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TRUST FOR REACHING THE UNREACHED, (TRU)
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The Experience of a Low Cost Diagnostic Centre (RAHAT NIDAN KENDRA)

Basic diagnostic services in Radiology and Pathology

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Objective of this presentation:

- 1. To sensitize service givers in Voluntary Organizations that it is possible to be financially viable if you provide services at 50% the market rates (in diagnostics) even if Consultants are paid as per market rate and the technicians are paid 25-50% higher than the rate prevalent in private patho lab or in an X-Ray center.
- 2. To present our experience so that more VOs are motivated to provide such services at low costs to the end user in health services.

What we provide:

- 1. Radiology services: X-Ray both simple and digital, High Resolution Sonography, Echocardiogram
- 2. Pathology services: All Lab investigations with some outsourcing. All investigations are charged 50% of respective association's price list.

Whom we cater: Low income and poor patients are main beneficiary groups. But we provide reasonably good quality services so that even richer class is attracted towards our services.

Assumption: More the number of patients visiting/taking services at our center; more economically viable we can be. Financial sustainability of such services can be achieved faster if the workload / turnover is larger

Targets: Initially 15 patients in X-Ray, 6 patients in Sonography, 15 samples in Lab per day was the target for achieving break even point.

Clientele now: X-Rays: 7 – 15 patients per day

Sonography: 4 - 10 patients per day Laboratory: 14 - 20 patients per day

Average expenditure per patient (both disciplines): 117 Rs. Per patient (RNK Alkapuri)

Issues to be tackled in establishment of any such set up:

- Location
- Nature of services
- Service providers
- · Training of staff
- Pricing for services
- Remuneration issues
- Cut practice
- Quality of work
- Mobilising patients
- Sustainibility of human resources
- Supplier issues
- Maintenance of machines & amenities
- Control over recurrent costs
- Expansion of activities

Percentage break up of expenditure:

Out of total expenditure in RNK:

a. Consultants: 25 – 30%

b. Technicians: 27 – 32%c. Reagents etc:17 – 22%

d. Other expr: 16 – 31% (includes taxes, maintenance of machines, support staff, etc.)

Average Charges: Rs. 75 per X-Ray, 150 – 250 per sonography,

Lab charges: as per tests @ 50% the cost of Pathology Association Income to the center is Rs. 123 per patient.

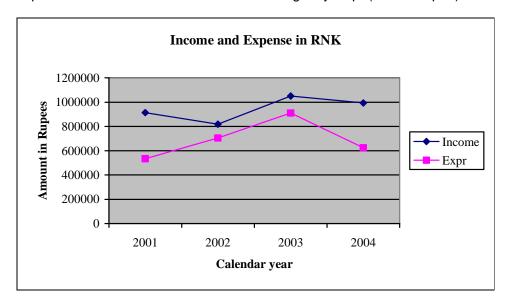
Surplus per patient varies from year to year.

The place is owned by the Trust and the cost of the land, building have not been added in the above expenditure, though as can be seen from item 'd' above, maintenance cost, which is considerable, has been taken into account.

Comparison of Income and Expenditure in RNK, Alkapuri:

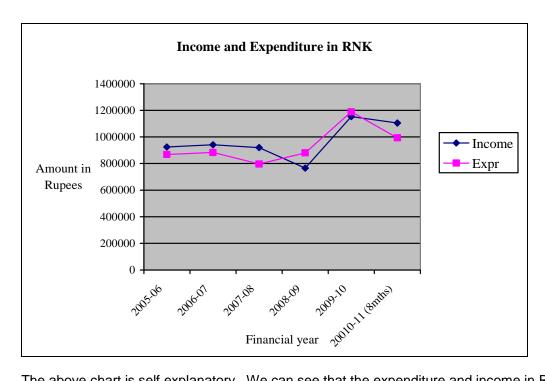
We had started in 1997. Till now we are using the same X-Ray machine. But the sonography machine has been changed three times. Major Lab equipments have also been changed four times. It is worth noticing that until the year 2008 – 09 we have been able to generate some surplus and buy the machines also out of the savings of the revenue of the center. We had a major purchase in 2009 – 10 for which the trust has advanced money worth Rs. 10,39,558.

Actually in the beginning we did not keep enough records to show break up of expenditure and income. But still the following may help. (RNK Alkapuri)



The first phase of RNK beginning 1997 up to 2000 we had many teething troubles. We were also not very confident about what we would be able to achieve. By the year 1999 we gained some confidence in the activity. Comparison since 2001 to 2004 clearly mentions that the expenditure always remained less than returns from the project. Thus we were able to go near our goal of achieving financial viability and still have some surplus for our educational work for women and children. Precisely because of this we were more encouraged to continue this effort. We are quite happy that we could purchase the new machinery also from the surplus.

Following synopsis of income and expr for 2005 – 06 until now shows a different view. (RNK Alkapuri). Though we are not able to present the discipline wise break up of expenditure, we have presented it as per the sum total of both disciplines. It is seen to be sufficient enough to show the trend and give a clue about what is being done in RNK.



The above chart is self explanatory. We can see that the expenditure and income in RNK are competing with each other since 2005-06. The expenditure crossed over the income in year 2008-09 and even continued to be almost same in 2009-10. We await figures of 10-10 which are likely to show some promise and generate some surplus to partially meet the cost of equipment we purchased in the beginning of 2009-10. If we are able to continue like this for another 5 years then cost of equipment will also be met from surplus generated in the project.

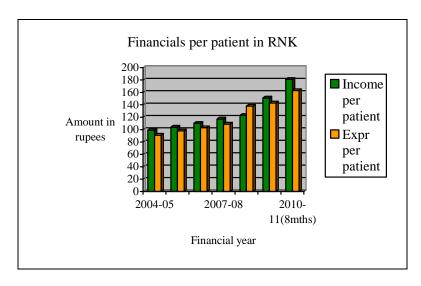
Number of patients in each discipline of RNK:

Financial Year	X-Ray	Sonography	Laboratory	Total
2004-05	3935	858	4672	9465
2005-06	3290	868	4734	8892
2006-07	3292	692	4602	8586
2007-08	3109	661	4081	7851
2008-09	2334	681	3242	6257
2009-10	2399	1171	4074	7644
Apr 10 –Nov10	1331	1056	3706	6093
Total	19690	5987	29111	54788

Income and Expenditure per patient in RNK:

The income and expenditure data shows that there is not much surplus at present rate of charging or number of patients. If we are able to raise at least 2,00,000 Rs. as surplus then we can meet the cost of last purchase of equipment cost in next 5 years.

Year	Patients	Income per	Expr per	Surplus per
		patient	patient	patient
04 - 05	9465	099	091	08
05 – 06	8892	104	098	06
06 - 07	8586	110	103	07
07 - 08	7851	117	109	08
08 - 09	6257	123	138	-15
09 – 10	7644	151	143	08
10 – 11	6093	181	163	18
(8mths)				
Total	54788	123	117	06



Conclusion and summary:

As this experience is being presented as part of exercise in cost reduction of services to the patients, we have tried to cull out the major issues. They are as follows:

- 1. Low income beneficiaries: serving poor and low income groups is achieved.
- 2. <u>Payments to consultants:</u> we save approx 15-20% in their cost by keeping them as visiting consultants and not full time working doctors. We are able to pay remuneration as per commercial rates in proportion of the time they spend for the center.
- 3. Raw materials: we get lowest rates from the manufacturers and are able to save approx 10 20% of cost of reagents.
- 4. <u>Maintenance costs:</u> we save almost 50% of maintenance contract (AMC) costs by keeping the servicemen on call.
- 5. <u>Infrastructure costs:</u> As the trust has its own properties in the city, we do not have to spend too much on infrastructure, although the above exercise does include the costs of alterations and additions to the old buildings.
- 6. No profit margin: We do not expect any profits from this exercise. Still it is worth appreciating that upto the year 2000, part of earnings could support educational activities in slums. Also most machines upto the year 2009 have been purchased through surplus generated from the project.
- 7. Advt and publicity: Low publicity costs, simple stationery, etc.
- 8. No cuts and commissions to doctors referring patients.
- 9. Competition; Various kinds of competition have to be faced with patience.

Other issues of concern:

- 10. Cost subsidy is being done to some extent, E.g. admin staff of other project gives time, infrastructure gets shared, capital costs often need to be subsidised, etc
- 11. Management time is not necessarily compensated from what the center earns.
- 12. Turn over of staff is a modern occupational hazard in this kind of activity.
- 13. Patient satisfaction is hard but not impossible. Still it is a critical issue because we have to be continuously vigilant.
