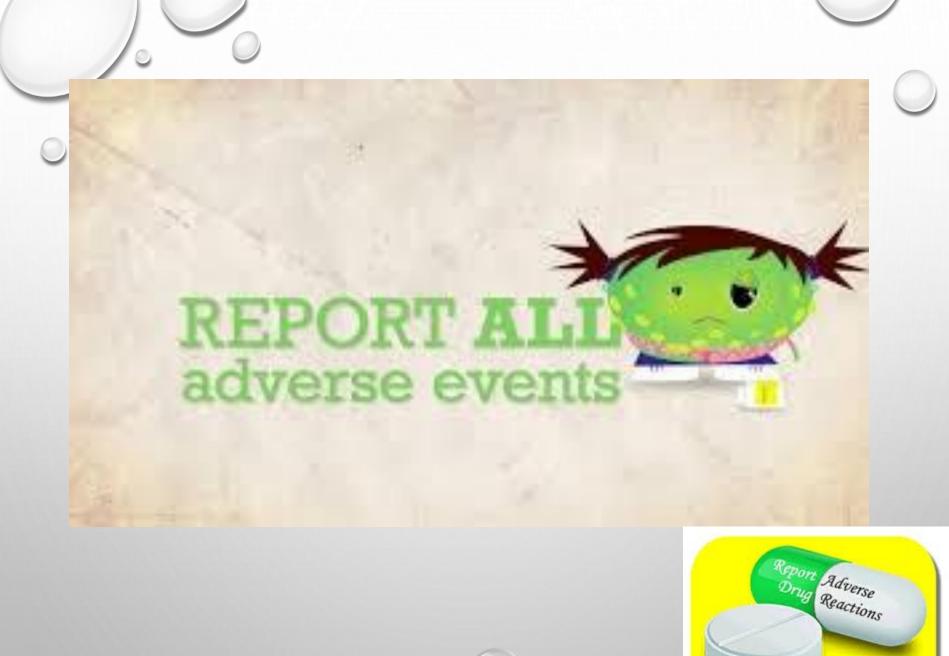
#### WHAT SHOULD RAISE SUSPICION OF ADR?

#### Symptoms that may:

- Appear soon after a new drug is started
- Occur after increase in dosage









#### ADR REPORTING FORM



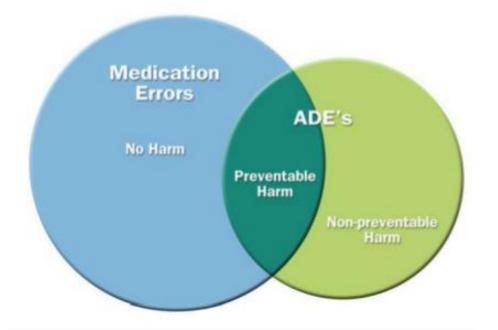
#### SUSPECTED ADVERSE DRUG REACTION REPORTING FORM

For VOLUNTARY reporting of Adverse Drug Reactions by Healthcare Professional

(National Coordination Certifer-Pharmacovigliance Programme of India) (National Coordination Centre-Pharmacovigliance Programme of India) (National Coordination Centre) (National Coordination Centre) (National Centre) (National Centre) (National Coordination Centre) (National				PHARM								F	OR AMC/N	CC USE C	NLY		
1. Patient Initials   2. Age at time of Event or Date of Birth   3. M   F   Other   4. Weight   Kgs   3. Relevant medical/ medication history (e.g. allergies, race, pregnancy, smoking, alcohol use, hepatic/renal dysfunction etc   Consense   Con			linistry o	f Health & F	Family	Welfare, 0	3ovemm	nent of I		la)	AMO	Report No.	:				
1. Patient Initials   2. Reg at time of Event or Date of Birth   4. Weight   Kgs    8. SUSPECTED ADVERSE REACTION   5. Date of reaction started (dd/mm/yyyy)   7. Describe reaction or problem   14. Seriousness of the reaction: No   if Yes   (please tick anye   Death (dd/mm/yyyy)   0. Describe reaction or problem   14. Seriousness of the reaction: No   if Yes   (please tick anye   Death (dd/mm/yyyy)   0. Death (dd/mm/yyyyy)   0. Death (dd/mm/yyyyy)   0. Death (dd/mm/yyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyyy												Worldwide Unique No. :					
Birth	A. P.	ATIENT INF	ORMA	TION							12. F	lelevant tests/	laboratory da	ta with da	tes		
8. SUSPECTED ADVERSE REACTION 5. Date of reaction started (dd/mm/yyyy) 6. Date of reaction started (dd/mm/yyyy) 7. Describe reaction or problem  14. Seriousness of the reaction: No   if Yes   (please tick anye   Death (dd/mm/yyyy)   Congenital-anomaly   Life threatening   Required intervention to prevent permanent   Intervention or problem   Disability   Other (specify)   Describe reaction: No   if Yes   (please tick anye   Death (dd/mm/yyyy)   Congenital-anomaly   Life threatening   Required intervention to prevent permanent   Intervention (please)   Describe   Des	1. Pa	tient Initials		Event or I			3. M	0 F	- o	ther 🗆							
S. Date of reaction started (dd/mm/yyyy)  6. Date of recovery (dd/mm/yyyy)  7. Describe reaction or problem  14. Seriousness of the reaction: No   if Yes   (please tick anye   Death (dd/mm/yyyy)   Congenital-anomaly   Required intervention to   Prevent permanent   Prevent permanent   Disability   Other (specify)   15. Outcomes   Recovering   Not recove   Fatal   Recovered with sequelae   Unknown   Not   Recovered with sequelae   Unknown   Not   Recovered with sequelae   Unknown   Not   Not   Recovered   Not   Not   Recovered   Not   N	-			Birth		_	4. We	eight		Kgs	_						
S. Date of reaction started (dd/mm/yyyy)  6. Date of recovery (dd/mm/yyyy)  7. Describe reaction or problem  14. Seriousness of the reaction: No   if Yes   (please tick anye   Death (dd/mm/yyyy)   Congenital-anomaly   Life threatening   Required intervention to Prevent permanent   Hospitalisation/Prolonged impairment/damage   Disability   Other (specify)   15. Outcomes   Recovered   Recovering   Not recover   Recovered with sequelae   Unknown   Not recovered   Recovered with sequelae   Unknown   Not recovered   Recovered with sequelae   Unknown   Not recovered   Not r	B. S	USPECTED	ADVE	RSE REAC	CTION						13. R	elevant medic	al/ medicatio	n history (e	.g. alle	rgies, race,	
1.4. Seriousness of the reaction: No   if Yes   (please tick anyer)   Death (ad/mm/yyy)   Congenital-anomaly   Life threatening   Required intervention to   Prevent permanent   Hospitalisation/Prolonged   Disability   Other (specify)   15. Outcomes   Recovered   Recovering   Not recovered   Recovered with sequelae   Unknown   Not recovered   Remail   Recovered with sequelae   Unknown   Not recovered   Remail   Recovered with sequelae   Unknown   Not recovered   Remail   Rem											preg	nancy, smokin	g, alcohol use	, hepatic/n	enal dy	sfunction etc.)	
1.4. Seriousness of the reaction: No   if Yes   (please tick anys   Death (dot/mm/yyy)   Congenital-anomaly   Life threatening   Required intervention to Prevent permanent   Prevent pe	6. D:	te of recov	ry	(dd/m	m/yy	yy)					_						
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Hospitalization/Prolonged   Disability   Other (specify)     15. Outcomes   Recovering   Not recovered   Not														_		-	
Disability   Other (specify)											10,	ife threatenin	5				
S. Name   Manufacturer Batch No. Exp. Date   Grand/Generic   Manufacturer Batch No. Exp. Date   S. Name   Grand/Generic   Gr											□ H	lospitalization	/Prolonged	impain	ment/c	lamage	
Recovered   Recovering   Not recove   Fatal   Recovered with sequelae   Unknown																	
C. SUSPECTED MEDICATION(S)  I. Name (Brand/Generic) (if known) / Lot No.																	
S. SUSPECTED MEDICATION(S)  No     No    No     No    No     No    No    No     No    No    No    No     No    No    No    No    No    No    No     No    No    No    No    No     No    No     No    No     No    No     No    No     No    No     No    No     No    No      No     No     No     No     No      No     No      No     No      No     No      No     No      No      No      No      No      No      No      No      No      No      No      No																	
No   R. Name   Manufacturer   Batch No.   Exp. Date   Dose   Dose   C(O, B)   Date   Started   Date stopped   Indication   Causality   Assessme   Date   D	c si	ISPECTED	MEDIC	'ATION(S	a							2(2)	Recovered	with seque	elae L	Unknown	
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III   No   P. Action Taken (please tick)   10. Reaction reappeared after reintroduction (please tick)   20. Refect unknown   20. Refec	i		_	<del>                                     </del>	_		Ť	_			etc.)						
No   Description   Dose   Do																	
10. Reaction reappeared after reintroduction (please tick)   20. Reaction reappeared after reintroduction (please tick)   22. Drug   Drug   Dose increased   Dose   Dose not   Not   Unkin   Yes   No   Effect unknown   Dose (if reintroduction   Dose (if reintroduction   Dose   Iffect unknown   Dose (if reintroduction   Dose   Iffect unknown   Iff				-	_		+		_	_		-					
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III   Concomitant medical product including self-medication and herbal nemedies with therapy dates (Exclude those used to treat reaction)   No   Name (Brand/Generic)   Dose used   Route used   Frequency   Therapy dates (Exclude those used to treat reaction)	_				$\vdash$			$\boldsymbol{+}$		+	<del>                                     </del>	_			+		
11. Concomitant medical product including self-medication and herbal remedies with therapy dates (Exclude those used to treat reaction)  No Name (Brand/Generic)  Dose used  Route used  Route used  (Oo, 80, etc.)  Date started  Date stopped  in  in  Additional information:  D. REPORTER DETAILS  15. Name and Professional Address:  Fin:  E-mail  Tel. No. (with STD code)  Occupation:  Signature:					$\vdash$			$\neg$		_					${}^{+}$		
No Name (Brand/Generic)   Dose used   Route used   Frequency (OD, BD, etc.)   Date started   Date stopped   Indication								$\perp$							$\bot$		
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## The relationship between Medication Error, ADE & ADR



#### MEDICATION ERROR

• A **MEDICATION ERROR** IS ANY PREVENTABLE EVENT THAT MAY CAUSE OR LEAD TO INAPPROPRIATE **MEDICATION** USE OR PATIENT HARM WHILE THE **MEDICATION** IS IN THE CONTROL OF THE HEALTH CARE PROFESSIONAL, PATIENT, OR CONSUMER.



#### EXAMPLE OF MEDICATION ERROR

A 25 KG CHILD WITH NO PRIOR HISTORY OF PENICILLIN ALLERGY
WAS PRESCRIBED 250 MG ORALLY OF AMOXICILLIN SUSPENSION
TWICE DAILY (MORNING AND EVENING) FOR 7 DAYS. ON THE
SEVENTH DAY, THE CHILD INADVERTENTLY RECEIVED A MORNING
DOSE OF 500 MG INSTEAD OF 250 MG. THE CHILD DID NOT SUFFER
ANY NEGATIVE CONSEQUENCES FROM THE ERROR.



#### ADVERSE DRUG EVENT

• AN **ADVERSE DRUG EVENT** (ADE) IS AN INJURY RESULTING FROM MEDICAL INTERVENTION RELATED TO A **DRUG**.

#### EXAMPLE OF ADVERSE DRUG EVENT

A 37 YEAR OLD PATIENT DIAGNOSED WITH AN INFECTION FOR
WHICH AMOXICILLIN AND CLAVULANATE POTASSIUM IS A CLINICALLY
REASONABLE CHOICE. PATIENT HAS USED AMOXICILLIN AND OTHER
ANTIBIOTICS IN PAST WITHOUT ADVERSE EFF ECTS. PRESCRIBER
ORDERED AMOXICILLIN AND CLAVULANATE POTASSIUM 500 MG
EVERY 12 HOURS. AFTER TAKING 3 DOSES, PATIENT EXPERIENCED
RASH AND FACIAL SWELLING. HE WAS TRANSPORTED TO THE
EMERGENCY DEPARTMENT AND TREATED.



#### THE ROLE OF PHARMACOVIGILANCE

• THE ROLE OF **PHARMACOVIGILANCE** IS TO DETERMINE WHICH ADVERSE EVENTS CROSS THE LINE OF A DRUG'S EFFICACY. IN OTHER WORDS, ANALYSING WHICH SIDE EFFECTS ARE WORTH THE RISK TO PATIENTS COMPARED WITH HOW EFFECTIVE THEY ARE AT TREATING A DISEASE.



