PRACTICE OF RATIONAL USE OF DRUGS (R.U.D.) AT THE HEALTH FACILITY IN FARYAB AND JAWZJAN PROVINCES OF AFGHANISTAN

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Background and Rational

- More than 50% of national and 60 – 80% of individual health care expenditure is spent on medicines .
- Selection of antibiotics 1) offensive use of antibiotics leads to wards complex problems like drug resistance and starts a vicious cycle 2) Afghanistan is still a country where prevalence of infectious diseases is high enough. Secondly, analgesics most commonly used in general practices and affects hazardous effects on body and most of the time, these drugs are used without proper consultation to doctor ,even higher doses are been asked by patients in hurry towards acquiring results in quickly. Injectables have strong connotation of being fast acting drugs and more powerful so preferred by prescriber and consumer also.

1) Definition

The rational use of drugs is that " patients receive medications **appropriate to their clinical needs** in **doses that meet their own individual requirements** for an **adequate period of time**, and at the **lowest cost to them** and their **community** ". (Source: WHO)

Case definition is related to **appropriate to their clinical needs** and **adequate period of time** components of definition.

OBJECTIVES

- **General Objective**:

  To assess the pattern of use of drugs specially, antibiotics and analgesics in Faryab and Jawzjan provinces of Afghanistan.

- **Specific Objectives**:

  1) To know prescribing pattern of drugs (antibiotics and analgesics).

  2) To know the patient knowledge about usages of advised medicine at the health facilities.

Rational

Selection of

1) **Antibiotics**

A) offensive use of antibiotics leads towards more complex problems like drug resistance and it starts a vicious cycle.

B) Still prevalence of infectious diseases is more than noninfectious diseases.

2) **Analgesics**

A) Most commonly used in general practices.

B) Has hazardous effects on body .

C) Without proper consultation , higher doses are been asked **by patients.**

3) **Injectables** have strong connotation of being fast acting drugs and more powerful so preferred by prescriber and consumer also.

METHODOLOGY

- ***Study Design***

  A cross sectional analytical study with both retrospective data from records and current patients from OPD patient on day of survey at the health facilities.

- ***Sampling techniques***
  - The two operational provinces of S.A.F. selected by convenient sampling.
  - Health facilities selected systematic random method
  - Prospective data : interviewing patient, simple random sampling
  - Retrospective data -The entries from the records of last one year is selected by simple random sampling.

Exclusion criteria

Patients with ICH Diabetic, HTN >1 yr

Sample size:

- 10 health facilities from 2 provinces of Faryab and Jawzjan each.

1) 1200 past records (5 records per month from Feb-2010 till Feb-2012) from each health facilities

2) 15 OPD patients visiting the health facility on the day of survey observed and interviewed from each facility. That is in total 300 patients will be interviewed from 20 health facilities.

	No. of health facility	No. of prospective data forms	No. of retrospective data forms
Faryab	10	10*15= 150	60*10=600
Jawzjan	10	10*15=150	60*10=600
Total	20	300	1200

- **Data collection**
- **Data source :** Primary data collection from records of health facilities

Structured Questioners with specific(prescribing, facility, and patient dose knowledge) indicator forms. To collect patient care indicator ,general observation with help of stop watch is done.

Prospective data will be collected by structured questioner and prescription they have with them where as retrospective data , from available records.

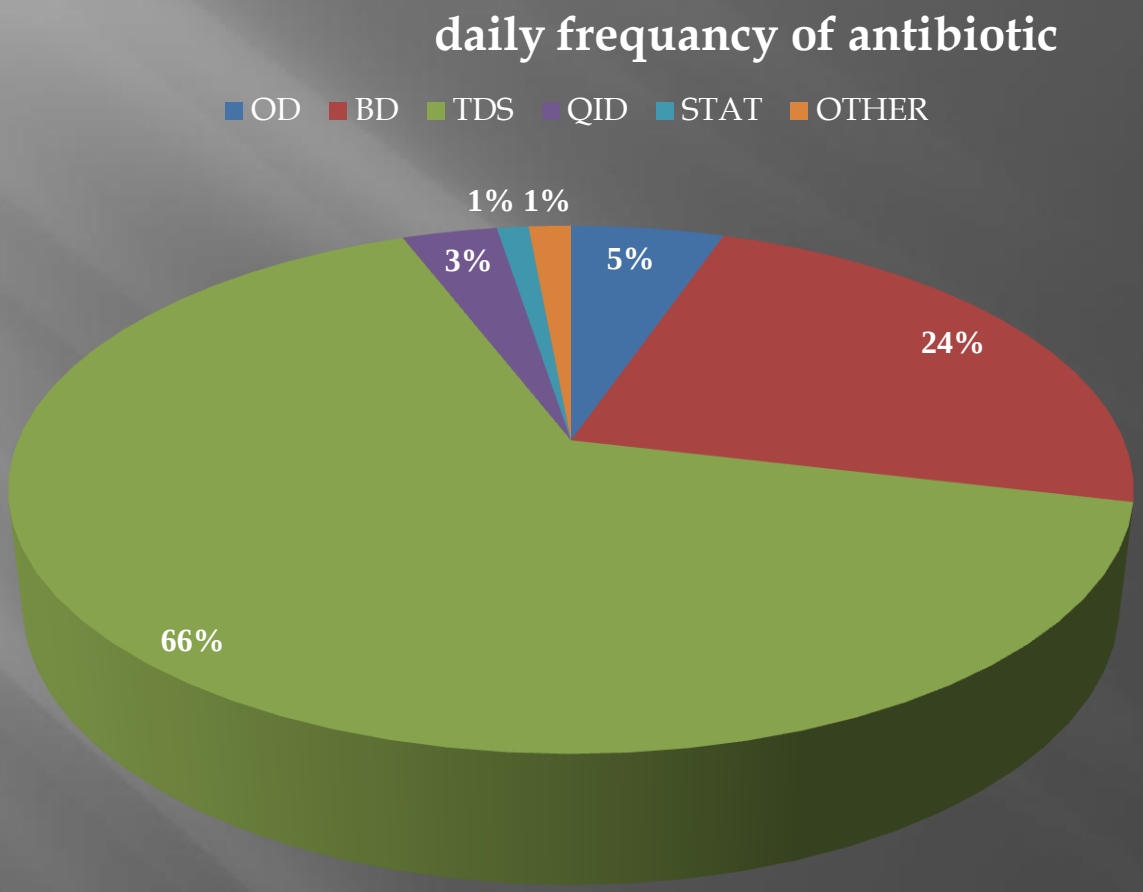
Data is collected over a period of 3 weeks by trained investigators.

- **Data analysis**

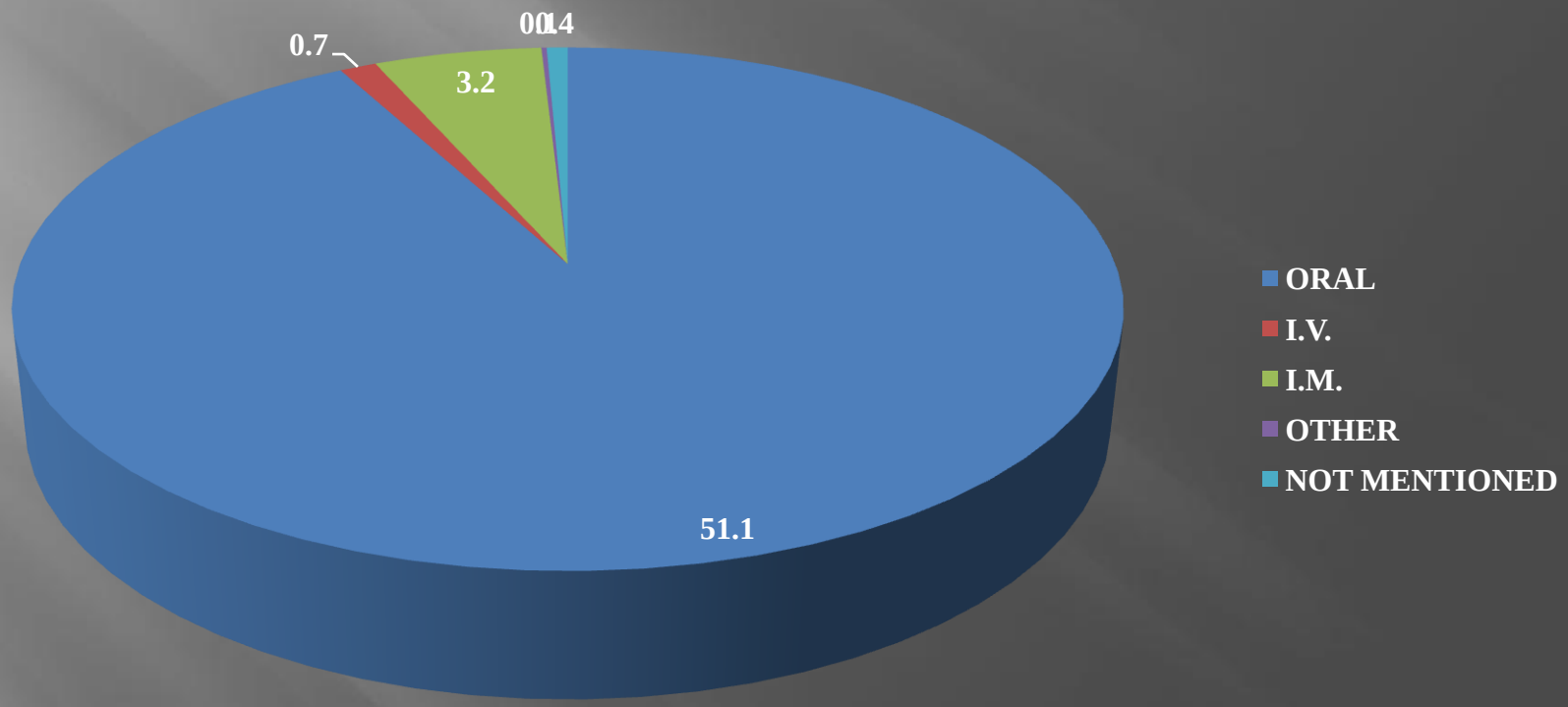
Data will be entered in the Microsoft Excel and will be analyzed with help of SPSS software.

Result and findings

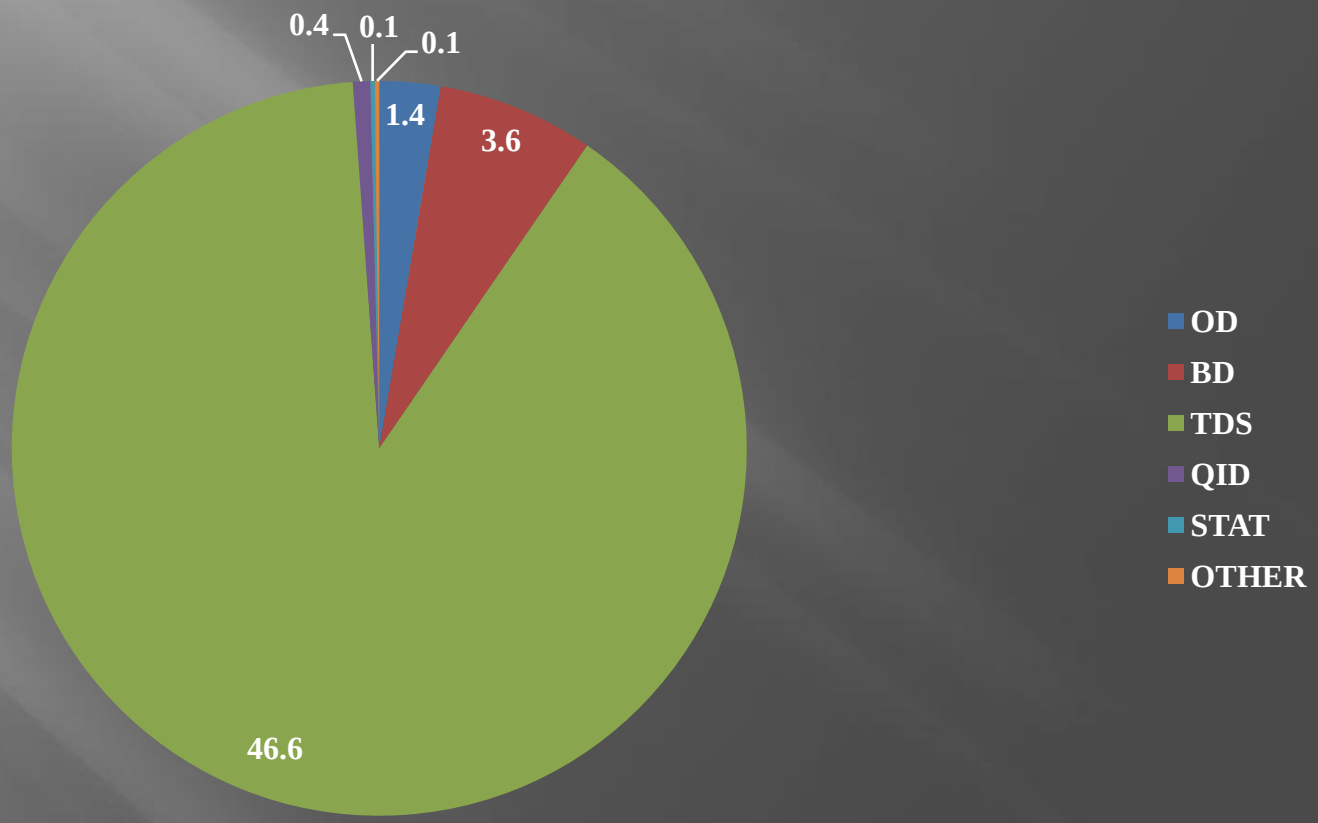
- prescription rate 99%.
- Antibiotic prescription rate 56.5%
- average duration of antibiotic was 2.96 days.
- analgesics prescription rate is 56%.
- Average duration of analgesics drug used is 1.83 days.
- Average number of injectable used 0.14 per person.
- average consultation time was 3.26 min
- average dispensing time was 2.2 min.

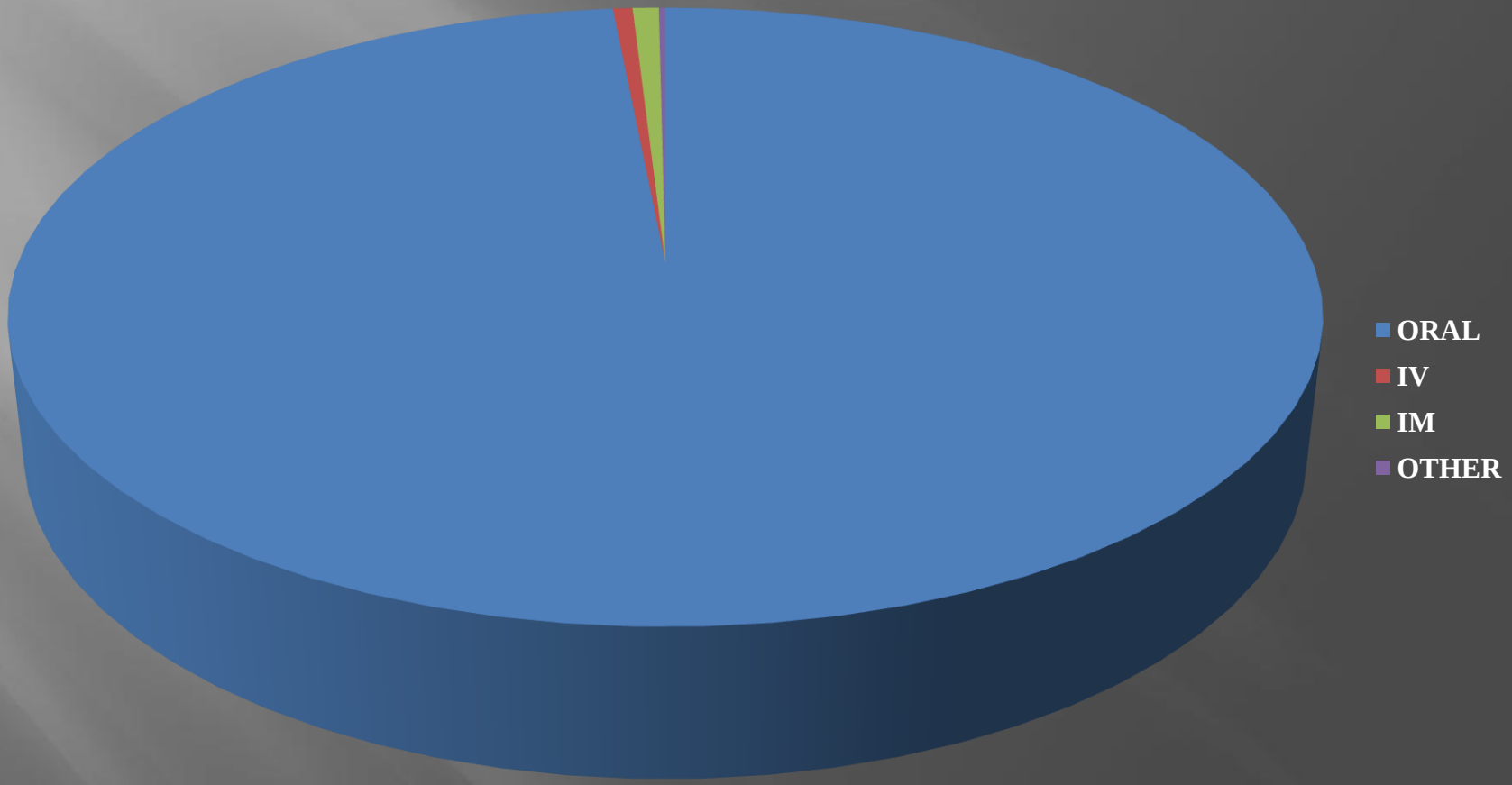

daily frequancy of antibiotic
OD
BD
TDS
QID
STAT
OTHER
1%
1%
3%
5%
24%
66%

ROUTE OF ADMINISTRATION



DAILY FREQUANCY OF ANALGESICS




ORAL
IV
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OTHER

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Patient's knowledge about	Percentage of knowledge
Timing of medication	94
Duration of treatment	81
Quantity of medicine to be taken	95
Methodology of consumption	94

Time of consultation in minutes	Percentage
1	10.3%
2	25.7%
3	22.3%
4	20%
5	13.4%
6	7.1%
7	1.1%

Limitations of study

- Limited to antibiotic and analgesics
- Monitoring the data collection is difficult therefore quality of data is not guaranteed
- Quality of doctor is not taken in to consideration
- It is completely quantitative and not the qualitative aspect of study.
- Availability of data within given time is difficult.
- Self medication practices is not taken in consideration

Refrencess

1) Promoting rational use of medicines: core components. WHO policy perspectives on medicines. Geneva, World Health Organization. No. (WHO/EDM/2002.3), 2002.
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3) Afghanisthan mortality survy 2010 full report
4) United Arab Emirates Bazigha K. ABDUL RASOOL , Sahar A. FAHMY, Eman F. ABU-GHARBIEH, Heyam S. ALI. Received (first version): 22-Oct-2009 Accepted: 10-Jan-2010, www.pharmacypractice.org (ISSN: 1886-3655).


THANK YOU