

A Brief Note on Prescriptions Collected from Bhopal Hospital Trust (BHT)

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Date: 17th to 19th July. 2000.

The Hospital and the five clinics run by Bhopal Hospital Trust were built in order to provide long awaited quality medical care to the gas victims. The wide publicity around the BHT hospital and clinic created hope and expectation among the gas victims who had been denied basic medi-care since the disaster in 1984.

The prescriptions were collected by Sambhavna clinic field workers during their visit in 1998-99 and made photocopied for documentation.

The present study is based on the photocopy of the prescriptions collected from patients undergoing treatment at BHT, by Sambhavna Trust, Bhopal. Dr.Rajiv Bhatia of International Medical Commission on Bhopal (IMCB) analyzed the same prescriptions and presented the following facts.

- 1) Proportion of visits where health workers and BHT recorded the specified symptoms and symptom categories.
- 2) Co-relations between the symptoms recorded on the health workers interview and symptoms written on the physicians prescriptions (first recorded visit).
- 3) Frequency of prescriptions for the most common classes of drugs for all recorded visits.
- 4) Odd ratios for prescriptions of drugs in category for selected symptoms.

Present study has looked in to 1) nature of reported clinical examinations, 2) appropriateness of drug prescribed 3) nature of dosage of appropriate drugs prescribed.

Prescriptions had been collected from Sambhavna Trust, Bhopal. Sambhavna Trust collected prescriptions of 400 individuals. Total 101 prescriptions of the patients have been selected for study and their total 380 visits have been checked. Analyses are broadly divided into three tables. Although the sample size was small comparing with gas affected population; it gives clear idea about general trend and guide for further course of action.

Table-1 illustrates signs and symptoms mentioned in the prescriptions. There are several prescriptions without any mention of symptoms (patient's descriptions of his / her suffering/s), or with just one or two words (like 'pain' without any mention of its location or intensity and 'cough' without any mention of whether it was dry or productive) or little descriptions of signs (doctor's observation/s like – pulse rate or blood pressure only) and very few proper descriptions on signs and symptoms. Proper descriptions are very important for further follow-up and also for other physicians who may see the patients. Treatments of the patients are based on these kinds of improper examinations. In Table -1, 380 visits are divided into three columns, 1) either no description of symptoms or just few words, 2) mixed i.e. descriptions of symptoms in few words along with description of signs in few words, 3) proper description of sign and symptoms.

Table1:

No description of symptoms or just few words	Mixed i.e. descriptions of symptoms in few words along with description of signs in few words	Proper description of sign and symptoms at least to diagnose the disease
252 (66.3%)	63 (16.6%)	65 (17.1%)

Total 380 visits

Table 2, illustrates extent of irrational therapy. There are several prescriptions where drugs have been prescribed without any justification (according to any standard pharmacology text) and may harm human body, like Corex cough suppressants containing opium derivative, alprazolam as anxiolytic, benzodiazepine as anxiolytic, or combination of Corex and alprazolam, or single drug anti TB therapy, over dose of anti helminthic and so on. Combination of Corex and anxiolytic may cause serious effect on brain resulting disorientation drowsiness etc. Over dose of anti-helminthic may cause abdominal discomfort. Single TB dose results resistant bacteria. There are several prescriptions where drugs have been prescribed which has no or little therapeutic value. For example, multi vitamin capsules / tabs for few days (with out mentioning of symptoms/signs of specific vitamin deficiency), iron capsules for few days, unnecessary antimicrobial (for just symptoms of common cold, pain abdomen and so on) below minimum recommended dose according to age and body weight of the patients and may result resistance of bacteria against antibiotics, combination of antacid and H2-receptor blocker (ranitidine or famotidine) for just abdominal pain (abdominal pain might be due to any cause. Combination will not give any extra benefit rather cause unnecessary expenditure) and so on. There are some prescriptions where both harmful and useless drugs are prescribed. It is worth to note that the aforementioned categories of prescriptions are not necessarily containing only harmful, useless or both kinds of drugs. These may or may not be associated with appropriate selection of drug/s. There are very few

prescriptions where neither harmful nor useless drugs have been prescribed rather proper drugs been prescribed.

Table 2:

Harmful (may or may not be associated with proper selection of drug/s)	Useless(may or may not be associated with proper selection of drug/s)	Both Harmful & Useless (may or may not be associated with proper selection of drug/s)	Neither harmful nor useless (proper selection of drug/s)
100 (26.3%)	184 (48.5%)	29 (7.6%)	67 (17.6%)

Total 380 visits

Table 3, illustrates prescribed dose of properly selected drugs. There are number of prescriptions where right drugs are prescribed but with wrong dose like frequency of intake per day, duration of course and strength of each intake.

Table3:

Improper dose	Proper dose
92 (45.3%)	111 (54.7%)

Total 203 visits

Note:

- There are 2 cases where anti TB drugs are prescribed with out investigations and doses did not follow any WHO or Govt. guidelines. There are 2 TB cases where proper investigations and treatment protocols have been followed.
- There are 22 visits where alprazolam and 1 visit where benzodiazepine had been prescribed with out any justification.
- There are several prescriptions where concerned doctors wrote "*No sensitivity to any drugs*"; perhaps to save themselves from any probable legal suit from patient/s. It is ridiculous because on one hand the doctors are not willing to pay more attention to examine patients, writing signs and symptoms in the prescription sheet on the other hand showing more concern to avoid possible legal action on account of drug reaction.

Conclusion: The brief analyses of prescriptions collected from BHT have revealed the concerned doctors are not careful about clinical examination and recording. Most of the cases harmful and useless drugs had been prescribed. Moreover, nearly half of the rightly chosen drugs were not given following proper dosage schedule. This study throws light on outcome of knowledge, attitude of doctors and hospital authority. It is necessary to trace back at doctor's level (attitude and practice) and authority level to corroborate these findings.

Analyses of Prescriptions Collected from Bhopal Hospital Trust (BHT)

Maybe it is better to call it 'a brief note'.

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The Hospital and the five clinics run by Bhopal Hospital Trust were built in order to provide long awaited quality medical care to the gas victims. Too much media coverage created ← → The wide publicity around the BHT Hospital and clinics created hope and expectation among the gas victims who had been denied basic medi-care since the disaster in 1984. But studies revealed, as far as quality of medical care is concerned perhaps BHT has no difference from ordinary Government Hospitals. [This is the only "study" examining BHT's quality of medical care. Also this sentence coming right at the beginning makes the writer seem biased. I think it is best to avoid this sentence]

[Good to mention the context, which BHT clinic ?, when and from where were the prescriptions collected?]

The present study is based on the photocopy of the prescriptions collected from patients undergoing treatment at BHT, by Sambhavna Trust, Bhopal. Dr. Rajiv Bhatia of International Medical Commission on Bhopal (IMCB) analyzed the same prescriptions and presented the following facts.

- 5) Proportion of visits where the specified symptoms and symptom categories were recorded by health workers and BHT.
- 6) Co-relations between the symptoms recorded on the health workers interview and symptoms written on the physicians prescriptions (first recorded visit).
- 7) Frequency of prescriptions for the most common classes of drugs for all recorded visits.
- 8) Odd ratios for prescriptions of drugs in category for selected symptoms. [This is incomprehensible to lay persons]

[It will be good if you mention Rajiv Bhatia's findings. Also the reason for looking at the prescriptions again must be made clear.]

Present study has looked in to 1) nature of reported clinical examinations [symptoms are part of history taking prior to examination], 2) nature of drug prescribed, ['nature' is too broad a term, better to be specific such as appropriateness of drug prescribed] 3) nature of dosage of appropriate drugs prescribed.

Prescriptions had been collected from Sambhavna Trust, Bhopal [A sentence on how the prescriptions were obtained may be necessary] . Prescriptions of 400 individuals were collected by Sambhavna Trust. Total 101 prescriptions of the patients have been selected for study [

Method of selection ?] and their total 380 visits have been checked. Analyses are broadly divided into three tables. [Limitations and scope of the auditing should be mentioned]

Table-1 illustrates signs and symptoms mentioned in the prescriptions. There are several prescriptions without any mention of symptoms (patient's descriptions of his / her suffering/s), or with just one or two words (like 'pain' without any mention of its location or intensity and 'cough' without any mention of whether it was dry or productive), or little descriptions of signs (doctor's observation/s like- pulse rate or Blood Pressure only) and very few proper descriptions on signs and symptoms [what about mention of duration of complaints ?]. Proper descriptions are very important for further follow-up and also for other physicians who may see the patients. want to change current physician/s. ←[omit] Treatment of the patients are based on these kinds of improper examinations. In fact one study revealed that out door doctors gave 2-3 minutes to each patient (including listening to the problems, examinations and prescription writing). ←[This sentence may be omitted because we do not have the source for this information.] In Table -1, 380 visits are divided into three columns, 1) either no description of symptoms or just few words, 2) mixed i.e. descriptions of symptoms in few words along with description of signs in few words, 3) proper description of sign and symptoms at least ←[OMIT]sufficient to diagnose the disease. [Maybe it is simpler to call these categories :in terms of recording of symptoms; improper, semi-proper and proper and then explain these categories.]

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Table 2, illustrates extent of irrational therapy. There are several prescriptions where drugs have been prescribed without any justification (according to any standard pharmacology text) and may harm human body, like Corex cough suppressants containing opium derivative, [maybe it is worth quoting Goodman and Gillman here] alprazolam as anxiolytic, benzodiazepine as anxiolytic, or combination of Corex and alprazolam, or single drug anti TB therapy, over dose of anti helminthic and so on. [Good if you can elaborate on this for a lay person to understand what exactly is improper in their use]There are several prescriptions where drugs have been prescribed which has no or little therapeutic value. For example, multi vitamin capsules / tabs for few days (with out mentioning of symptoms/signs of specific vitamin deficiency) [Mention vitaminosis ?], iron capsules for few days, unnecessary antimicrobial [with what consequence]below minimum recommended dose according to age and body weight of the patients [consequence of low dosing ?], combination of antacid and H2-receptor blocker (ranitidine or famotidine) for just abdominal pain [potential consequence ?] and so on. There are some prescriptions where both harmful and useless drugs are prescribed. It is worth to note that the aforementioned categories of prescriptions are not necessarily containing only harmful, useless or both kinds of drugs. These may or may not be associated with appropriate selection of drug/s. There are very few prescriptions where neither harmful nor useless drugs have been prescribed rather proper drugs been prescribed.

Table 2:

Harmful (may or may not be associated with proper selection of drug/s)	Useless(may or may not be associated with proper selection of drug/s)	Both Harmful & Useless (may or may not be associated with proper selection of drug/s)	Neither harmful nor useless (proper selection of drug/s)
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[One very important figure remains to be presented, no. of prescriptions with proper drug in proper dosage]

[One very important section remains to be written which is that of conclusions. Best to write all opinion related statements here so that they seem to be conclusions drawn from hard data]

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- There are 2 cases where anti TB drugs are prescribed with out investigations and doses did not follow any WHO or Govt guidelines. There are 2 TB cases where proper investigations and treatment protocols have been followed.
- There are 22 visits where alprazolam and 1 visit where benzodiazepine had been prescribed with out any justification.
- There are several prescriptions where concerned doctors wrote "*No sensitivity to any drugs*" , perhaps to save themselves from any probable legal suit from patient/s. It is ridiculous because on one hand the doctors are not willing to pay more attention to examine patients, writing signs and symptoms in the prescription sheet on the other hand showing more concern to avoid possible legal action on account of drug reaction.[This para shows bias and the mention of 'no adr' is avoidable or can be mentioned without comment]