



CHAPTER 6

CONCLUSION DISCUSSION, POLICY IMPLICATION AND RECOMMENDATION

6.1 Conclusion

Medical education is usually the highest cost among other education. This study the cost of producing a medical doctor at Faculty of Medicine provides the results that can be summarized as the following :

1. Analysis of the cost of the production can be divided to be 2 Categories i.e.the variable cost and the fixed cost as in table 5.1
 - 1.1 The total variable cost 240,126,549 Baht is 73.6% of the total cost and only the labor cost is 69.5 %of the total cost.
 - 1.2 The total fixed cost 86,203,173 Baht is 26.4 %of the total cost as in table 6.1

Table 6.1 Shows the variable cost and fixed cost of producing one medical doctor

	Baht	Percent
Variable cost	240,126,549	73.6
Fixed cost	86,203,173	26.4
Total cost	326,329,722	100.0

- 1.3 The unit cost of a medical student enrolled is 2,161,124 Baht or 8,217 Baht /SCH and when adjusted with the repeat and drop out student the cost increase a little to be 2,174,091 Baht or 8,267 Baht /SCH
2. Analysis of the indirect cost of student, is the cost or income foregone from going study in the university. This is the same in all the 6 Years Course about 90,800 Baht / person/year. Since the distribution of students in Bangkok Metropolis, and rural are nearly the same in all 6 years students in fiscal year 2000. The total indirect cost of the student is 544,956 Baht /person in 6 years course.

6.2 Discussion

The cost recovery is a crucial issue for the autonomous university. From this study the labor cost cover about 70% of the total cost. The unit cost of producing one medical student is 2,161,124 Baht and 2,174,091 Baht with adjusted for the repeating students. The tuition fee of medical students from year 1 to year 6 are charged at flat rate for about 20,000 Baht per person per year, this is a about 5.6% of the total cost. Therefore, the cost recovery would be a problem. A question is weather we collect all the 100% of the total. The answer depends on weather we consider the university education as a private investment, or a social investment that need to be subsidized at a certain percentage of the total cost or we account it as? Since the doctors have contributions to the whole society and welfare, we should subsidize at a certain amount. In the United states the tuition fees of most medical schools have been able to keep tuition at 4 to 6 percent of their budgets this seems to be the same rate as us now (Ariyan,2000) But the issue is the rest of the cost comes from?

The cost of year 1, we used previous study data (Pinijesak, 1991) and corrected by the inflation rate (CPI of all categories from Department of Domestic Commerce). This could estimate the total cost of year 1 and because it was estimated as variable cost, so we categorized it to be the labor cost. The labor cost here might be over estimated.

On allocation Hospital cost to related Departments we used the 10%, this proportion we judged from the average teaching hours of all personnels in medical school setting. Some studies using a greater proportion (30%), from our experiences it was an unfair figure to allocate such large amount to the medical students. Since there are patient treatments and these are major activities occurred in the hospital wards.

From the analysis of each Department (Table 5.5) the Department of Medicine seems to be the biggest cost (13.24%) but this is because of the number of credits this department teach. Obstetrics and Gynecology cost the second 11.73% and Paediatrics cost 9.9%. The reason was because of the number of credits these departments taught.

For year 2 (table 5.6) the Baht/SCH, Department of Pathology was 18,894 Baht /SCH, Biochemistry was 4,668 Baht /SCH, Microbiology was 13,17 Baht /SCH. For year 3 pathology cost at 17,955 Baht /SCH, Forensic Medicine cost at 17,259/SCH. The Department of Forensic Medicine costly could because of number credit it taught (1 credit) this is the same reason for year 4 that Forensic Medicine costs 18,162 Baht /SCH and for Ophthalmology 14,861 Baht /SCH and Obstetrics and Gynecology 13,615 Baht /SCH (table 5.7 and 5.8)

Year 5 Rehabilitation cost at 26,580 Baht /SCH and Radiology cost at 26,344 Baht /SCH the shooting cost of these two departments could be that they taught only 2 and 4 credits for the whole six years of medical student curriculum (table 4.9).

Year 6, Medicine cost at 14,470 Baht /SCH, Obstetrics and Gynecology at 13,888 Baht /SCH (table 4.10).

The percentage of labor, material and capital cost of each department (Table 5.5), the labor cost more than average were Department of Psychiatry (85.1%), Laboratory Medicine (84.5%), Medicine (81.7%), Surgery (80.5%), Rehabilitation (79.7%), Orthopedics (78.5%), Anesthesiology (77.2%), Ophthalmology (77.1%), Otolaryngology (74.1%), Parasitology (71.4%) and Preventive Medicine (71.1%). From these figures we could suggest the guide in solving the cost of this component.

The economic loss from dropout and repeat student the unit cost increase by 0.59% This is because of the small proportion of repeat student and zero percent from dropout.

The indirect cost of student (opportunity cost) was about 90,826 Baht /person/year and for the whole six years course is 544,956 Baht /person When add up the opportunity cost to the unit cost, then the unit cost could be 2,706,080 Baht that is a huge amount.

6.3 Policy implication, and Recommendation

From this study the labor cost could be the main problem for the management of the Faculty the increase is salary could occur only if the efficiency of production increase i.e. the increase in numbers of production, reduce resource etc.

The cost-fee ratio (cost/fee) was 95:5 which suggest that medical students obtain 95% subsidy from the government budget or the society. If we regard that the doctors contribute their practices to the whole society, not a private benefit, or concern about

equality in education, we should subsidise. Universal insurance policy of the Government, that is a social welfare to all people, this policy needs doctors as the health care providers and the private benefits may be reduced, the reasons to subsidise will be augmented. If we regard that are private benefits the amount of subsidy will be reduced.

The economy of scale could not analyze by this study, the future study with serial data may be done then the economy of scale could be analyzed.

The limitations of study are the optimum size of production, which I could not analyses here. Could we increase the number of students without increasing the number of resources?

The cost that was difficult to estimate, the capital cost : building and land which we use the area used by each cost center, a rent rate was applied (using the rent rate of Asset Management Office Chulalongkorn University for Samyan Commercial Building as reference), while the land was not accounted. This could cause the estimation to be under estimate. If we should correct this underestimation, we may include the land value in the capital cost. by doing this I estimate the total cost could increase to be 1,154,610,403 Baht, the unit cost, 7,637,993 Baht and 9,098 Baht/ SCH this is about 3.5 times of the estimated. (the land value was 75,000 Baht /Square meter) (Value Association of Thailand, 1997).