### How to Write a Good Prescription





Dr. Anjan Adhikari Assistant Professor Department of Pharmacology R G Kar Medical College

Kolkata





















#### DEPARTMENT OF REALTH A PANEL WELFARE CONTENSIENT OF WEST BOYCES. OPEN EMPRICANCY TREASURED CARD.

- de transcer Bang	(mg)
The state of the s	1
HARM BETON BOTH	100 m 2 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1
House San Day See Davids  Description See 25 June 1997	4910 house
Signs A. Symptoms Chical Scanniches Input Steen	
Assugation with	· Capitalo Priomprisas
recorders	Consideration of the
Fye discholique	taclet Alburdantie
Tretted Square	La Copcoberrano
canania.	×4.0
Ecogonetiniti	Ancaegroot



# History

```
Prescriptions have been in use since ancient times

Latin adopted as standard language "Rx" = prescription

"Sig." = directions
Federal Food, Drug, and Cosmetic Act (1938)

Non – prescription

Prescription

Legend drugs

Controlled drugs
```





Be 120 mining For Production Van Calonate - D USGIO Abou



Toplare of - popular Cato Spalin pr Win @ Trait TOMBO ( On Eggs) M. 3 Family (19) Sprevely CSO 29/4 contain are as he - 64 posther 200 241- 15 o con court in 200 or - Which low war tool

- Once a patient with clinical problems has been evaluated and a diagnosis is reached, the physician can select any one of the variety of therapeutic approaches.
- Medication, surgery, radiation, physical therapy, health education, counseling, further consultation and no therapy are some of the options available.

 Of these options, drug therapy is by far the one most commonly chosen.
 Usually prescriptions of medications are the results of 67% cases of

physician patient contact.

#### Definition and Format

A prescription is a written, verbal, or electronic order from a practitioner or designated agent to a pharmacist for a particular medication for a specific patient.

# Prescription

 Prescription is the physician's written order to pharmacist for preparing and dispensing medicines and also direction to the patient for the proper use of medicines.  Writing a good prescription is not only a good scientific practice but also involves arts of medical science.

 Good prescription is the first step for rational drug use.  Rational drug use indicates right drug for the right patient in right dose at right time and at right cost.

 Good prescription or rational prescription or right prescription is one of the preconditions for use of right medicines by the society.

- Prescription is an outcome of the interaction between the doctor and the patient.
- Writing a prescription rationally & correctly is the prime responsibility of any physician.
- It carries more importance in countries like ours where superstition and ignorance is still persisting in the society.

dissemination of rational and scientific knowledge throughout in the society.

Good prescription plays crucial role in

 A prescription should cover all the relevant information about patient,

disease & medicine advised.

- In recent times, the trend has been to prescribe the medicines that are produced in mass and packaged in convenient formulations under brand names.
- Now the practice of writing complex prescription orders containing many active ingredients, adjutants, correctives and vehicle has been abandoned in favour of single drug compounded by pharmaceutical companies.

 The prescription in this case refers to the physician's written order to the pharmacist or chemist for dispensing a

medicine.

- A prescription is an important medico-legal document.
- A prescription should be clear, legibly written in ink in English with good handwriting or computer printed.

- Local vernaculars can also be used for better understanding of the patients.
- Abbreviations of all type should be avoided as much as possible.

 A prescription must have a date. Date serves multiple purposes like legal aspect, maximum number & time of refilling, patient compliance etc.

 A prescription should contain prescriber details including the name, address and contact phone number. It serves proper identification of the physician and the doctor can be contacted if any clarification is needed, for una∨ailability of the prescribed branded drugs, for adverse drug reaction and emergency.

 Information regarding the patient should be complete. It should contain name, age, sex, address, body weight and body surface area if needed.

- Name of the drugs should be written correctly and <u>clearly & in capital letter</u> if possible. Use of <u>Generic</u> names should be preferred.
- Use leading zeros (0.125mg not .125mg) are always preferred, but never use trailing zeros (5mg not 5.0 mg).

 Dosage form, Strength, Units, Dose, Duration and Route, Timing of drugs with meals should be clearly mentioned. The dose and duration of the therapy should be specified. This information must be ventilated to the patient or the relatives.

- If there is more than one dosage form by different routes in a prescription, the order should be as follows –
  - ▶ Injections, followed by
  - ▶ Oral preparations in this order –

Capsules Tablets Liquids & finally

➤ Topical preparations

- If there is any special instruction for the pharmacist or chemist, it should be written clearly.
- The prescription should be explained to the patient or the relatives.

 All prescriptions must be signed by the competent authority, i.e., physician or registered medical practitioner.
 Registration number if required must be written.  Poor prescribing habits can lead to ineffective and unsafe treatment, exacerbation or prolongation of illness, distress and harm to the patient and higher costs of therapy.

It may be a source of medication error.

In this modern era of scientific explosion, it is the right of common people to get right and appropriate information about health. It will be very difficult if the doctors are not able to prescribe good, rational, scientific, cost effective prescription, if the pharmacists & chemists are not able to follow the prescription and to ventilate the necessary information to the users and if the patients are not realizing the importance of rational use of medicines.

#### Guidelines for writing good prescription in Standard Treatment Guidelines (STG)

 Doctors are requested to follow the following guidelines suggested by STG.

There must be a standard format or proforma for both Out Patient Door (OPD) and Indoor/Emergency.

STG developed a format for OPD/Emergency. This standard format is already used by different health facilities of North & South 24 parganas district. The physicians are requested to use this format while prescribing in OPD/Emergency. A copy of this format is shown here.

#### **OPD Ticket**

#### DEFARTMENT OF HEALTH & FAMILY WELFARE GOVERNMENT OF WENT BENGAL

Name of the Health Facility , Address		Tel. No. PHORPHONE		
PATIENT DETAILS	Registration No	radio)	Date	
	Vide-	Polipies.	Code	
Dector's Name				
Channel notes	Dam	ABVICE/IN	rediptions	
Hotory C. maptures (Ago. A. Symptone) Choicel Executive/lose Previolental Diagnosis Agory Notes				

## Importance of standard

**OPD/Emergency format** 







Sept 166



Chicken Allen Too

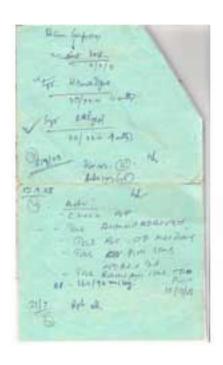
#### **OPD Ticket**

-	NT THERESE	ALTH & FAME YOR WEST BE CY TREADMEN	PEARS	N/10/2014
PATIENT DETAILS	Registration 1 les. Titl.	Astrona Astrona	Face:	
Section States States Section		APACE S		

# It is essential that the prescription is

legible

# It must be legible, if hand written.



Fish afire S/hors/kee West Bongal Form No. -769 TICKET FOR OUT-DOOR PATIENTS Chandpur P.H.C. Rajarhat Block North + 24 Parganasi ... No. in O.P. Register Date of First Visit Name Sex Caste Age Discase Treatment Date

## It must be clear.



#### Identity of the health facility

- DEPARTMENT OF HEALTH & FAMILY WELFARE
- GOVERNMENT OF WEST BENGAL
- OPD / EMERGENCY TREATMENT CARD
- Address......Tel. No.....Tel. No......

#### Identity of the patient

PATIENT DETAILS

· Registration Number-

Date-

- Name.....
- Age......Religion...

  Caste......
- P.O.-....PS.....

# Identity of the prescriber/doctor

Doctor's Name......

#### Identity of the patient

PATIENT DETAILS

· Registration Number-

Date-

- Name.....
- Age......Religion...

  Caste......
- P.O.-....PS.....

 Name of the medicines should be in capital letter. But small letter legible name can also serve the purpose, if writing in capital letter is laborious due to patient

overload.

 Provisional diagnosis and important findings supporting the provisional diagnosis (PD) should be written.

 Relevant information related to provisional diagnosis (PD) or differential diagnosis (DD) should be written.

- · Chronology of prescribing drugs/medicines-
- Core Drug
- Complimentary Drug
- · Supportive or Symptomatic Drugs.
- · Each prescribed drug/medicine must be provided with—
- Dosage form
- Strength
- Dose
- Frequency
- Duration

 Supportive advice following the provisional diagnosis or the drugs/medicines should be written. Important advice in the prescription indicates quality prescription.

 Advice of supportive investigation will strengthen the purpose of prescription. Try to avoid abbreviation as much as possible.

 Registration number should be written whenever necessary as per prescription.

## How to Evaluate a Prescription

#### Prescription Audit in STG

- Drug or medicine is any substance or product that is used or is intended to be used to explore the physiological system or to modify pathological states for the benefit of recipients (World Health Organization).
- Drugs or medicines can do good, can do harm & whenever a drug is taken a risk is taken. So doctors should be aware of its importance.

 Medication error is defined as "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...related to professional practice, health care products, procedures and systems including prescribing; order communication; product labeling, packaging, & nomenclature; compounding; dispensing; distribution; administration; education; monitoring; and use." Statistics shows that 44,000 to 98,000
 Americans die each year as a result of medical errors.

 This is associated with a cost of USD 17 to USD 29 billion and ranks medical error the eighth-leading cause of death in the US.  Though in India, a proper reporting of medication errors in the hospital is not available still now, but survey shows that out of all visits to the medical emergency department- six per cent are drug-related.

 Of all ADE-related visits, 52 per cent and of all ADE-related admissions, 55 per cent were considered preventable.

# Several survey confirmed irrational drug use in India.

 Recent initiatives of regulatory authorities (MCI) warned that doctors

found to be unethical and irrational

prescribing would be punished.

 The fast growing rates of medication errors all over the world indicates the need for starting a routine prescription auditing in all health setup, this is more important in respect to India, where resources are limited. Standard Treatment Guideline (STG)
prepared and implemented by Institute of
Health & Family Welfare, Department of
Health & Family Welfare, Govt. of West
Bengal, Swasthya Bhavan, (29 GN Block,
Sector-V, Bidhan Nagar, Kolkata-700091) is a
justified and timely approach.

#### Prescription auditing

This is a process of auditing prescription in a particular health care system with the purpose of identifying the medication errors, finding out the way to prevent such errors and thus improving the overall health care system.

 The process of prescription auditing in its broader sense include prescription monitoring, drug utilization studies, prescription pattern studies, study of prescription habits of doctors, adverse drug reaction monitoring, drug interaction monitoring, criteria based prescription auditing and many other activities.

 But the most important and basic activities include checking the prescription for drug name (brand name or generic), strength, formulation, dose, route of administration, frequency, duration of treatment and drug allergies.  The process of prescription auditing is a type of vigilance activity, which is very beneficial for the health system in terms of reducing the financial burden because of medication errors and increasing the rate of patient recovery and discharge from the hospital. Not only that, prescription audit ensures quality health service which is very much essential.

 There is no routine auditing system of prescription audit in India. The method used for prescription auditing depends upon purpose for which it is carried out. Different studies audited prescription in different ways. Though there is no standard methodology, these studies are very helpful in collecting data regarding prescription habits of doctors, the comparison of efficacies of different drugs.

 Standard treatment guidelines and its implementation in the primary health care evaluated and monitored the prescription habit of doctors. A standard method is developed for routine screening of some sample prescription (usually ten) and all the prescription drugs along with the prescribed information regarding the drug name (brand names), strength, formulation, doses, route of administration, frequency and duration of treatment. We also evaluate some other important aspects of prescriptions.

# Standard procedure for collection of prescription

- 1. Doctor should prescribe medicines on the standardized OPD/Emergency tickets (STG). These prescriptions contain PD, symptoms, signs, drug name, strength, formulation, doses, route of administration, frequency & duration of treatment, necessary advices and investigations.
- 2. STG monitors/assessors will collect sample prescription randomly, carefully during the visit of health facilities for audit.
   Prescription containing more that one encounter should reflect better prescribing trends.

 Collect only OPD/Emergency prescriptions. Try to avoid Eye, ENT, Dental, RNTCP, Antenatal Check up, Discharge Tickets.

# DEPARTMENT OF HEALTH & FAMILY WELFARE GOVERNMENT OF WEST BENGAL OFO, EMERCANCY TRATMENT CARD

A PROCESSION OF THE PARTY OF TH Name of the Street, Earlier PATRICIPALITY HERBARLE Same Address - Transport Visites Day SEC. 15 Discov's Name Clinical Society Minter P.Conglishon. Masi Sun & Street, or other Chical Exercise in Beiser Neter 100 - 100 50h 100 + 1000 50h 000 ml Pr Nove med Excellent Dispose

Follow Standard Treatment Collection and source Rational Line of Stationer

whether আপৎকালীন বিভাগ - Geoleston -আপণ্ডালীন বিভাগ - CASSORATO -March Land

po Quin	Registration Number: 22 & 52 Date: 197076.
Visiting Day Decre's Name	Minerality
Clinical Natur	ADVICE/Interligations
History / Complaints State & Semples State & S	Date:  Control 2 (September 1) (19 Per 1) (1
Growth of the	Charles and the control of the contr

# ক্ষমনহেড়িয়া চড়িয়াল বুক প্রাথমিক স্বাস্থ্য কেন্দ্র

বজৰজ - ১নং ব্লক, পোঃ বুইতা, দক্ষিণ ২৪ পরবাণা

WHEN CARD	Alatte State	4-2-55
48	-	-
See		
Name and Address	The second second	
# Processor Stagents	September 1970	
( and complete !		Application of the Party of the
	to leave that he assessment which	and this house the
	response to the second or the stage of the Sale	Concession of the latest
Decimal Decimal	to current to service to the	Aspert AV
a Year board, districts	Annual Many Comment of the State of the	Secretario CFS
- District Constitution &	management that the property of the Principles	\$14,00 Md
Seeming Co.	Secret Security by the No. on prints on this is no new pri	186
Charles Comme	Common of Street, I will be any one woman for it	
4 bridgest 4 Physics	Charles Street and Street Street Street	A DOMESTIC
1 Stephen 19 St.	And the first of the state of t	Supplied of feet
E-Trace (1) Types	Continues State Labor Laborator Laborator	tols responsed from the little
TO A SHEET, N. Law Assess Address.	State of Sta	Contract of the Contract of th
in model	Married States on State of the Party of States	
a transmission and the		
- Statement - Charles	Security Stay Payle or server, 1	- Ohio artis
To be a second of the second o	Security (Mr. State Cymress (Co. 4) 1	
in his factions of	NAME AND ADDRESS OF THE PARTY O	
& Indiana N. Coastment	tion below to the weeker of the second real field the	
Company of Personal Co.	Management owner, the feet in a color was free on whether	
A NAME OF TAXABLE PARTY.	*	
N. Stanforder	The state of the s	
a files a Calcado Silvino.	Security 1	
TI, STORY HOTERS	Barbins of St. Str., Spinster, St. 67 (1971) with Fig. 17 (69)	()
In Registrop system	Star un de describer	
- A Regulation report by the second	Street, Square, Square	
A Parameters, bellesing	Service State of State (Control Service)	
II ADDRESS AND DESCRIPTION OF THE PARTY NAMED IN	Carlotte Carlotte	
In reader	Short tellite The war	
a betterment & famous	The same of the sa	
- mercenta i prof pathonis		
14 Dunatosina		
S. Sant		9
in Carrente & Pear Street		Game i'm
A BANK S FORMS		Name:
4-14 STORES IN THE BEST FREE		Finance .
P. Contract		100
11.0	1119	171.
Was .	TATE OF THE PERSON OF THE PERS	74
man della	1 Telephone	The contract of

- If possible xerox or scan the prescriptions, if no such copying system available nearby then the monitors can use carbon copy of the prescriptions or copy the prescription by handwriting.
- Properly preserve the prescription and hand over it to the respective authority for audit.

# Prescription auditing methodology

Following the guidelines of World Health
Organization (WHO) and under the
guidance of our respected teachers we
developed a methodology for
prescription auditing.

- Some modification of WHO formula was done to make it simple and practical and compliant to our primary health care setup.
- This methodology was already tested and proved effective during the audit of prescription in piloting of STG (Number of prescription/encounters audited - 4867, North 24 pgs-2373 & South 24 pgs-2658).

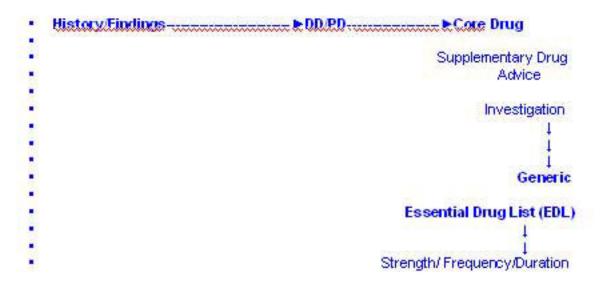
# Steps to be followed in prescription audit of STG-

- 1. All prescriptions collected should be numbered as ------
- Number the Prescription as 1,2,3.....etc.
- &..... → Then
- Number of Encounters as 1,2,3,4......
- 2. In audit we will evaluate the encounters.
- 3. Encounters without date will be cancelled and not evaluated.

 4. If the prescription is ILLEGIBLE at any item then that item should not be considered and 0 (ZERO) points will be given.

5. The main Objectives for evaluation -- ▶ Prescription should be understandable.

## Scheme & Flow Chart of Evaluation process of Prescription Audit-



- 6. Evaluation scoring system- Each encounter/prescription will be assessed on the following four facets,
- Completeness of Prescription (Diagnosis, Findings, Signature),
- Whether Prescription corroborates with Symptoms/Diagnosis (Selection of core drugs, Selection of subsidiary/symptomatic drug, Relevant advices/instructions for patients),
- Prescribing Behavior (Generic Prescription, Essential drugs Prescription, Judicious Investigations)
- Dosage Schedule (Dose, Frequency of administration, Duration of therapy).
- All the points/question/item scores 2 (two) marks.

 Negative marking will be there depending on prescribing of vitamin / tonics / enzymes / poly pharmacy (antimicrobials) / parenterals for

unnecessary indicators.

### PRESCRIBING INDICATORS

Category: 4 (Each category comprises of three questions / items)

Questions 12 (Each question / item carries 2 marks)

Total marks: 24

Marks obtained:

Rational

Semi Rational

Un acceptable

24 - to >18:

18 - to >12

= or >12:

#### DEPARTMENT OF HEALTH & FAMILY WELFARE COVERNMENT OF WEST BENGAL

OR A MARRIAGEN OF THE ATLEINT CARTS

use of the throate harder	No. of Street, To St. H.	Total State
Marie Allerton Control	Note in \$4 th cappened	The second second
remembers	Englewish Number - St. 7. Apr. Apr. Apr. Apr. Apr. Apr. Apr. Apr	1337
Volting Date		
Doctor's Feature Clinical Nation	APAICE / breed	and the second
Biner/Constant. No.		
FROTULONE Dyspessi Actack Parlin Sip 120 School Ar(0) 4950 LVSp. 118 HE 120 C	Tatu	ANTACIA  27065 ADAMA  27065 ADAMA  ANTACIA  27065 ADAMA  ATTOMORPHICALLA  17065 YIZAMA  SOLOMORPHICALLA  25 11

Fallow Standard Treasured Guideline and steeps Rathon? For of Wadeline

Massat PHE Barn y NT OF BEALTH & FAMILY WELFARE GOVERNMENT OF WEST BENGAL CMINION TOWNSTONE WIND TO STAN PRESENCER Name of the Health Facility Daw 1 10 cales PATHENT BETAILS. Skips to State Bet. SPAISOY. Codeblate Nune **Address** po bette Parper pa Madabbelle. Vosing Dati . ON SOMEGRACIO Desire's Name 6 Statuted Nation **Binery/Complete** Signi A. Syngli **Christ Euri** PARALETANIL (COLL) 28 ST Induct Name Francis Later ore Elmin -Manage to CLIPPING (BAC) siving divine were No all Lough . Accidence by the

Follow Standard Treatment Califolium and rissure Raisonal Use of Medicine.

& Vival Lease

- I. Completeness of Prescription
  - ▶ Diagnosis
  - ▶ Findings
  - ► Signature

### II. Whether Prescription corroborates with Symptoms/Diagnosis

- Selection of core drugs
  - ► Selection of subsidiary/symptomatic drug
  - ▶ Relevant advices/instructions for patients

•

# III. Prescribing Behavior

- ► Generic Prescription
  - ▶ Essential drugs Prescription
  - ▶ Judicious Investigations

# · IV. Dosage Schedule

- ▶ Dose
  - ► Frequency of administration (Interval)
  - ▶ Duration of therapy

 There are twelve items to be evaluated in each encounter / prescription. Each item scores 2 (two) marks. So, total points are 24. Negative markings (2 marks for each item) will be given for tonics/enzymes/poly pharmacy (antimicrobials)/parenterals for unnecessary indicators. Now the total marks scored by each encounter will be converted into percentage and then graded into Rational (R), Semi Rational (SR), and Un Acceptable (UA).

and the Bradth Fortilly	NA MARKET THE PARTY OF THE PARTY OF THE PARTY OF THE
Emerican Maria	12 to
ning Day	DR. B. HISWAR
Salesi Notes	T Colomorada as  Secula sola sola sola  T Colomorada as  (100 - 50)  Secula sola sola solara  Secula solara  Se
Townson Married	Fig. Sections

#### DEPARTMENT OF HEALTH & FAMILY WELFAKE GOVERNMENT OF WEST BENGAL

OPD / EMERGENCY TREATMENT CARD Baining reach west: 1 kin over of the Black's Facilities PATRICITION TAILS Brightnesses Number - J. T. 277 ATTACK HIPE Danner's Name .... AMERICA / Secretarion Stowal Potes Since / Completel. Dayson & Taxasphore Child Essentiation Injury Name Capsulo Prompoge frisage A Consulation ce fails hoch wom weathers tablet Alberda Title Free Stimed Disposit Eandmia Edwinner ritio Enforce Standard Treatment Containers and course Rational Cas of Wash

### · Evaluation Scheme

Total Points = 24 = 100%

R = Rational = Points - >18- to 24: Rational = >75% to 100%

SR = Semi Rational = Points - >12- to 18 Semi Rational = > 51% or = or < 75%

UA =Un Acceptable=Points-< or = 12: Un Acceptable = = or < 50%

Registration Number - 1157 12 PATTENT DETAILS AMERICAN PROPERTY Visiting Date 2 3 - 6-43 Doctor's Name Clinical Notes ADVICE / Investigations History / Complaints. Signs A. Symptomic Clinical Examination My Write descharge Candid vaginal gol My Write descharge TD x 7 0 ays. V 3 yrs. Tab fe 2 (150) once ah x 6 whs. Provitional Diagramia Bras Snash Kencomkeg.

Visiting Date - 08/67 Doctor's Nume	109 DV	Parw Glash .
Clinical Notes	-	ADVICE / Investigations
History / Complaints Signs & Symptoms Clinical Examination Injury Notes  Clo Atching Spenn 15 day and an dill  O  5: Italy Abd- Provisional diagnosis Starler & A  acidity	× 7days	Adv. Tel Famotidue (20m. 1 tel total daily x o , Tel Ceta 2 true (15mg) 1 once daily x s , BB lotten to at their searty x

# Prescription audit of STG also evaluated following points

- Prescription with identification-
- a). Identification of the health facility
- b). Prescribers identification
- c). Patient identification
- d). Stamp of the prescribers
- e). Signature of the prescriber

- Other points-
- Prescription with provisional diagnosis/findings written
- · Illegible prescription
- · Percentage of prescription without abbreviation
- Prescription with medicine written in capital
- · Prescription with drugs from Generic / EDL
- · Number of drugs prescribed per prescription
- Percentage of prescription with an antibiotic
- Percentage of prescription with an injection
- Number of prescription without drugs (only advice)
- Prescription written in local language

 A zero medication error is an impossible thing to achieve because we are humans and not machine. So, the only way to get rid of irrational, unscientific prescription is a thorough screening all components of a prescription. That is why to ensure rational prescription auditing must be an integral

component of the health system.

 This unique approach of prescription audit in Standard Treatment Guidelines at primary health care is a definite step for right medicine for right person at right time in right dose and at a right cost.

#### CONCLUSION: -

- The process of prescription auditing is a kind of vigilance activity
- The objective of prescription auditing is to detect medication errors preferably before they are dispensed
- Prescription auditing reduces medication errors and increases the rate of patient recovery and discharge from the hospital

#### Right Drug for Right Person at Right Time in Right Dose......





