Forty Six Years of Health Financing in Fiji (1962 – 2008)

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Abstract
This paper provides an analysis of the Fiji Ministry of Health (MoH) budget for the last 46 years, its share of the national budget and annual percentage of GDP, its revenues, per-capita health expenditure, staff costs, and the performance on key population health indicators and Millennium Development Goals (MDGs). Despite annual increases in dollar terms, the proportion of GDP allocated to the national public health system has fallen from 4% to 2.6% over the last 15 years. Consequently the national performance on key health service indicators and MDGs is declining and health staff are migrating. We outline factors to retrieve the public health system in Fiji, such as the need for political commitment to the health of the people, public policy debate on the nature of the health system, the revision of hospital charges, the need to protect the poor by strengthening means testing, and propose compulsory health insurance for the employed.
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Introduction
While there is no golden rule on the optimal percentage of the GDP allocated to health, many developed countries spend at least 7% to 8% of GDP (World Bank, 2005) on health. Fiji's allocation of 2.6% is the lowest among our regional neighbours (UNDP 2007/2008). The Solomon Islands and Tonga allocate between 5-6% of GDP to health annually, Samoa between 4-5% and Vanuatu and Papua New Guinea over 3%. In Fiji, the proportion of GDP allocated to health has fallen progressively for the past 15 years, placing pressure on the capacity to provide a quality national health care system and to continually upgrade it. That this fall continued during the recent period (1999-2008) of donor-sponsored health sector reform ($15.5 million FJD) questions the nature of the reform process and the common expectation in the donor community that the MoH will be able to sustain new initiatives.

Recent interest in strengthening the private sector has arisen with little public debate yet the fees for private services are well beyond the majority of the population, as over 76% of the employed population earn less than 10,000 p.a (Bureau of Statistics EUS 2005). Health infrastructure, particularly rural nursing stations, health centres and sub-divisional hospitals and their staff quarters have deteriorated due to lack of maintenance. Large capital investments are needed to upgrade these facilities and re-equip them with furniture and fittings, medical equipment, supplies, drugs and dressings and to provide clinical learning opportunities.

This review provides an opportunity to generate discussion on critically evaluating health financing, determining an approach to increasing resources, assessing the determinants of past and current trends in health expenditure and looking towards the future. The statistics provided could be further analysed to determine salary and wage increases in line with the Consumer Price Index and in comparison with the private sector and neighbouring countries.

Health insurance is considered as a potential strategy for increasing revenues but it has its own weaknesses of adverse selection, moral hazard and a limited economy of scale, while the administration of membership registration, the determination and collection of premiums and the reimbursement processes to service providers present problems in serving the sparsely distributed population inhabiting approximately one third of the 332 islands that make up the Fiji group.

MoH expenditure has continued to rise in line with the growing economy but the increase in real terms is largely consumed by salaries and wages, leaving limited funds for capital works, maintenance and supplies and for extending the range of services. Over the last 20 years the MoH has considered the following three options to increase its revenues and to complement funding provided by government, but they have not been acted on (Wong & Govind 1992):

1. Increasing user charges by revising the schedule of hospital charges in the Public Hospital and Dispensaries Regulation.
2. Charging market rates for services provided to non-patient groups, such as medical examinations and reports for employment or immigration purposes, quarantine services, environmental impact studies and health inspections; and, medical examination fees and drug supplies for tourists.
3. Health Insurance schemes, either voluntary or compulsory.

In November 1993, following a presentation by the Minister for Health, Cabinet agreed that the MoH undertake a review of its cost-recovery program. Fifteen years later this review has not been conducted, while government continues to finance 71% of health costs and has a negligible cost recovery program of less than 2% of expenditure, while the community bears 20% by way of out-of pocket expenses. Cost-recovery is not a new feature in Fiji as the 'user pays' system has been in operation since 1978 (Laws of Fiji, Chapter 110 Public Hospitals and Dispensaries Act), however, the dollar value of these fees has not been revised since 1980 despite an estimated 500% increase in costs.

Experience elsewhere has shown that cost recovery is much more effective if the collecting agency retains the revenues (Wong & Govind 1992). Currently, revenues collected by the MoH are paid into the government's consolidated revenue fund. While the MoH can prepare guidelines on fee increases there is little incentive to do so, or to improve collections, if the funds are not retained for health purposes.

Current Services and Sources of Health Funds

Health services in Fiji are primarily provided by government and financed almost exclusively through general tax revenues. Other sources of funding are through donor assistance for service enhancements, a small cost recovery program of user charges, a revolving drug fund account from community pharmacies and a government pharmacy bulk purchasing scheme. A small private sector includes one private hospital based in Suva that provides a range of specialized services, and 110 private general practitioners located in the urban centres of the two main islands Viti Levu and Vanua Levu. Another private hospital is planned for Lautoka.

Government provides services through its three Divisional Hospitals, three Specialized Hospitals, 16 Sub–Divisional Hospitals, three Area Hospitals, 74 Health Centres and 100 Nursing Stations. The MoH approved staffing establishment as at December 2007 was 3,199 posts with 3,030 filled and 169 vacancies. In the Medical Officer category 318 positions were filled of the approved establishment of 396, a shortfall of 78

medical officers. In the Nursing category 1,820 positions were filled of the approved establishment of 1,827 reflecting a shortfall of only 7 (MOH Annual Report 2007).

Services provided at outpatient departments are free. These include medical and nursing consultations, laboratory testing for diagnostic confirmation, X-ray and pharmaceutical provision. Inpatient services are also provided freely unless patients choose to be admitted to 'paying wards' where a range of fees are charged for diagnostic services in addition to the room charges. These 'paying ward' fees are very low compared to hospital charges in the Fiji private sector and in New Zealand and Australia and stock-out of essential items are frequent, so the real costs are transferred to the population, which meets 20% of the national health expenditure from its own pocket (National Health Accounts, 2007) including health insurance premiums and pharmaceuticals purchased from private providers.

Method

This study is a desk review of documents in the public domain relating to the financing of health services in Fiji and on Fiji's performance on selected health indicators and MDGs. Table 3 presents information calculated to a notional 6% of GDP adjusted for the annual rate of inflation.

Findings

Government Financing, MoH Budget and Quality of Service Indicators

Table 1:
Govt. Budget, MoH Allocation and Budget Share, MoH Revenue, MoH Revenue as Proportion of Expenditure and Per-capita Health Expenditure 1962-2006.

Fiscal Year	Whole of Govt. Budget (Million FJD)	MoH allocated Budget (Million FJD)	Health Share of Govt. Budget (Percentage)	MoH Revenue (Million FJD)	MoH Revenue as % of Health Expenditure (Percentage)	Per capita Health Expenditure (Million FJD)
1962	16.10	2.10	13.00	0.30	14.28	4.88
1963	17.20	2.10	12.20	0.30	14.28	4.98
1964	20.10	2.30	11.40	0.30	13.00	5.18
1965	23.30	2.50	10.72	0.30	12.00	5.34
1966	25.20	2.70	10.70	0.30	11.10	5.75
1967	29.10	2.80	9.63	0.30	10.70	5.66
1968	30.70	3.00	9.77	0.40	13.30	5.91
1969	34.40	3.10	9.01	0.40	12.90	6.17
1970	49.50	3.80	7.67	0.40	10.50	7.31
1971	56.60	4.50	8.00	0.40	8.80	8.49
1972	58.20	5.10	8.80	0.40	7.80	9.44
1973	79.00	6.00	7.60	0.60	10.00	10.91
1974	94.30	7.50	8.00	0.40	5.30	13.39
1975	115.10	9.20	8.00	0.40	4.30	16.14
1976	147.00	11.90	8.10	0.30	2.50	20.52

1977	168.10	13.30	7.90	0.30	2.20	22.17
1978	185.90	14.80	8.00	0.50	3.30	24.26
1979	219.60	16.90	7.70	0.50	2.90	27.26
1980	255.30	18.70	7.30	0.50	2.60	29.68
1981	292.20	20.20	6.90	0.80	3.90	31.08
1982	323.90	26.30	8.10	1.00	3.80	39.85
1983	329.50	28.70	8.70	1.00	3.50	42.84
1984	366.10	33.70	9.20	1.00	3.00	48.84
1985	371.70	32.40	8.70	1.10	3.40	46.29
1986	383.30	35.00	9.13	1.10	3.10	49.30
1987	398.20	34.10	8.56	0.90	2.60	46.71
1988	397.20	29.40	7.40	0.90	3.10	39.73
1989	477.90	35.20	7.36	1.10	3.10	46.93
1990	522.10	42.00	8.00	1.10	2.60	54.83
1991	490.90	48.10	9.80	1.30	2.70	61.51
1992	550.50	44.40	8.06	0.80	1.80	55.64
1993	815.99	68.57	7.50	1.63	2.60	79.89
1994	830.64	73.26	8.30	1.54	1.20	88.40
1995	827.53	78.11	9.00	1.56	2.10	89.25
1996	960.72	85.23	8.00	1.66	2.10	100.85
1997	1088.66	89.19	8.00	7.27	8.30	110.10
1998	1108.26	98.92	7.50	1.03	1.20	105.48
1999	1174.56	107.90	7.50	1.08	1.20	103.12
2000	1097.96	124.20	9.00	3.05	3.10	123.18
2001	1096.85	129.86	8.30	1.40	1.50	105.71
2002	1225.49	134.13	8.90	1.40	1.20	125.87
2003	1294.99	136.88	9.00	1.00	0.80	134.33
2004	1313.30	134.13	10.20	1.41	1.00	158.61
2005	1424.48	136.88	10.00	1.30	0.80	176.55
2006	1558.51	147.06	9.44	1.00	0.70	165.49
2007	1572.37	142.67	9.07	1.70	1.10	174.71
2008	1527.91	150.00	9.82	1.60	1.20	163.26

Source: Fiji Budget Estimates, Bureau of Statistics.

Table 1 shows annual financial figures for the years 1962 to 2008. After independence in 1970 Fiji saw the health sector share of government budget fall from around 13% to around 7% - 9% and remain in that vicinity throughout the period. In terms of per-capita spending the dollar amount has risen significantly along with the developing economy, evident in the increased size of the government budget. Yet despite the growing economy there has been a steady decline in health sector revenues over the entire 46 year period, revealing that the health sector has increasingly become one of public provision.

Some anomalous years suggest that revenue collection efficiency varies, but the sustained low level of cost recovery is not surprising given that the fee structure has not been revised since 1980. A virtually free service removes the cost barrier to access and may encourage overuse (Wong & Govind 1992). Conversely,

high fees contribute to under-use by the poor, so determining a level of fees that discourages frivolous use without discouraging essential use has serious ramifications on either side of the equation. Policy inactivity on this issue over recent decades may reflect political caution, but in an era of sharply rising costs it has inevitably propelled Fiji towards under-funded and inadequate services.

Table 2:
Population, GDP, MoH Budget as % of GDP, CPI, and MoH Salary and Wages in FJD and as a Proportion of MoH Budget 1993 -2006.

Fiscal year	Pop.	GDP at Constant Price (Million FJD)	Actual MOH Budget (Million FJD)	MoH budget as % of GDP (Percentage)	Consumer Price Index	MoH Salary & Wages (Million FJD)	Salary and Wages as % of MoH budget (Percentage)
1993	771,104	1707.00	68.57	4.02	100.00	39.30	57.30
1994	783,550	1794.00	73.26	4.08	100.80	43.40	59.20
1995	796,078	2799.00	78.11	2.79	103.00	44.60	57.10
1996	775,077	2962.00	85.23	2.88	106.10	45.30	53.20
1997	788,918	3061.00	89.19	2.91	109.70	45.30	50.80
1998	797,643	3284.00	98.92	3.01	116.00	49.00	49.50
1999	806,212	3662.00	107.90	2.95	118.30	54.80	50.80
2000	810,421	3505.00	124.20	3.54	119.60	54.80	44.10
2001	861,003	3836.00	129.86	3.39	124.70	52.10	40.10
2002	872,985	3961.00	134.13	3.39	125.60	59.90	44.70
2003	866,099	4245.00	136.88	3.22	130.90	67.40	49.20
2004	848,647	4539.00	134.13	2.95	134.60	78.90	58.80
2005	849,361	4731.00	136.88	2.89	137.70	79.90	58.40
2006	862,101	5032.00	147.06	2.92	141.20	80.90	55.00
2007	827,900	5079.00	142.67	2.81	148.00	83.70	58.70
2008	827,200	5826.00	150.00	2.57	-	94.10	62.70

Source: Bureau of Statistics, Fiji.

Table 2 illustrates how in the 15 year period 1993-2008 the population of Fiji increased by 7.3% (56,096 people), Gross Domestic Product (GDP) more than tripled while the proportion allocated to MoH fell from 4% to 2.57% of GDP. In the same period the Consumer Price Index (CPI) increased by 48 % and Salaries and Wages as a proportion of MoH budget averaged 53% over the period. (MoH salary and wages in relation to the CPI and skills migration is the subject of a subsequent paper).

While staff costs are wrongly blamed for the failings of the health system in Fiji, it's the falling proportion of GDP that accounts for the bulk of the financial shortfall, as can be seen in *Table 3*, which illustrates the difference between the actual MoH budget and a 'notional' MoH budget had it achieved the level of 6% of GDP similar to Tonga and the Solomon Islands. It reveals that the actual MOH budget has not achieved even 50% of this notional budget since 1994. This notional allocation is theoretical, but when used as an indicator the annual shortfalls are alarming, suggesting that the ills of the Fiji health system are directly attributable to

low budget allocations, and illustrating the lack of policy action, as even the low proportion of 4% of GDP in 1993 had not been preserved, let alone improved on. Over the fifteen year period since, this notional annual shortfall has increased from 33 to almost 190 million Fijian dollars (FJD).

Table 3:
GDP, MoH Budget, MoH Budget as % of GDP, Notional MoH Budget at 6% of GDP, Shortfall as % of GDP and Shortfall of Notional MoH Budget at 6% of GDP Minus Actual MoH budget 1993-2005.

Fiscal Year	GDP ($ millions)	Actual MOH Budget (Million FJD)	MoH Budget as % of GDP (Percentage)	Notional MoH budget at 6% of GDP (Million FJD)*	Notional % Shortfall in GDP allocation (Percentage)	Shortfall: Notional Budget * – Actual Budget (Million FJD)	Inflation (%)
1993	1707.00	68.57	4.02	97.28	1.98	28.71	5.02
1994	1794.00	73.26	4.08	106.97	1.92	32.82	0.62
1995	2799.00	78.11	2.79	167.40	3.21	89.29	0.32
1996	2962.00	85.23	2.88	168.92	3.12	83.69	4.95
1997	3061.00	89.19	2.91	177.47	3.09	88.38	3.37
1998	3284.00	98.92	3.01	185.38	2.99	86.46	5.92
1999	3662.00	107.90	2.95	215.39	3.05	107.49	1.97
2000	3505.00	124.20	3.54	208.01	2.46	83.81	1.09
2001	3836.00	129.86	3.39	220.75	2.61	90.89	4.27
2002	3961.00	134.13	3.39	235.76	2.61	101.63	0.80
2003	4245.00	136.88	3.22	244.00	2.78	107.12	4.20
2004	4539.00	134.13	2.95	264.71	3.05	130.58	2.80
2005	4731.00	136.88	2.89	276.75	3.11	139.87	2.40
2006	5032.00	147.06	2.92	294.40	3.08	147.34	2.49
2007	5079.00	142.67	2.81	290.11	3.19	147.43	4.80
2008	5826.00	150.00	2.57	339.07	3.43	189.07	3.00

Source: Bureau of Statistics, Fiji.

Note: 6% of GDP is the approximate allocation of Fiji's neighbours, Solomon Islands and Tonga

* adjusted for annual inflation rate (Source: International Monetary Fund - 2008 World Economic Outlook)

Table 4:
MoH Quality of Health Service Indicators 1990-2005

Year	Pop.	Birth Rate per 1000Pop	Pop. Mortality Rate per 1000 Pop.	Natural increase %	Peri-natal Mortality Rate *	Infant Mortality Rate **	Child mortality Rate ***	Maternal Mortality Rate ****
1990	735,985	24.30	5.70	1.80	10.80	16.80	-	26.80
1991	746,326	24.00	5.00	1.90	13.30	19.00	-	26.00
1992	758,275	24.40	5.90	1.90	12.50	18.40	-	41.60
1993	771,104	24.30	5.60	1.80	12.20	16.60	-	63.00
1994	783,550	24.30	5.60	1.90	10.30	16.40	21.40	63.00
1995	796,078	24.40	5.40	1.90	9.00	14.70	19.30	60.40
1996	775,077	24.00	6.00	2.00	11.90	17.10	22.30	43.20
1997	788,918	21.90	6.80	1.50	12.00	16.80	22.60	54.90
1998	797,643	21.80	6.20	1.70	13.10	17.80	23.60	38.20
1999	806,212	20.50	6.70	1.30	14.70	17.20	24.30	40.30
2000	854,796	20.30	6.90	1.30	16.20	16.20	21.80	57.50
2001	861,003	19.90	6.70	1.30	7.90	15.40	23.10	40.60
2002	872,985	19.50	6.40	1.30	8.50	17.70	22.30	23.50
2003	866,099	20.70	7.00	1.30	16.40	18.80	23.70	22.30
2004	848,647	20.90	6.60	1.40	19.30	17.80	22.50	33.80
2005	849,361	21.00	7.00	1.40	22.50	20.70	25.80	50.40
MDG Targets	-	-	-	-	-	5.6	9.3	10.3

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* Perinatal mortality rate: deaths in children around the time of birth (between 28 weeks of gestation and one week postnatal) per year per 1000 live births.

** Infant Mortality rate: deaths of children les than 1 year old per year per 1000 children in this age group.

*** Child Mortality rate: deaths of children aged 1-4 years per year per 1000 children in this age group.

**** Maternal mortality ratio: deaths of mothers from causes associated with childbirth per year per 1000 births.

Table 4 presents a selection of quality of health service indicators and Fiji's MDG health targets. A declining birth rate and an increasing mortality rate have resulted in a declining rate of natural population increase. The increase in the population mortality rate may reflect a change in the age composition of the population, where younger people have migrated since the mid 1990s. The migration of younger people has significant implications for the health system, reducing the pool of potential health workers, reducing the income tax base, reducing the potential revenues from health insurance and increasing the demand on services as the average age of the population increases.

Other than large gaps between current performance and the MDG targets, the most significant findings are the doubling of both peri-natal and maternal mortality rates, and recent increases in infant and child mortality rates. Significantly, Fiji shows little progress in achieving its MDG targets. On these figures, the quality of health services appears to be declining.

Increasing Health Revenues

The ability for government to increase its health sector allocations is limited by slowed national economic growth, by a history of significant under-funding and by periodic austerity measures following political events. To increase revenues from service users would represent a major change to public sector provision and would have significant political and population health status ramifications. The introduction of realistic user charges would likely result in much of the population's inability to pay, reduced access to services and worsening health indicators. The potential for the general population to pay health insurance premiums is similarly limited, although some employers provide health insurance schemes on a co-payment basis with their staff.

The 2002-03 Household and Income Expenditure Survey estimates that more than 34% of the population of Fiji is living below the poverty line. Another 15 to 20% are on the poverty margin and are not in a position to pay for services, so potentially 50% of the population requires some form of protection or exemption from rising costs. Any increase in fees and charges would require the approval of the Prices and Income Board, a public consultative process and negotiations with various organizations, such as the Consumer Council, Ministry of Finance (MOF) and non-government organizations (NGOs), and would likely result in the institution of a means test or the issuance of exemption status.

However, there is still some potential to increase revenues by raising fees for selected services that don't affect the poor, as identified above. The Health Minister has powers under the Public Hospital and Dispensaries Act to revise current charges through regulation, but this has not happened. That it hasn't happened reflects the same low level of health policy debate and action that has allowed the decline in the proportion of GDP allocated to health.

Health Insurance, Adverse Selection and Moral Hazard

Insurance companies are faced with the problems of adverse selection and moral hazard. Adverse selection arises when people with pre-existing conditions, or in age groups or occupations of high risk, become the majority users of the insurance scheme. This situation arose in Fiji when health insurance was introduced for the Fiji Public Service in 1988. The insurance broker relaxed its membership criteria in order to attract large numbers of members. However, the chronically ill and those at higher risk of illness or injury were the first to join, resulting in the company sustaining huge losses and closing. In order to remain financially viable health insurers require significant numbers of people to pay premiums and *not* use health services.

The moral hazard argument recognizes that the very act of insurance creates a set of perverse incentives for the insured person. Once insured, the incentive to consume more and better health care than otherwise is increased, while incentives to maintain healthy lifestyles are weakened (Bennet1991). The problems arising from adverse selection and moral hazard can contribute to large increases in insurance premiums, pushing them beyond the means of low paid workers and the unemployed. In Fiji, with 50% of the population near or below the poverty line, the potential for health insurance is limited and the burden of costs for the unemployed and uninsurable will remain on government.

Conclusion

This paper has identified a progressive erosion of funding for Fiji's public health system in recent decades, resulting from an apparent lack of policy activity to protect or improve the levels of government funding, whereby the 2008 government allocation was among the lowest in the world and significantly less than our regional neighbours. Cost recovery measures may contribute only limited revenues and may only partially guard against the moral hazard of overuse of a free system, but can only be applied to those who can afford to pay and risking the alienation of those who can't. Health insurance schemes are only feasible among the employed, yet unemployment and underemployment rates are high (Narsey 2006, 2007) while over ¾ of the employed population earn less than the taxable threshold of 15,000FJD. Public debate is needed to halt the progressive erosion of public health financing and staffing in Fiji and to establish feasible principles of revenue collection in the context of the political, economic, social and cultural milieu of the nation. But forums for public debate are limited while the dependency on declining government provision is now absolute for many. What is needed now is the commitment from successive governments to incrementally increase the share of GDP allocated to health to, at least, a level comparable to our poorer neighbours.

References

1. Bennett.S, 1991, The mystique of markets, public and private health care in developing countries, The London School of Hygiene and Tropical Medicine, no.4, Departmental Publication.
2. Fiji Island Bureau of Statistics, 2007, Fiji census report, Government Printer, Fiji.
3. Fiji Island Bureau of Statistics, Economic statistics, 1991- 2006, Government Printer, Fiji.
4. Fiji Islands Bureau of Statistics, 2004-2005 Employment and Unemployment Survey, Government Printer, Fiji.
5. Government of Fiji, 1993, Parliamentary paper No.49, Government Printer, Fiji.
6. Government of Fiji, 1987- 1990, Annual reports, Government Printer, Fiji.
7. Government of Fiji, 1969, Public Hospital and Dispensaries Regulation, CAP 90, Government Printer, Fiji.
8. Government of Fiji, Laws of Fiji, Chapter 110, 1978 Public Hospitals and Dispensaries Act, Government Printer, Fiji.
9. International Monetary Fund - 2008 World Economic Outlook
10. Ministry of Finance and Economic Planning, 1989- 2008, Fiji Budget Estimates, Government Printer, Fiji.
11. Ministry of Health, Annual reports, 1991-2007, Government Printer, Fiji.
12. Government of Fiji, 2007, National Health Accounts. National Planning Office
13. Narsey.W, 2006, The Household and Income Expenditure Survey Report 2002-2003, Fiji Island Bureau of Statistics.
14. UNDP, Human Development Report 2007/2008, http://hdr.undp.org/en/
15. Wong.H. & Govind.S., 1992, Health Financing in Fiji: the role of and potential for cost recovery, Health Financing and Sustainability Project, Technical Report, No. 7, ABT Associates Inc. Maryland.
16. World Bank, 2005, World development report, Washington DC.
17. World Bank, 2002, Global distribution of GDP and health expenditure in developing countries, Washington DC.

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