

## **CHAPTER V**

### **Presentation**

I presented the overall view of my thesis on the topic "introducing STS through face-to-face education: a way to improve prescribing practices at BRAC Health Centers" on April 2, 1999 to the Examination Committee. The presentation was divided into four parts: introduction, essay, proposal and data exercise.

I presented the problem addressed in this thesis, reasons and evidences for the problems and the conclusions of the issue. I presented the situation of prescribing practices in Bangladesh and a conceptual framework of factors affecting prescribing practices. I also presented possible approaches for improving prescribing practices at BRAC Health Centers.

In the proposal, I presented the study design as well as a cyclical medical model through which I will conduct this study step by step. I also presented the process by which I can follow each of the steps describes in the model. Moreover, I presented my activity plan including the amount of money that I need to conduct this study.

The fourth part of my presentation covered data exercise. I presented my objectives and described about the rationale for selecting this health center. I also presented limitations I faced and lesson learned during the collection of data. After the oral presentation, the examination committee members asked me questions about my

thesis, to which I tried to respond with my best ability and knowledge. Similarly, the committee members gave me few suggestions to improve my study and I incorporated those suggestions in my thesis.

The overhead transparencies were prepared and used for the presentation. The contents of the transparencies are mentioned as follows sequentially as shown to the examination committee.

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**Issue:**

**How prescribing practices at BRAC  
Health Centers, can be improved?**

**Rational Prescribing,  
one of the concept of RUD,  
is the concern of this study**

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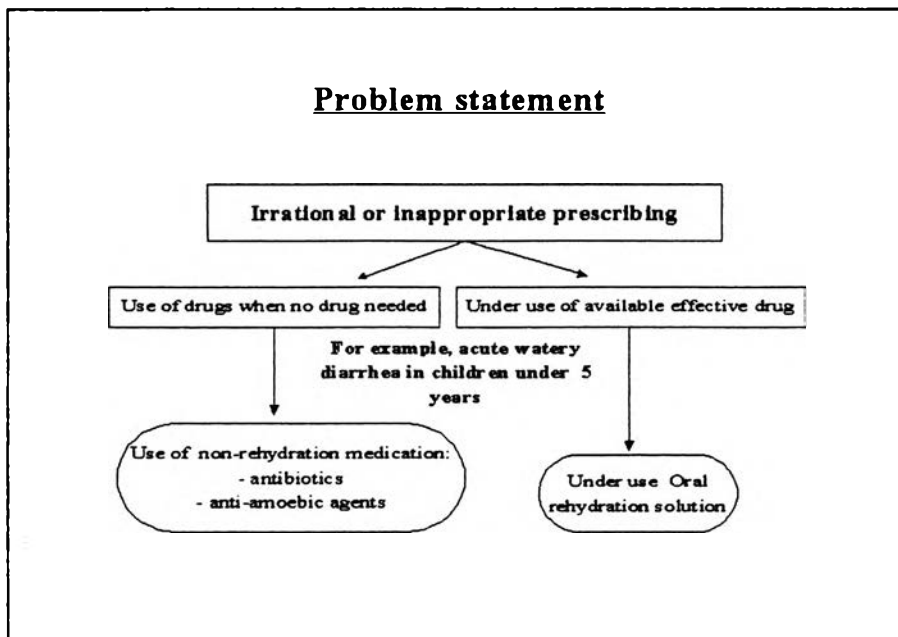
**Rational Prescribing** means prescribing drug should be *appropriate* for the disease, after correctly diagnosed, and should be given at the right dose & right duration.

**Appropriate means,**

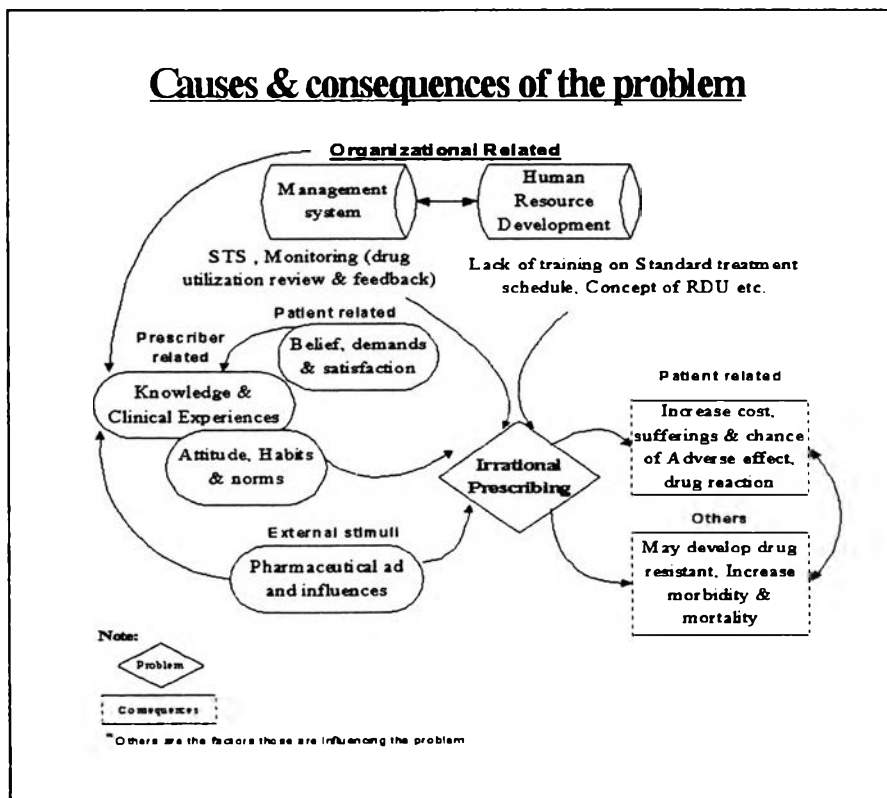
- based on medical rationale
- safe, effective & low cost

*Source: Adapted from WHO Expert Committee Meeting, Nairobi 1985*

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### **Evidences of irrational prescribing**

Many studies confirmed that the most common error in the treatment of childhood diarrhea were-

- failure to recommend the use of ORS
- use of antibiotics & inappropriate drugs

Baqui et al.(1997), Chowdhury RR(1995), Ronsmans et al.(1996), Cash R(1996), Chowdhury AKA et al.(1997)

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### **Evidences of irrational prescribing in the Rx of Childhood Diarrhea**

- A high rate of use (17%) of Metronodazole (UNICEF, 1992)
- Antibiotics prescribed unnecessarily in 23% of watery diarrhea cases (UNICEF, 1993)
- 78% of the rural practitioner said that they used antibiotics (UNICEF, 1992)
- Comparing public hospital and private practitioners practices in 1990 found that nearly two-thirds used antibiotics (UNICEF, 1993)

\* Source: Chowdhury RR, (1995) International Experiences in Rational Use of Drugs

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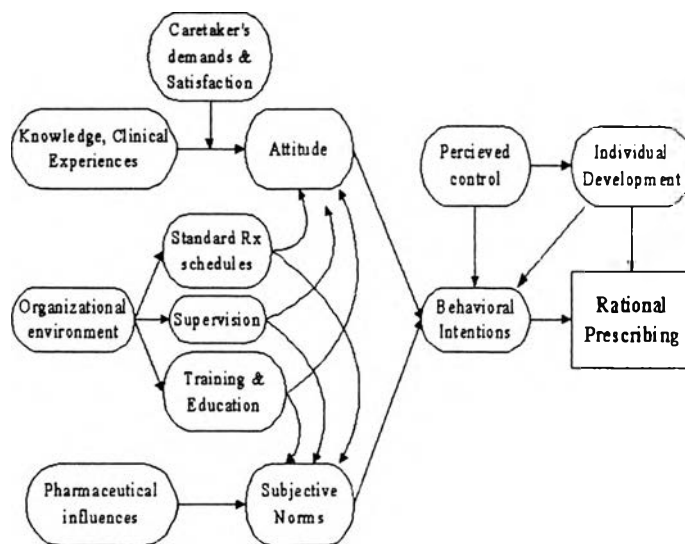
### Justifications

- Diarrhea is the **leader of childhood mortality** comprising **110,000 deaths** in Bangladesh (1996); Globally **2.6 million** (1996)
- The **danger of diarrhea is dehydration** and **rational treatment** is one way to control dehydration from diarrhea
- ORS use rate - 1993                      1994                      1995  
     45%                      48%                      46%
- Goal for **ORT use rate** by 2000 is **80%**

Source: UNICEF, BBS July 1997

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### Conceptual Framework of intervention



Source: Adapted from the behavioral intention model (Ajzen & Fishbein) and the Theory of Planned Behavior (Ajzen, 1991).

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**Possible Intervention Measures**

- **Educational**
  - foundation for prescribing, prepare the ground by changing knowledge, attitude & habits
  - Printed materials, training & workshop and media-oriented approach
- **Managerial**
  - guide decisions through the use of specific processes to establish norms
  - EDL, STG, Structured drug prescribing form, effective supervision etc.
- **Regulatory**
  - restrict allowable decisions by placing absolute limits
  - banning of drugs, limits on number or quantity of drugs per patients etc.

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**Advantages of STS**

- **patients points of view**
  - reduces confusion to patients & increase compliance
- **prescribers points of view**
  - gives expert consensus on most effective & economic treatment
- **managers & policy makers points of view**
  - serve as a basis to control & compare quality of care and control cost

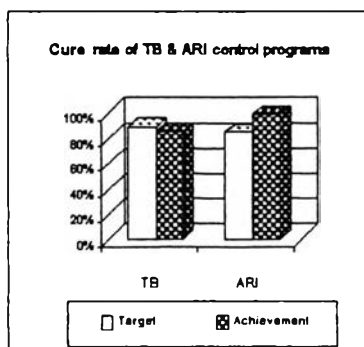
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### Disadvantage of STS

Ineffective when implemented alone  
(Ross-Degnan et al., Wiedenmayer et al.)

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### Rationale for standard treatment schedule



STS of ARI & TB in BRAC setting, developed by WHO and adopted by national program exhibited a good results in BRAC catchment area.

(Source: RHDC Annual Report, 1996-97)



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**Face-to-face education - the best way to introduce STS .**

**because -**

- **Organizational & cultural feasibility**
  - ARI & TB treatment schedule exist in BRAC
- **Technical feasibility**
  - no needs of sophisticated communication systems or equipment
- **Likelihood of success**
  - two way, participatory & interactive discussion,
  - assesses specific motivation & adopt messages to relate to this motivation
  - creates verbal agreement & fit better with existing supervisory system
- **Economic feasibility**
  - other strategies like training is costly & needs wide range of resources

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**Introducing Standard Treatment Schedule through  
Face-to-Face Education: A way to improve prescribing  
practices at BRAC Health Centers**

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**Objective - specific**

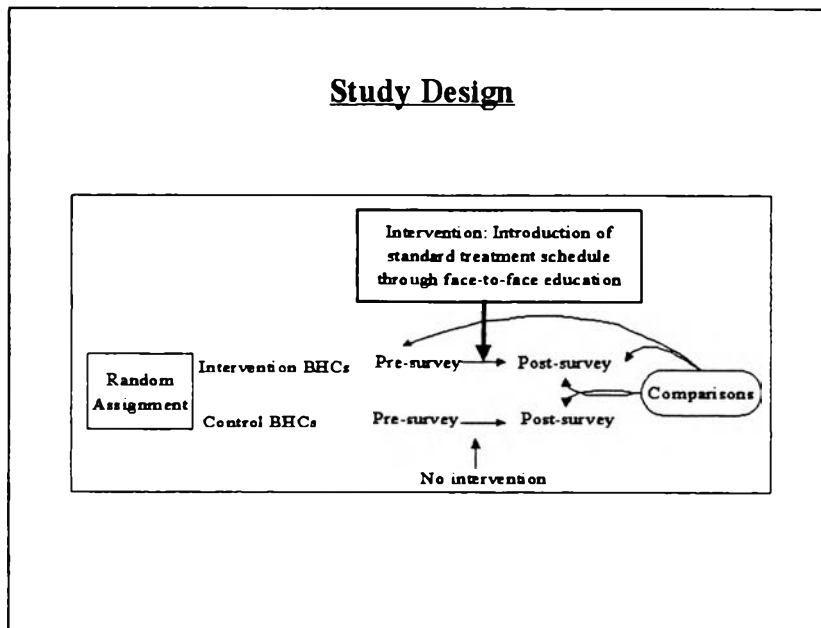
- To increase the awareness & knowledge of the prescribers in the case management of acute watery diarrhea in children under 5 years
- To increase the use of ORS in the treatment of acute watery diarrhea in children under 5 years.
- To reduce the use of antibiotic or anti-amoebic agents in the treatment of acute watery diarrhea in children under 5 years.

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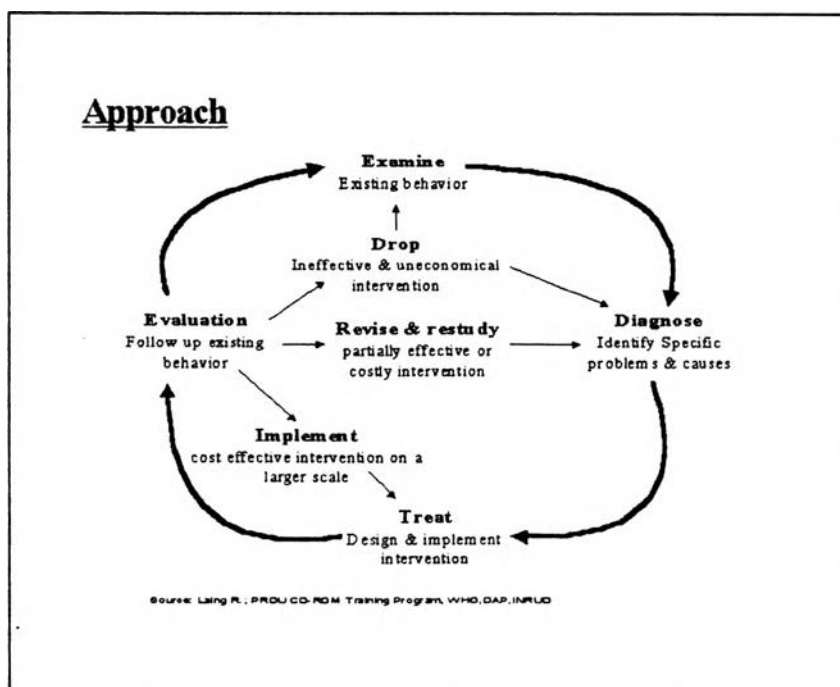
**Objective - general**

To improve the prescribing practices of the prescribers of BHCs in the treatment of Acute Watery Diarrhea in Children under 5 years

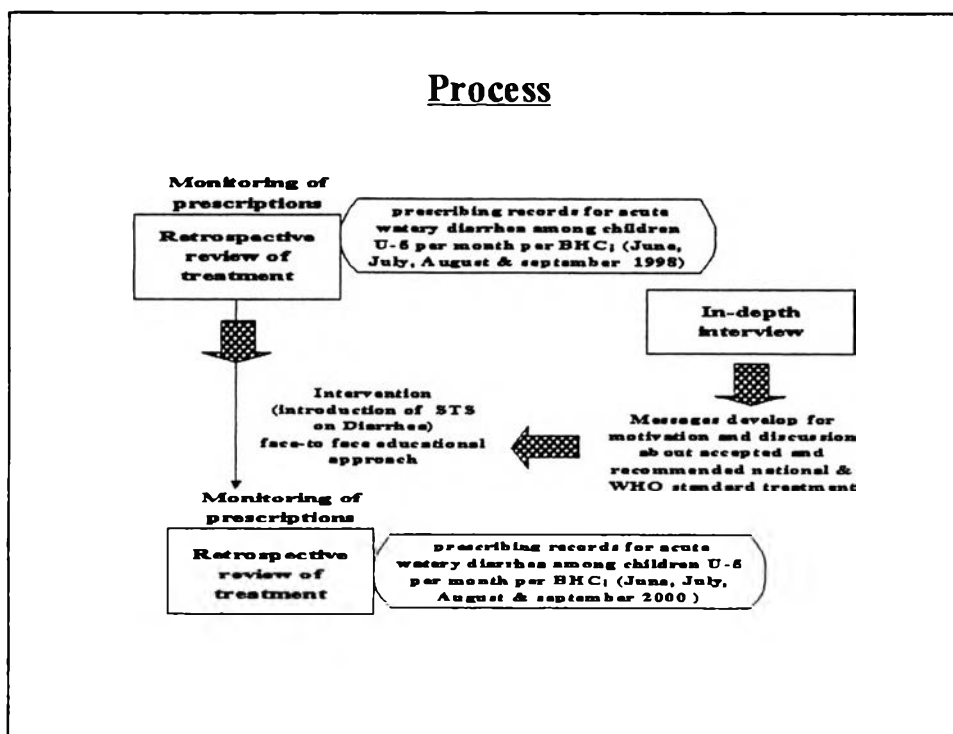
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## Slide - 19



## Slide - 20

**Measurement indicators**

- Percentage of encounters prescribed with ORS
- Percentage of encounters prescribed with an antibiotic
- Percentage of encounters prescribed with anti-amoebic

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**Activity plan, (July 1999 - December 2000)**

Activities	Period					
	1999			2000		
	July	August	September	October	November	December
Discussion with Director, HPD	■					
Approval for the study	■					
Forming a research team	■					
Collection of data	■			■		
Data Entry	■	■				
Conduct indepth interview		■				
Develop/ collect motivating references		■				
Collection of copies of national & WHO treatment guideline		■				
Conduct face-to-face education		■	■			
Data analysis & report writing				■	■	
Dissemination of the result						■

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**Budget**

Category	Total Cost	
	BDT	US\$
• Personnel	97,800	2,058.95
• Transport	26,000	547.37
• Field Allowance	12,000	252.63
• Other direct cost	18,696	393.60
<b>Total</b>	<b>Tk.154,496</b>	<b>US \$ 3,252.55</b>

*(47.50 Tk = 1 US \$)*

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## **Data Exercise**

- Objectives are to get acquainted with the process and to develop my skill & knowledge on data management.
- Place of data exercise is Health Center-41, Klongtoye.

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## **Lesson learned & limitations**

- Use trade name in the prescription
- Prescription cards kept haphazard
- Timing of data collection
- Language barrier
- Hand writing is not eligible