When Less Is More: A Group Of First Year Undergraduate Malaysian Students' Experiences Of The Essay Revision Process.

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ABSTRACT

The teaching of English as a Second Language (ESL) in Malaysia has undergone many changes. Different ways of looking at and employing pedagogical approaches in Malaysian ESL classrooms have been considered and attempted; some of these have not only altered but also challenged traditional approaches in the classroom. However, writing, seen by many Malaysian students as the most difficult of the four, has often been neglected. ESL teachers cannot be entirely blamed for this minimal emphasis on composition writing. Factors, which work against both the teachers and students, include the time factor, which inevitably compels teachers to focus on a product-based rather than process-based writing. Although there is an extensive body of research on process-oriented first language writing, little attention has been given to second language classroom practice. Therefore, researchers who examine ESL writers in Malaysian universities are required to determine whether the process-oriented approach to teaching writing can be used effectively with ESL students so that the gap between the actual level of English language proficiency amongst Malaysian university students, especially writing skills, and the level of competence required for learning at tertiary levels can be bridged relatively quickly. This paper reports the finding of one of the research activities looking at the contribution of a teaching intervention based on the process centered approach; i.e. the types of revision changes employed by this group of students in developing the drafts. Revising is the process of making sure that the writing says what the writer wants it to say.

Keywords: English as a second language, process writing, revision, tertiary writing, review

INTRODUCTION

The main objectives of writing instruction is to enable the students to write well. Yet, we know from our classes, as well as from published articles and from writing scholars, that ESL or EFL students do not write as well as we think they should (e.g., Hillocks, 1986; Rijaarsdam et al.,2005). The reasons for students' inability to write well enough to meet teachers' expectations are many and varied. Most students lay it on the writing skill for being extremely complex. However, according to Smit (1991), the most obvious reason that students do not

write well is that they do not receive a great deal of instruction, practice, and feedback in writing.

It is necessary, then, if we are going to improve the writing of our students, that we teach writing more often and more effectively, and that we require our students to write more often so that they can get the practice they need (e.g., Hampton, 1995; McCormick, 1989). Moreover, it is only by responding to comments on early drafts and putting them into practice that students can "demonstrate what they have learned and internalize from the advice they have received" (Smit, 1991, p.3). However, there is a great deal of evidence that teacher written comments have no effect on student writing except when they are focused (e.g., Hillocks, 1986; Leki, 1990).

Naginder (2006), Jalaludin et. al. (2008) and Che Musa et. al. (2013) are to name a few of Malaysian researchers who have been concerned over low literacy attainment in English language among Malaysian learners. They have been examining the reasons that led Malaysian students low English literacy even after going through 11 years of learning English in school. At University Malaysia Sabah this is also observed, resonating findings of Isarji Sarudin et al. (2008). This disables the students' progress especially through low writing skills.

Malaysian educationists are constantly plagued with opinions that the standard of English proficiency is worsening "among students and graduates…(and made worse by)…the rote-learning and exam-oriented education system which hinders students' creativity and critical thinking…" (Education Reform in Malaysia Report, 2012:2). When addressing the deteriorating standard of English, it is important for us to study the contributing variables to this issue. One of the reasons is perhaps students' employment of writing strategies, specifically revision. Abdullah (1993:124) states that Malaysian students in general seem to be merely "going through the motions, pouring commonplace ideas into a pre-cast rhetorical mould". She observes that the students seem to produce work that is weak in content and which displays a lack of general knowledge, regurgitation of platitudes and clichés, an undiscerning reliance on printed sources, unquestioning acceptance of 'received wisdom', simplification of complex issues, ideas expressed in sweeping over generalisations, and a lack of adequate supporting evidence.

Dissatisfied with the depth of analysis that students were able to demonstrate, regarding their own and each other's writing, we decided to analyse students' revision activities to establish their revision activities and see whether this group of students are able to respond to each other's writing. The insights generated by the description and analysis of the data collected for this study can be used for a variety of purposes: to better understand Malaysian ESL writers; to help Malaysian ESL curriculum development and instructional practice and to provide useful insights for educational language policy-making.

LITERATURE REVIEW

Revising, especially of content, has generally been shown to be beneficial (Stallard, 1974; Sommers, 1980; Faigley & Witte, 1981; Leki, 1991; Gillam-Scott, 2010; Hawes, 2013): 'Rewriting a piece of writing correlates more closely with improved writing than does almost any other form of instruction in writing' (Beyer, 1979: 189). This is so even with no feedback provided on the first draft (Fathman & Whalley, 1990; Polio et al., 1998). Content should be focussed on first, then form: 'editing errors and revising for better organisation should be attended to at a later stage in writing to prevent a breakdown of what Perl calls 'the rhythms generated by thinking and writing'' (Spack, 1984: 656).

Despite the importance of revising within the process of writing well, students are generally not aware of its purpose. They may see revising as a time to concentrate on sentence-level concerns, changing individual words or reorganising sentences. Actually, revising is a multi-layered process that a writer does as he/she goes along. The process of concentrating on sentence level concerns could more accurately be called editing, which is discussed later in some detail. Editing deals with the surface features of writing and is generally performed after the writer has achieved the desired objectives with a paper. Revising is more properly what writers do to the writing before the desired objectives have been achieved.

As discussed earlier, good writers appear to revise mentally during pauses in composing, and they tend to focus on global changes that are intimately linked to their audience, purpose, and stance. Revising, then, requires that writers consider their role, as well as that of their readers, in regard to the topic. It requires that writers be critical readers (Carter 1997). The revising process demands that a writer stand back from his work that has taken time and effort to produce, and make objective decisions about it. It must be seen as it is, not as it is wished to be. A good writer must be able to delete sentences and paragraphs that do not work, and they must be willing to shift sections from one place to another to enhance the overall organisation of the composition.

Peer feedback is a popular revising activity. It is the process by which students exchange constructive criticism of their work to help each other edit and hone their critical reading, writing, and speaking skills. Many instructors use some form of peer feedback groups in their writing courses. They have found that encouraging students to respond to each other's drafts has numerous benefits, including:

- Increasing student editing skills, for use on their own writing as well as on the writing of others;
- Promoting active learning;
- Motivating multiple drafts and substantial revisions;
- Building classroom community;
- Providing a wider audience for student-writers;
- Underscoring the collaborative nature of writing;
- Modelling most workplace writing.

Simply telling students to respond to each other's writing, however, is seldom sufficient. Experienced instructors have found they must teach students how to respond. This effort often spans an entire semester. Providing students with guidelines or rubrics for responding is one especially useful way to foster effective peer feedback.

Writing theorists have used peer groups in high school and college classrooms to encourage students to write and revise. Elbow (1973) promoted the use of "teacherless writing groups"; Murray (1982) suggested that teachers train students how to respond constructively to writing in process; Moffett (1983) suggested that teachers teach students to teach each other; Macrorie (1984) discussed the value of creating a "Helping Circle" and Bruffee (1983) insisted that students "talk through" the task of writing. Bruffee felt that this would produce an essential form of collaborative learning. Graves (1983, 1984) and Calkins (1982, 1983) conducted peer feedback groups, even with young writers, and found that this brought positive benefits. As a result of these studies and others like them, writing groups, sometimes referred to as "peer conferencing" or "peer collaboration", have become a pedagogical tool in a wide range of teaching/learning contexts.

Research indicates that students writing without reactions from a writing group often do not anticipate an audience. Hedge (2000) agrees that helping student writers to develop a sense of audience is important. This is especially so with less mature writers; making them aware of whom, they are writing for, helps them develop a sense of audience.

There are also reports that support the use of writing groups for encouraging revision. The study by Kantor (1984) concluded that the development of a peer community fostered growth from egocentrism to audience awareness and that knowing the audience helped students become more aware of possible strategies for revising the written message. Furthermore, peer feedback affords students much more immediate and frequent feedback than one instructor can possibly provide. This process produces advantages that compensate for any irregularity of quality (Topping 1998).

Nilson (2002: 2) suggests that peer feedback is not without it shortcomings. She notes that the causes are:
- Emotions and loyalties intrude, making most students reluctant to find fault with a fellow student's work and inducing a few to trash the work of someone they don't like (Strachan & Wilcox 1996; Pond, Ulhaq, & Wade 1995).
- Students lack the disciplinary background to know, let alone to apply, professional expectations and standards, so they don't know how to give helpful feedback (Svinicki, 2001). No doubt if they did know how to write a clear thesis statement, a logical argument, a convincing conclusion, etc., they would do so without peer collaboration.
- Students fail to put adequate effort and care into analysing each other's work and into providing constructive, detailed feedback – in part because the peer-feedback questions may not require them to. When a question explicitly asks only for a yes or no answer, students may not know enough to give a justification or to refer to particulars in the work. In addition, since the questions usually ask for an "opinion", students at a certain level of cognitive development may believe that one opinion is as good as another, justified or not. Besides, students reason, the only opinion that matters is the instructor's, so their peers aren't the real audience anyway.

Fitzgerald (1987) summarizes some of the main findings on revision. She states that research has shown that inexperienced writers do not revise very much, and unless given support and encouragement, neither do more experienced writers. In general, the most common revisions are surface changes, but among experienced writers, there is a greater tendency to revise more for meaning, which appears to improve the quality of compositions. Thus, based on current knowledge about revision, it seems that a crucial variation in strategies concerns the writer's tendencies to focus revision either on meaning of text or on aspects that do not concern meaning. This division of meaning versus surface revisions is the main criterion in Faigley and Witte's (1981) taxonomy of revision strategies.

Revision has been identified as the most important determinant of the final quality of written work (Sommers, 1980; Zamel, 1983); unfortunately, overall, there is less research in L2 revision process than in L1, not to mention research on revision strategies. Given these findings, the close relations between revision and the quality of written work, and the scarcity of research in the area (i.e., L2 revision strategies), this study seems to be both necessary and important to instruction and research of L2 writing.

RESEARCH METHOD

The researchers investigated 20 Universiti Malaysia Sabah first year students' revision activities in writing through the analysis of multiple drafts of their writings. The students revised the drafts using peer review activities. By collecting and analysing these between drafts reviews, the researchers hope to be able to understand their revision strategies employed over the semester.

The students' essays comprised both drafts and completed work. In total the students had to complete three essays. The first one was collected in week five, the second in week nine and the third in the last week of teaching. All the drafts were reviewed twice. The students were also taught to use the reviewing checklist by applying it to sample essays. Students have to evaluate a sample essay and discuss problems in class. The reviewers reviewed the essay based on a peer-review checklist that was adapted from White and McGovern (1994). All written work was collected, and changes in students' writing skills were observed, if any, at the different stages of the course. The Faigley and Witte instrument (1981, 1984), also well-established among previous researchers, was used to quantify between draft revisions in the type of change.

Sample Selection

This study employed students who are taking English Level 3. The lesson time is 3 hours per week for 14 weeks. With the permission of the Dean of Centre for the Promotion of Knowledge and Language Learning, the researcher worked with a group of 20 first-year students. Attendance for this course is compulsory to all students with Malaysian Universities Entrance Test (MUET) Band 1 and 2.

Homogeneous purposive sampling is chosen in selecting the research participants for this study. This non-probability sampling technique is chosen because the sample being investigated is quite small, especially when compared with probability sampling techniques. The goal of purposive sampling is not to randomly select units from a population to create a sample with the intention of making generalisations. Its main purpose is to focus on particular characteristics of a population that are of interest and aids the researcher to answer his or her research questions. The sample being studied is not representative of the population, but for researchers pursuing qualitative or mixed methods research designs, this is not considered to be a weakness. Rather, it is a choice. In homogeneous sampling, units are selected based on their having similar characteristics because such characteristics are of particular interested to the researcher, i.e. in this research MUET band 1 and 2 students.

RESULTS

When the texts were analysed according to Faigley and Witte instrument (1981, 1984), the types of revision made by the students were:

1. Deletion
2. Change in Tense
3. Change in Spelling
4. Change in Singular/Plural
5. Change in Pronoun
6. Change in Sentence to Illustrate Meaning
7. Change in Verb to Be
8. Change in Word to Preserve Meaning
9. Change in Preposition

10. Change in Capitalisation

The students seemed to make more meaning preserving changes and no paragraphing format changes. The researchers' identification of the above types of revisions in the students' texts supported other studies' findings that peer review/feedback favours mechanics and content revision (Al-Hazmi and Scholfield, 1999; Bisaillon, 1999).
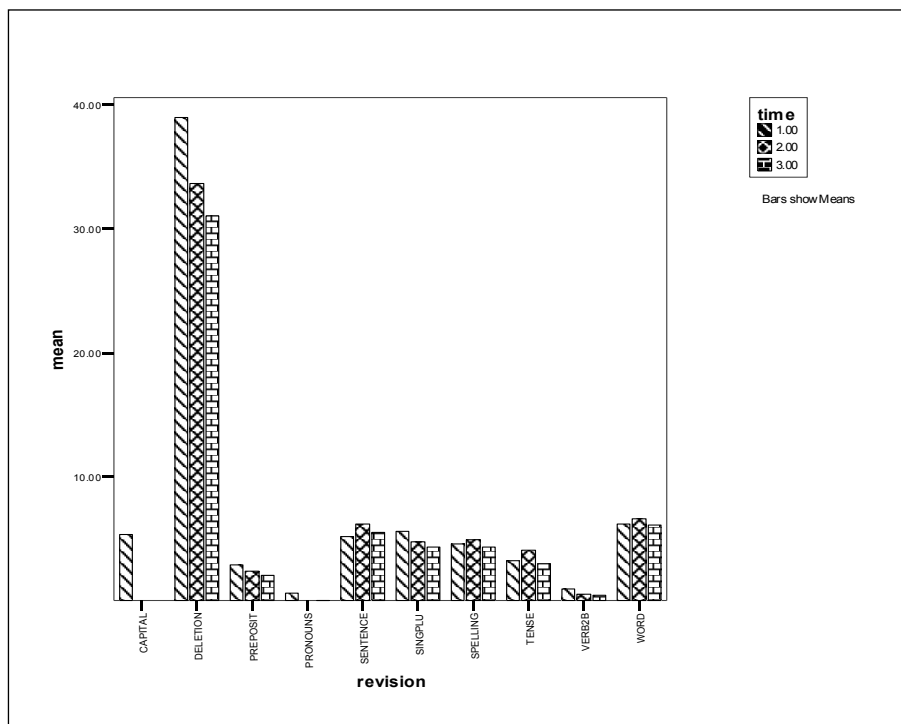
This is demonstrated in Figure 1.1 below.

Figure 1: Types of Revision and Number of Occurrences

From Figure 1, the types of revisions with a decreasing pattern are changes in capitalisation, deletion, prepositions, pronouns, singular/plural, and the verb to be. Despite the emphasis of the checklist on content and organisation, changes were predominantly at the word, sentence and preserving meaning levels.

Deletion seems to have been the most employed type of revision when totalled for all the essays. In most cases, the students deleted words and sentences in their attempt to clarify meaning. However, they restricted themselves much more to rewording in their first draft, especially the linguistic basics of vocabulary and sentence structure. Because of that they considerably employ deletion. It could have been their proficiency level that handicapped them from revising extensively at the graphic and multi-sentential level, for example by adding new text. Counts of Different Types of Revision on Essay Drafts

From Tables 1–3, it can be seen that deletion was the activity most conducted, followed by changing words to clarify meaning, changing sentences also to clarify meaning, rectifying plurals and singulars in nouns, articles and verbs, spelling corrections, tense corrections, corrections of prepositions and capitalisations, corrections of the verb to be (is/are/was/were) and, finally, the activity with the lowest count number was corrections of pronouns.

Table 1: Revision Count for Students 1–7

	S1E1	S1E2	S1E3	S2E1	S2E2	S2E3	S3E1	S3E2	S3E3	S4E1	S4E2	S4E3	S5E1	S5E2	S5E3	S6E1	S6E2	S6E3	S7E1	S7E2	S7E3
DELETION	5	1	1	3	1	1	12	5	1	33	37	29	49	21	19	53	61	49	144	109	97
TENSE	1	1	0	1	0	0	1	1	1	1	1	2	10	13	11	3	2	2	5	3	4
SPELLING	5	7	4	3	3	5	5	7	5	11	9	9	6	7	6	0	1	0	0	0	0
SINGULAR/PLURAL	3	3	2	0	0	0	0	0	0	3	3	3	6	3	5	12	11	13	25	19	21
PRONOUN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0
CHANGE SENTENCE	0	0	0	0	0	0	0	0	0	8	11	10	16	15	15	6	4	6	20	23	21
VERB TO BE	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	9	3	0
CHANGE WORD	0	0	0	0	0	0	0	0	0	5	6	3	15	13	14	12	15	13	27	21	23
PREPOSITION	0	0	0	1	0	0	0	0	0	1	1	1	2	3	1	4	4	3	15	9	7
CAPITALISATION	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0
TOTAL	16	12	7	8	4	6	18	13	7	63	69	58	104	75	71	90	98	86	264	187	173

Table 2: Revision Count for Students 8–14

	S8E1	S8E2	S8E3	S9E1	S9E2	S9E3	10E1	10E2	10E3	11E1	11E2	11E3	12E1	12E2	12E3	13E1	13E2	13E3	14E1	14E2	14E3
DELETION	11	17	13	54	52	47	32	21	13	61	58	59	12	15	9	27	31	29	13	10	8
TENSE	2	2	1	0	0	0	13	17	11	6	13	7	0	0	0	1	1	1	0	0	0
SPELLING	0	0	0	13	11	9	1	1	1	5	3	5	5	4	5	3	3	3	0	0	0
SINGULAR/PLURAL	0	0	0	2	2	2	0	0	0	2	2	1	5	5	3	9	13	7	4	3	3
PRONOUN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CHANGE SENTENCE	2	2	2	1	1	0	0	0	0	11	17	13	7	9	7	0	0	1	1	2	1
VERB TO BE	0	0	0	1	1	1	0	0	0	3	3	3	0	0	0	0	0	0	0	0	0
CHANGE WORD	1	1	1	2	3	2	14	15	13	4	4	4	1	1	1	2	3	2	1	1	1
PREPOSITION	1	1	1	1	1	1	3	3	3	2	2	2	4	3	4	0	0	0	6	6	5
CAPITALISATION	0	0	0	30	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
TOTAL	17	23	18	104	71	62	63	57	41	95	102	94	34	37	29	42	51	43	25	22	18

Table 3: Revision Count for Students 15–20

	S15E1	S15E2	S15E3	S16E1	S16E2	16E	17E	17E	17E	18E	18E	18E	19E	19E	19E	20E	20E	20E
DELETION	56	47	61	39	28	31	71	52	61	16	13	17	51	63	48	38	31	27
TENSE	0	0	0	4	7	4	10	13	7	4	4	6	3	3	3	0	1	0
SPELLING	13	15	9	3	3	2	3	3	3	3	4	3	8	11	13	5	7	5
SINGULAR/PLURAL	2	2	2	3	1	3	25	18	13	0	0	0	7	6	5	4	4	4
PRONOUN	0	0	0	0	0	0	3	0	0	1	0	0	4	0	1	0	0	0
CHANGE SENTENCE	1	1	1	16	19	17	11	15	13	0	0	0	0	0	0	4	4	4
VERB TO BE	1	0	0	0	0	0	3	2	2	0	0	0	1	0	1	0	0	0
CHANGE WORD	2	2	2	5	7	8	14	17	13	8	11	10	5	5	5	5	7	7
PREPOSITION	1	1	1	3	1	1	7	6	5	0	0	0	3	3	3	4	4	3
CAPITALISATION	27	0	0	0	0	0	1	0	0	1	0	0	6	0	0	19	0	0
TOTAL	103	68	76	73	66	66	148	126	117	33	32	36	88	91	79	79	58	50

There were differences between the amounts of improvement on deletion, spelling singular/plural, pronouns, verb to be, prepositions and capitalisation. However, they were entirely due to the improvement in mechanics being greater than that in anything else. This also demonstrates the benefit of the enforced draft writing plus peer and self-revisions.

CONCLUSION

We see revisions being made, probably more than before, albeit mostly low level. There is evidence of between draft improvements of quality. However, revision was reported as focused more on the low-level aspects of writing than higher level ones: grammar, spelling, and vocabulary. This order of preference is consistent with the findings of other studies of low proficiency writers, even when using checklists that prompt attention to higher levels (Doushaq & Al Makhzoomy, 1989; Halimah, 1991). These sources indicate that grammar, spelling and the like are targeted because they are seen by these learners as the main bearers

of correctness, and as therefore important, which in turn arises because teachers themselves concentrate mainly on these features.

It is also observed that the type of revision that they seemed to employ most was deletion. It was seen that in their attempts to clarify meaning, these students tended to delete words and sentences. This appears to suggest that the students felt that by rewording, the meanings of what they were trying to convey were clearer. This again could be due to their proficiency level, as indicated in the interview. They acknowledged that grammar; sentence construction and limited vocabulary were factors that hindered them from writing well.

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APPENDIX A

Classification of types of revision (Faigley and Witte, 1981; 1984).

I. Surface changes
A. Formal changes: (00)
1. Spelling: 01
2. Tense, number, and modality: 02
3. Abbreviation: 03
4. Punctuation: 04
5. Format
a. Paragraph: 05
b. Other: 06
B. Meaning-preserving changes (10)
1. Additions: 11
2. Deletions: 12
3. Substitutions: 13
4. Permutations: 14
5. Distributions: 15
6. Consolidations: 16
II. Meaning changes
A. Microstructure changes (20)
1. Additions: 21
2. Deletions: 22
3. Substitutions: 23
4. Permutations: 24
5. Distributions: 25
6. Consolidations: 26
B. Macrostructure changes (30)
1. Additions: 31
2. Deletions: 32
3. Substitutions: 33
4. Permutations: 34
5. Distributions: 35
6. Consolidations: 36

The India Healthcare Sector: Governance and Management Challenges

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ABSTRACT

The global health care industry estimated at $ 5 trillion, is one of the world's largest and fastest-growing industries. India's healthcare industry which is expected to be around $45 billion by the end of 2013 accounts for less than 1 % of the global healthcare industry, but has to address the healthcare needs of 17 % of the global population. The India health sector therefore faces severe resource constraints to deliver health services. India spends about 5 % of GDP on healthcare compared with 10-12 % of GDP on healthcare spending by developed countries. The government's share in the total healthcare expenditure in India has remained around 1 % of GDP, and therefore the private sector has become a dominant player in health service delivery. Regulation of the private sector is essential for successful Public private Partnership. The unregulated private healthcare sector also raises serious concerns regarding the accountability, equity and quality of service delivery. India ranks 112 out of 193 WHO countries on health system performance. The WHO Report on Macroeconomics and Health [Jeffery Sachs, et al 2001], followed by the Report of the National Commission on Macroeconomics and Health [GoI, August 2005] provide strategic directions to improve our health system performance. Improvements in our health system performance call for a significant scaling up of resources by the Government of India, and tackling the non-financial obstacles that have limited the capacity to deliver health services. Building health systems that are responsive to client needs requires politically difficult and administratively demanding choices.

Keywords: Healthcare, Management Challenges, India

1-2-3 challenge: The Indian healthcare sector faces the 1-2-3 challenge; India needs to add 1 million doctors, 2 million nurses and 3 million hospital beds to achieve the world average of 1.7 physicians, 3.3 nurses and 3.6 beds per 1000 population.

INTRODUCTION

The World Health Organization defines health as a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.

Healthcare industry, as per the United Nations International Standard Industrial Classification [UN, 2008] consists of three categories, namely,

- Hospital Activities (mostly inpatient services)
- Medical and Dental Practice Activities (mostly out-patient services)
- Other Human Health Activities (mostly non-medical such as nursing, physiotherapy services etc.)

The global healthcare industry, estimated at $5 trillion, is one of the world's largest and fastest-growing industries consuming over 10 per cent of the Gross Domestic Product (GDP) of most

developed nations. Ancillary sectors of the healthcare industry include pharmaceuticals, medical equipment and devices, biotechnology, information technology, medical insurance, medical tourism, and so on.

The India healthcare industry has grown from $4 Billion in 1990-91 to almost $ 40 Billion by 2011-12, thereby registering an impressive growth. However, India's healthcare industry projected at $ 45 billion by the end of 2013 accounts for less than 1 % of the global healthcare industry estimated at $ 5 trillion. Among the ancillary industries, the Indian pharmaceutical industry, growing at 12 % annually and valued at $ 22 billion, is the world's fourth largest by volume and is likely to lead the manufacturing sector of India. The Indian biotech industry, estimated at $ 1 billion is likely to be a leader in the employment of skilled human resources like the IT sector. Other ancillary sectors, especially the medical equipment, and healthcare IT sectors are likely to witness unprecedented growth as result of increasing investments in these industries by the private healthcare sector.

Good health services are those which deliver effective, safe and good quality services. Availability, access, affordability and equity in service provision are important determinants of service quality. Improving access, coverage and quality of health services depends on the ways services are organized and managed. In India, the Ministry of Health and Family Welfare (MoHFW) is the nodal ministry for healthcare service delivery. The MoHFW focuses on prevention and cure of diseases, and coordinates with other ministries to take care of physical, mental and social well-being needs for good health (Please refer to the WHO definition of health mentioned in the beginning). For example, the MoHFW coordinates with the Ministry of Women and Child Development for nutritional supplements to children and pregnant women, Ministry of Human Resource Development for adolescent health and education, Ministry of Rural Development for water and sanitation, and so on.

Health plays an important role in the economic development of any country. The GDP growth of a country and its sustainability requires a healthy workforce to contribute to increased productivity. An unhealthy population would end up consuming more than what it produces and thereby retard the GDP growth.

A MACRO-ECONOMIC PERSPECTIVE

A comparison of India's healthcare sector with other developing and developed economies in the world may throw some light for our policy makers to formulate evidence based health policy and planning.

The global GDP is dominated by the OECD1 and BRICS2 groups of countries. Together, the OECD and BRICS groups represent 20 % of the number of countries in the world and account for 80-85 % of the global GDP. In this section, we therefore provide a macro-economic perspective of India's healthcare system Vis-à-vis the OECD and BRICS groups of countries.
Even though India's economy is the third largest in the world, our total expenditure on healthcare is less than 5 % of our GDP, compared with 10-12 % of GDP spent on healthcare by the OECD countries, as can be seen from Figure 1.

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[1] The Organization of Economic Co-operation and Development (OECD) group of 34 developed economies account for 60% - 65 % of the global GDP.
[2] Brazil, Russia, India, China and South Africa (BRICS) group of 5 developing economies account for 15-20 % of the global GDP.

Figure 1: Health expenditure as % GDP
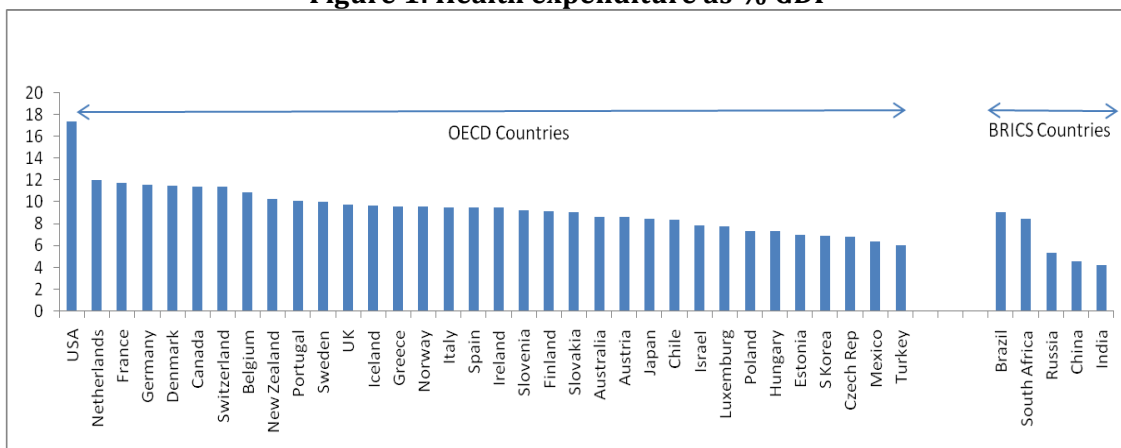
Such a low level of spending on health in India for a population of 1.2 billion translates into $ 45 (at average market exchange rate) or equivalently $ 122 (PPP exchange rate) per capita expenditure on health [WHO, 2011]. As per WHO estimates, a minimum of $ 50 (at average market exchange rate) per capita is necessary to meet basic healthcare needs. Why is India not investing in health?

A comparison of India with OECD and other BRICS countries on per capita expenditure (PPP) on health is shown in Figure 2.

Figure 2: Healthcare expenditure per capita (PPP)
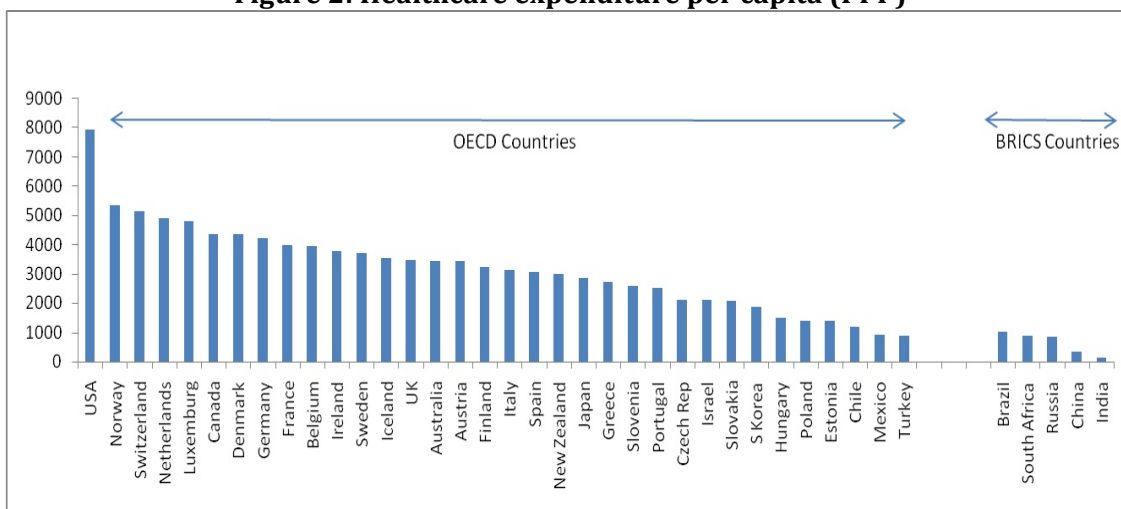
It can be seen from Figure 2 that the per capita expenditure on healthcare among OECD countries ranges from approximately $ 8000 by USA to about $1000 by Turkey. Among the BRICS group of countries, Brazil tops the list on healthcare expenditure per capita while India gets the lowest rank.

A breakdown of the healthcare expenditure into expenditure by the Public and Private Sectors raises more alarms, as can be seen in Figure 3. It can be seen from Figure 3 on next page that USA is ranked 32 out of 34 OECD countries on public health expenditure even though USA tops the world on total healthcare expenditure. Public health expenditure by many OECD countries ranges from 50-80 % of their total health expenditure. In India, public health expenditure accounts for less than 30 % of the total health expenditure. In fact, India is ranked 171 out of 193 WHO countries on public health expenditure.

Figure 3: Public Expenditure as % Total health expenditure
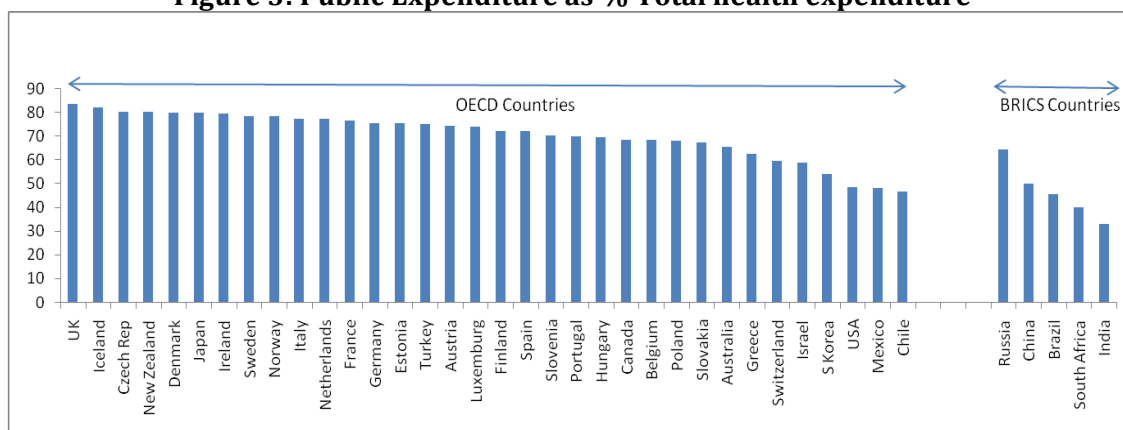
It is also well known that USA which tops the list of countries on per capita expenditure on health, does not top the list of countries on health system performance [WHO, 2000]. This may be because public health expenditure by USA is very low, as can be seen from Figure 3. The same conclusions may be drawn for the poor health system performance by India. It therefore seems to reason that the government's share in the total healthcare expenditure is an important determinant for health system performance; this research is currently underway by the author.

The Planning Commission of the Government of India has committed to increase the public healthcare expenditure from 1 % to 3 % of our GDP by the end of the 12th Five Year Plan. However, there is no reliable data on the projected growth of the unregulated private health sector for the above period, even though it currently accounts for almost eighty percent of the total healthcare expenditure (equivalently 4 % of the 5 % GDP on total healthcare expenditure). The unregulated private healthcare sector raises serious concerns regarding the accountability, equity and quality of service delivery. It is therefore surprising that the Government, at the national and state levels, is actively pursuing Public Private Partnership for improving healthcare delivery with very little knowledge of the private healthcare sector. It would be necessary to regulate the private healthcare sector so that the public and private sectors could work closely for improving our health system performance.

HEALTHCARE FINANCING

The dominance of the private healthcare delivery system in India is evident from the fact that out-of pocket expenditure on health accounts for almost 68 % percent of the total healthcare expenditure, as can be seen from Figure 4 [GoI Sept 2009].

An analysis of the out-pocket expenditure in the rural and urban India (see Table 3) shows that that both rural and urban India depends largely on the private sector for outpatient services, and on the public sector for inpatient services.
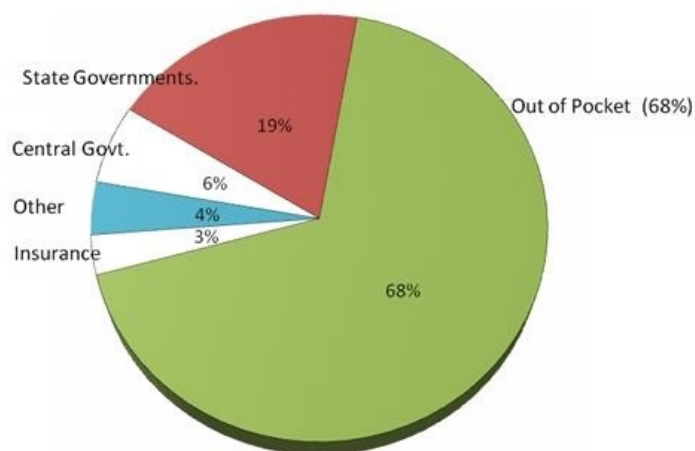
Figure 4: Healthcare Financing

Table 3: Out-of-Pocket expenditure: Private Sector

Type of service	Rural	Urban	Total
Out patient-care	69 %	62 %	66 %
In-patient care	21 %	27 %	24 %
RCH services (*)	5 %	6 %	5 %
Other services (**)	5 %	5 %	5 %
Total	100 %	100 %	100 %

Source: [Mahal, et al 2010]

(*) Anti natal, intra-natal, post natal and abortion services

(**) Includes Immunization, Family Planning etc.

An analysis of expenditure by function (Table 4) reveals that curative care accounts for almost 78 % of the total expenditure.

Table 4: Health Expenditure by function

Function	Billion Rs	%
Curative Care	1042.87	77.96 %
RCH an FW	107.97	8.01 %
Control of communicable diseases	18.01	1.35 %
Control of Non Communicable diseases	2.42	0.18 %
Other public health activities	6.54	0.49 %
Medical Edu and Research	30.14	2.25 %
Health admin and Insurance	43.32	3.24 %
Others	86.49	6.47 %
Total	1337.76	100 %

[Source: GoI, Sept 2009]

The very low expenditure on preventive care and promotion of good health behaviour explain the reasons for the poor performance of our public healthcare system. About 200 mothers and 5000 children under the age of five years die every day in India [Ramani, 2010]. Almost 2/3rd of the maternal and child deaths are preventable with timely interventions. Besides maternal and child mortalities TB accounts for an additional 1000 deaths per day. India will certainly miss the MDG on maternal and child health. The government of India should divert more funds for preventive care and promotion of healthy behaviour given that the Planning Commission of

India is committed to increase public share of the healthcare expenditure from the current level of 1 % GDP to 3 % GDP by the end of the 12th Five Year Plan.

The discussions so far have highlighted the need to scale up financial resources in the India health sector, and to increase the government's share in the total health expenditure with a larger allocation to prevention and promotion activities. Next, we turn our attention to analyse the non-financial barriers which constrain the delivery of healthcare services.

NON-FINANCIAL OBSTACLES IN SERVICE DELIVERY

One of the recommendations in the WHO report [Jeffery Sachs, et al 2001] is the need to tackle the non-financial obstacles that have limited the capacity to deliver health services. The management of our healthcare system has to be made more effective and efficient. This calls for evidence based planning and monitoring the utilization of resources in the delivery of healthcare services in order to (i) attain optimum utilization of the health infrastructure, (ii) achieve maximum productivity from healthcare workers, (iii) avoid shortages of medicines, drugs and vaccines, and (iv) maintain minimum downtime of medical equipment and devices.

Health Infrastructure

Infrastructure forms a critical part of health service delivery in any country. Availability, access, affordability, and equity of quality services highly depend on the distribution, functionality and quality of infrastructure. India's record of investing in public health infrastructure has not been very satisfactory

Public Health Infrastructure

The District Health System (also known as Rural Health System) got considerably strengthened when the Government of India launched the National Rural Health Mission (NRHM) in April 2005 to carry out the necessary architectural corrections in the basic healthcare delivery system [GoI, 2005]. The Rural health system consists of approximately 150,000 Sub-health Centres (SC), 24,000 Primary Health Centres (PHC), and 4600 Community Health centres (CHC), and still has a shortfall of 30 % health facilities as per government norms. The real worrying question is not the shortfall in health facilities, but the number of health facilities which are functional. The functionality of a health facility is determined by the availability of all services, namely, consultation, investigation, and medication at any given point in time. An estimated 65 % shortages of doctors (GoI, Sept 2009]) in the rural health system explains the poor functionality of the public healthcare facilities. Poor functionality of public healthcare facilities is the major reason for the private sector to dominate healthcare service delivery even in rural areas (see Table 3 above). Besides the SCs, PHCs, and the CHCs, the public health system has an estimated 13,000 secondary and tertiary care hospitals.

The Urban Health System in India continues to remain neglected, even though the current urban population in India is estimated at 350-400 million. Urban health caught the attention of the national health planners for the first time in the 10th Five Year Plan 2002-2007. A proposal to set up a National Urban Health Mission (NUHM) is still pending with the Government of India [GoI, 2012]. Unfortunately, no recent statistics are available from the government on the number of urban health facilities in India.

Private Health Infrastructure

The private health sector in India is not regulated and so there is no reliable source to provide information on private health care facilities. Private health care facilities include dispensaries, clinics, nursing homes and hospitals, big and small. It is estimated that the private sector has

about 2/3rd the number of hospitals, owns about 1/3rds of the total number of hospital beds, and accounts for 75 % of healthcare workforce3. The private sector in India has a dominant presence in all the sub-markets- medical education and training, medical technology and diagnostics, pharmaceutical manufacture and sale, hospital construction and ancillary services, and finally the provisioning of medical care. Of concern is the quality of services provided at the rural periphery by a large number of unqualified healthcare staff. Its relationship to health outcomes at the population level has never been established. The private sector's predominance in the health sector has led to inequities in access to healthcare; hospitalization among the well-off is six times higher than that of the poor [GoI, 2010].

As per the World Health Statistics report [WHO, 2011], India has approximately 700,000 beds in the country implying a ratio of only 0.6 beds per 1000 population, as against the world average of 3.6 beds per 1000 population. India therefore needs an additional 3 million beds to reach the world average. It will take a few decades to achieve the world average for the number of hospital beds per 1000 population.

Human Resources in Health
Health service delivery is highly labour intensive and therefore health workforce is the most critical component of the health sector in any country. Table 4 provides a comparison of HR staff levels in the Indian health sector with the global scenario.

Table 4: HR staff In Indian health Sector

Healthcare workforce	Global statistics	India statistics	
	Number	Number	Density per 1000 population
Physicians	9,171,877	660,801	0.6
Nursing and Midwifery personnel	19,379,771	1,430,555	1.3
Dentistry	1,932,650	78,096	0.07
Pharmaceutical	2,587, 043	578,179	0.52
Community health workforce	1,369,772	50,715	0.05
Total	**34,441,113**	**2,798,346**	

Source: WHO, 2011

It can be seen that the Indian health sector has approximately 2.8 million workers compared to 34.5 million healthcare workers worldwide. Indian health sector has thus 8 % of the global workforce to meet the healthcare needs of 17 % of the global population.

As per the WHO statistics [WHO, 2011], India has 0.6 physicians per 1000 population, against the world average of 1.7 physicians per 1000 population. The number of nursing and midwifery staff in India is estimated to be 1.2 nurses per 1000 population, against the world average of 3.3 per 1000 population. The India healthcare system therefore requires an additional 1 Million physicians, 2 million nurses so as to meet the world average. It would take decades to meet the above requirements, since India produces only 45,000 doctors [MCI website], and 180,000 nurses per year [INC website].

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3 Healthcare workforce is not merely the number of doctors and nurses; it includes all health service providers and administrators from remotest sub centres to large hospitals, both public and private.

Availability of Medicines and drugs

Availability of medicines, drugs and vaccines in the healthcare facilities at all times is an important indicator of health system performance. As per the India facility survey [IIPS, 2005], the availability of medicines and equipment in working condition is as low as 40 %. The District Level Health Survey, DLHS-3 survey [IIPS, 2009] reported shortage of essential medicines in PHCs and CHCs for about 5- 10 days in a month. The National Family Health Survey, NFHS-3 survey [GoI, 2007] pointed out that only 54 % of our children are completely immunized. A recent study [IIMA, December 2011] showed that one of the major reasons for low levels of complete immunization is the poor transport arrangements and cold storage facilities for vaccines in villages. The logistics management of transportation, storage and distribution of medicines and vaccines requires considerable strengthening.

Maintenance Of Medical Equipment And Devices

As per the report of the National Commission on Macroeconomics and Health [GoI, August 2005], capital expenditure accounts for only 5 % of the total expenditure in the public health sector. This has serious implications on the quality of service delivery. The downtime of medical equipment and devices in public healthcare facilities is alarmingly high [IIPS 2009], partly due to poor monitoring and control measures, and partly due to procedural delays. Too frequent and long downtime of USG (Ultra Sono-graphy) machines would force the pregnant women to seek USG services from elsewhere incurring high costs, and thereby defeating the very policy goal of the government to provide timely maternal care services at affordable costs to the poor. It has been well documented in the literature that 60-70 percent of medical decisions are based on the investigation reports [IIMA, November 2011. It is therefore imperative to maintain the medical equipment and devices properly so as to deliver good healthcare services.

INTER-SECTORIAL AND INTER-MINISTERIAL COORDINATION

The Indian health sector works closely with several sectors which include pharmaceuticals, medical equipment and devices, information technology, medical insurance, medical tourism etc. The Pharmaceutical Industry in India (under the Ministry of Chemicals and Fertilizers), is the world's fourth largest in terms of volume. Pharmaceuticals play an important role in our healthcare delivery system since curative care accounts for almost 80 % of our total healthcare spending. Investment in medical technology needs to be considerably increased to improve the quality of service delivery, as brought out clearly in the report of the National Commission on Macroeconomics on Health [GoI, Aug 2005]. Information technology in healthcare is gaining wider acceptance now to enhance the clinical and administrative workflow of service delivery. Medical insurance coverage has to be expanded to address concerns on the equity of healthcare service delivery.

It is important to realise that healthcare indicators on mortality and morbidity are influenced by several factors such as age at marriage, anaemic status of pregnant women, malnutrition in children, quality of drinking water and so on. As per the NFHS-3 survey [GoI, 2007] and DLHS-3 survey [IIPS, 2009], about 50 percent of girls in India get married before the legal age of 18 years, 20 percent of mothers are adolescents, 60 percent of pregnant women are anaemic, 54 % of children are fully immunized against vaccine preventable diseases, and 50 percent of our children are underweight. Adolescent anaemic mothers are vulnerable to maternal mortality and morbidity. Malnutrition among children is high among those children born to adolescent anaemic mothers. As per the report of the National Commission of Microeconomics and Health [NCMH, 2005], poor hygiene and sanitation accounts for 9 percent of all deaths and an estimated 27.4 million years of life lost per year in India.

In order to address the above issues, MHFW coordinates its activities with several other ministries (as MHFW focuses only on disease prevention and cure). The Ministry of Women and Child Development (MWCD) looks after the nutritional needs of children (under the age of five years) through its ICDS program (Integrated Child Development Scheme) and of the adolescent girls under its Kishori Shakthi Yojana. The Ministry of Human Resources and Development (MHRD) is in charge of the Mid-Day Meal scheme, the National Programme of Nutritional Supplement to Primary Education to children in classes I to V in government and government aided schools. MHRD also looks after the school Health Education and Life-skills Programs (HELP) in classes IX and XI. Issues related to adolescent health are with the Ministry of Youth, Culture, and Sports. The Ministry of Drinking Water and Sanitation is responsible for the overall coordination of programs of drinking water and sanitation in the country. As per WHO estimates, unsafe water supply, sanitation, and hygiene accounts for as high as 88 percent of the burden of diseases and is mostly concentrated on children in developing countries [WHO website].

The Ministry of Health and Family Welfare (MHFW), which is the nodal ministry for healthcare delivery, thus faces enormous challenges in inter-sectorial and inter-ministerial coordination in order to address issues on all aspects of health, as can be seen from Figure 5.

Figure 5: Public Health Service Delivery in India
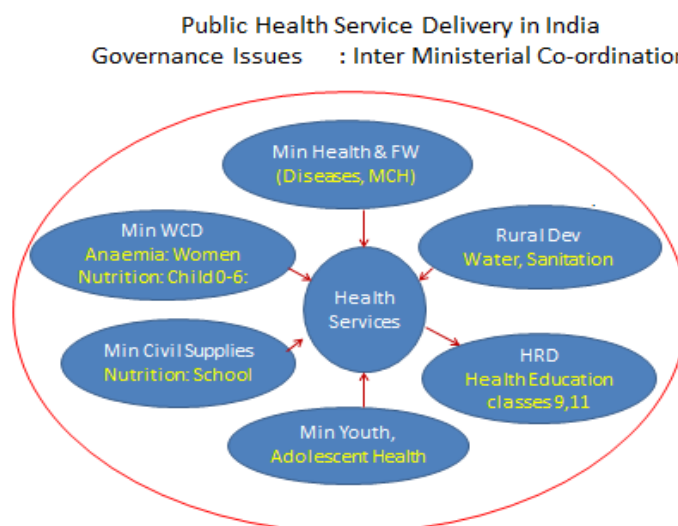
CONCLUSION

From the above discussions it is clear that the India health sector is at cross roads today and needs serious reforms. After establishing NRHM in 2005, there has been no major reform in the India health Sector. NRHM was conceptualized in response to perceived systemic flaws in our health system, namely, lack of a holistic approach, absence of linkages with collateral health departments, gross shortage of infrastructure, inadequate skilled human resources, and so on. In spite of additional resources made available to the states under NRHM, Maternal Mortality Rate (MMR) continues to be high around 178/100,000 live births. India would therefore miss the MDG target for MMR at 100/100,000 live births by 2015, even though we may be close to achieving the MDG for Infant Mortality Rate. The Planning Commission of India proposed to increase the Government share of total healthcare expenditure from 1 % of GDP to 2-3 % of GDP by the end of the 11th Five Year Plan (2007-2012), but the government share continues to remain at 1 % GDP. The government's poor share in the total healthcare expenditure has led to

rapid growth of the unregulated private sector for healthcare service delivery in India. The dominant role of the private healthcare sector raises serious questions on the equity and accountability of service delivery. A regulated private health sector is also necessary for any meaningful Public Private Partnership (PPP) so that the public and private sectors could complement each other's strengths and weaknesses for improving our healthcare system performance. It would be necessary for the government of India to divert more funds for preventive care and promotion of healthy behaviour given that the Planning Commission of India is committed to increase public share of the healthcare expenditure from the current level of 1 % GDP to 3 % GDP by the end of the 12th Five Year Plan (2012-17). Even if we achieve this target of government expenditure on health by the end of the 12th Five Year plan, India still lags behind the OECD countries on health system performance and expenditure on health. The OECD countries spend around 10-12 % of GDP on total healthcare expenditure, and the government's share on total health expenditure averages around 70 % . It therefore seems to reason that the government's share in the total healthcare expenditure is an important determinant for health system performance; this is an area for future research.

While NRHM has had some success, the fate of NUHM still hangs in the balance. The proposal to include NUHM under the NRHM umbrella proves the inability of our government to admit the basic differences in health care issues of the urban population from the rural population. Neglect of urban health planning has resulted in many urban health indicators being worse than rural health indicators. Government has to take up urban health planning on a war footing.

Lack of management capacity to transform the available financial resources into better service delivery is evident from the unutilized NRHM budget by the states. Functionality of the existing public health infrastructure has to be improved so as to make basic healthcare services available at all times. India requires an additional 1 Million physicians, 1.8 Million nurses and 3 Million hospital beds to reach the world average of 1.7 physicians, 3.3 nurses and 3.6 beds per 1000 population. At the current rate of 45,000 doctors and 2 million nurses produced every year, it would take another 20-25 years for India to achieve the world average for the number of physicians and nurses per 1000 population. The logistics management system to transport, store and supply medicines and vaccines to health facilities in rural areas should be strengthened so as to avoid shortages of essential medicines and vaccines. The government should invest more on medical and information technology to improve the quality of care. Health System planning has to be strengthened in order to manage the health system resources effectively and efficiently.

The governance of the Indian healthcare sector should facilitate inter-sectorial and inter-ministerial coordination between the Ministry of Health and all other ministries participating in delivering health related services such as nutrition, health education and so on.

Managerial challenges have to address the urgent need to scale up the financial resources to the health sector and tackle the non-financial barriers coming in the way of healthcare delivery. Building health systems that are responsive to client needs requires politically difficult and administratively demanding choices.

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