

How Financial Assistance Schemes Help Poor Patients to Manage Their Healthcare Expenditure: An Experience from a Premier Tertiary Care Institute of North India

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ABSTRACT

Background: Many schemes introduced into India's health sector provide financial support to poor who may not otherwise afford expensive tertiary healthcare. We assessed financial assistance provided through different schemes by 'Poor Patient Cell' (PPC) of PGIMER and described trends of utilisation of the funds received.

Methods: Records of financial assistance provided through PPC to poor patients were studied retrospectively for a period of 1-year. Funds allocated under National Illness Assistance Fund (NIAF)/RAN (Rashtriya Arogya Nidhi), Health Minister's Cancer Patient Fund (HMCPF) and Poor Patient Welfare Fund (PPWF) were evaluated.

Results: Out of 181 beneficiaries, 66.9% were male and 30.4% females with mean age 32.8 years. 47.5% received assistance for medical conditions (maximum for pulmonary conditions). 64.1% didn't possess requisite documents. 89.8% earned less than ₹50,000/annum and had average 5.31 dependents on them. Total ₹79,12,695 was demanded and ₹70,71,137 sanctioned from these funds. 53.6% received full amount required. Highest proportion of male beneficiaries suffered from pulmonary ailments and females from pediatric ailments. Maximum beneficiaries of PPWF, NIAF/RAN and HMCPF were in the age groups of 20-30, 10-20 and 40-50 years respectively. Maximum cancer beneficiaries were from Haryana and Himachal Pradesh. Maximum benefit for cancers was received from HMCPF (75%) while for transplants, medical conditions and surgical conditions were received from PPWF.

Conclusions: Poor patients are receiving substantial financial support through various Government schemes at PGIMER. However, there is still a high demand for financial assistance by poor and government needs to focus on enhancing its healthcare expenditure and introduce newer schemes.

Keywords: poor patient welfare; healthcare expenditure; health schemes; financial assistance; rashtriya arogya nidhi (RAN); distressed financing

INTRODUCTION

Healthcare affordability is a major determinant to access and utilization of health services. With its huge population of 1.36 billion and the government spending just 1.2% of its Gross Domestic Product

(GDP) on health, about 22% population of India living below poverty line (BPL) is often found struggling to get comprehensive treatment for their ailments, especially tertiary level healthcare. [1-4] Situation gets worse due to the impoverishment caused by

Out-of-Pocket-Expenditure (OOPE) for availing health services which is as high as 63.2% in the country. [5] It has been demonstrated that OOPE on health especially in the developing countries exacerbates poverty. [6] The reasons for more than half of the households falling into poverty has been shown to be ill health and OOPE for health. [7-9] Over and above this, these estimates did not include those people who are already living below poverty line and are pushed further into destitution.

The poor patients are more price sensitive to healthcare and are less likely to avail healthcare as compared to rich when they are ill, more so in the rural areas. [10-12] The likelihood of a poor patient foregoing medical care due to financial costs has increased over time in both rural as well as urban populations. [13] The misery of the poor section is further intensified due to lack of financial risk protection against costs incurred for medical treatments. [14] Besides the private insurance which is obviously not affordable to the poor people, government has been coming up with various financial assistance schemes to help the poor meet their healthcare expenditure. Social Security Expenditure (SSE) by government on health is about 7.3% of the Total Health Expenditure (THE). [5] This however indicates pooled funds for specific categories of population only. This may primarily be categorised into Social Health Insurance Schemes (SHIS) including schemes like Central Government Health Scheme (CGHS), Employee State Insurance Scheme (ESIS) and Ex-Serviceman Contributory Health Scheme (ECHS) and Government Financed Health Insurance (GFHI) including numerous schemes like Rashtriya Swasthya Bima Yojana (RSBY) and other state-wise insurance schemes.

About 20% of the patients visiting Post Graduate Institute of Medical Education and Research (PGIMER) Chandigarh, a 1948 bedded premier tertiary healthcare government institute of North India seek financial assistance for their treatment which is facilitated by the

dedicated “Poor Patient Cell” (PPC) in the Institute. This establishment coordinates funding from all extramural sources providing financial assistance to poor patients and also guides and assists the beneficiaries in availing assistance from these sources. Most of the financial assistance is received through revolving funds sanctioned to the institute under government schemes like Rashtriya Arogya Nidhi (RAN), Health Minister’s Cancer Patient Fund (HMCPF), National and State Illness Assistance Funds (NIAF/SIAF) or through donations received in the Poor Patient Welfare Fund (PPWF).

PGIMER Chandigarh is one of the largest public sector tertiary healthcare institute of India, an Institute of National Importance (INI) and caters huge number of patients in a year. This study was carried out to assess the financial assistance provided through Poor Patient Cell of the institute and describe the trends of utilisation of the funds for poor patients.

MATERIALS AND METHODS

This was a record based retrospective study. The study was conducted after getting approval from the Institute Ethics Committee and other relevant permissions. Records of financial assistance provided to the poor patients who received treatment at PGIMER Chandigarh were accessed from the Poor Patient Cell, Private Grant Cell and treatment files retrieved from the Medical Records Department. The records for a duration of 1-year were retrieved retrospectively. Details of the funds allocated under National Illness Assistance Fund (NIAF)/RAN, Health Minister’s Cancer Patient Fund (HMCPF) and Poor Patient Welfare Fund (PPWF) were retrieved as these three constituted the majority source of financial assistance. As the number of beneficiaries under HMCPF & NIAF/RAN was very low (83 beneficiaries), all cases were considered in the study over the said duration. However, number of beneficiaries under PPWF was very high (1718) and therefore, simple

random sampling technique was applied to this category and sample size was calculated using an online tool. A total of 92 beneficiaries were considered for PPWF using 95% confidence level and confidence interval of 10.

Statistical Analysis: Data was compiled using Microsoft Office Excel and analyzed using SPSS Software version 20. Descriptive statistics were represented as mean with standard deviation, frequency and percentages. Chi Square and Unpaired t-test were used as tests of significance. A p-value of <0.05 was considered to be significant.

RESULTS

A total of 175 beneficiary records were studied. 92 records were under PPWF category (52.6%), 46 (26.3%) from HMCPF and 37 (21.1%) under NIAF/RAN categories.

69.1% beneficiaries were male, which was significantly higher than the proportion of females (30.9%) ($p = 0.00$). The youngest beneficiary was aged 1 year while the oldest one being 84 years, with mean age of the beneficiaries being 32.8 (± 13.4) years. A significant age-wise difference was observed amongst both genders, with maximum male beneficiaries (25.6%) falling in higher age group of 40 to 50 years while most of the female beneficiaries (21.8%) were from younger age group of 20 to 30 years ($p = 0.00$). Also, significant age-wise difference was found in the pattern of beneficiaries seeking treatment from different states ($p=0.00$). 1/4th patients (25.5%) in Tri-city (Chandigarh) were from the age group 10 to 20 years. 24.6% beneficiaries were from local areas of the Tri-city while 75.4% were from other adjoining states. 18% belonged to Haryana followed by 17% from Punjab and Uttar Pradesh each.

A valid BPL Card was missing in 64.1% cases and Income Certificate was missing from 71.8% files. Income details of 49 subjects (28%) could be assessed. Out of these, earnings of about half (51.02%) was

between ₹ 25,000 to ₹ 50,000 per annum. More than 1/3rd (38.78%) earned lesser than a meager ₹ 25,000 per annum while rest 10.20% earned somewhere between ₹ 50,000 to ₹ 75,000 per annum. Minimum and Maximum income amongst these subjects was ₹ 6000 per annum and ₹ 72,000 per annum with average income being ₹ 32,830 ($\pm 14,898$) per annum. Number of dependents could be assessed for 52 subjects, with average number of dependents being 5.31 (± 1.78) (minimum 2 and maximum 10 dependents). 57.4% had between 2 to 5 dependents, 40.7% had 5 to 10 dependents and only 1.9% had less than 2 dependents.

Beneficiaries received treatment from more than 19 different departments. Maximum beneficiaries (16.6%) received treatment from Pulmonary Medicine followed by Neurosurgery (14.3%), Pediatrics (11.4%), Radiotherapy (9.7%) and General Surgery (9.1%). Lowest number of beneficiaries sought treatment under Intensive Care, Internal Medicine & Ophthalmology (0.6% each). Almost half the beneficiaries (49.1%) got treatment for Medical ailments followed by 22.9% for Surgical conditions, 22.9% for Cancers and 5.1% for Transplants. A statistically significant difference was observed in the department-wise pattern of treatment sought by male versus that by females ($p = 0.00$). Maximum male beneficiaries (19.1%) sought treatment for Pulmonary diseases, whereas maximum female beneficiaries got treatment in the Pediatric Department. A significant proportion of males (47.93%) and females (50.91%) got treatment for medical conditions ($p=0.00$). Also, a significant difference was also observed in the age pattern of patients receiving treatment for medical conditions, surgical conditions, cancers & transplants ($p=0.00$). Highest proportion of beneficiaries (22.1%) seeking treatment for medical conditions was between 10 to 20 years. For cancers, maximum people (30%) belonged to the age group 40 to 50 years, while for transplants

were most common (70%) in the age group of 30 to 40 years.

Table 1. gives the sanctioned amount under the three financial assistance schemes.

Table 1. Sanctioned amount under different financial assistance schemes.

Scheme	N	Minimum	Maximum	Sum	Mean	Std. Deviation
HMCPF	45	20000	200000	3771834	83818.53	40321.563
NIAF/RAN	37	5000	300000	3142400	84929.73	70814.660
PPWF	92	63	10000	156424	1700.26	1585.849

A relief amounting to a total of ₹ 79,12,695 under these three schemes was sought during the study duration out of which an amount of ₹ 70,71,137 was sanctioned. Maximum amount demanded in a single case was ₹ 3 lakhs, and minimum was ₹ 300. Maximum sanctioned amount in a single case was ₹ 3 lakhs (through NIAF/RAN) and minimum sanctioned was ₹ 63 (from PPWF). While 57.5% beneficiaries received full amount as required, 42.5% were sanctioned amounts lesser than required, the difference being as high as ₹ 2 lakh (in a single case). Significantly different age-wise pattern was observed amongst the three financial assistance categories, with highest proportion of beneficiaries (26.1%) receiving benefits from PPWF being in the age group of 20 to 30 years, while HMCPF (36.9%) being from 40 to 50 years and NIAF/RAN (24.3%) being from 10 to 20 years of age (p=0.00). Table 2. describes state/region-wise and ailment-wise pattern of utilization of the three financial assistance schemes.

Maximum beneficiaries of HMCPF (65.2%) were from Haryana, Himachal & UP (equally), while those for PPWF and NIAF/RAN were from Tri-city (27.2% and 35.1% respectively) (p=0.00). Maximum beneficiaries suffering from cancers received assistance from HMCPF (75%), while those with medical conditions, surgical conditions and transplant got assistance from PPWF (59.3%, 60% & 80% respectively) (p=0.00). There was no significant difference in sanctioning amounts under the three schemes (p=0.929).

DISCUSSION

PGIMER Chandigarh has consistently ranked 2nd in terms of utilization of these financial assistance schemes amongst all INIs in recent past. [15] However, a huge disparity was observed when utilization trends were compared with those of the apex institute, i.e. All India Institute of Medical Sciences (AIIMS) New-Delhi. Considering an average double admission rate for AIIMS as compared to PGIMER, the utilization of NIAF/RAN & HMCPF was about 10 to 12 times higher (respectively) in AIIMS. [16,17] This calls for a review of the system and processes in place at PGIMER Chandigarh to achieve a higher rate of utilization of such financial assistance schemes.

A remarkable gender disparity was observed in this study towards availing these financial assistances. This was commensurate to the general finding in our country, that the healthcare expenditure on males was higher than that on females. [18,19] Also, it has been proved that the likelihood of 'distressed financing' is lower for females as compared to males and women are discriminated against under such circumstances, especially amongst the

Table 2. Sanctioned amount under different financial assistance schemes.

Financial Assistance Scheme →		HMCPF	NIAF/RAN	PPWF
N →		46	37	92
State / Region	Tricity	5	13	25
	MP	0	1	0
	Punjab	1	6	23
	Haryana	10	4	17
	Himachal	10	3	2
	JK	4	0	3
	Uttarakhand	5	2	3
	UP	10	8	13
	Bihar	1	0	4
	Jharkhand	0	0	1
	Nepal	0	0	1
Category of Ailment	Cancers	30	1	9
	Transplant	0	2	8
	Medical	16	18	51
	Surgical	0	16	24

poorer. [18,20] This disparity is persistent across all demographic and socio-economic groups. [20] Batra et al. [21] concluded in their study that expenditure on getting treatment for females suffering cancers was significantly lower than that on the males, a finding similar to what we observed in our study. Rout [22] showed a significant difference OOP for seeking healthcare amongst the genders in urban areas.

Maximum males seeking financial assistance were in the age group of 40 to 50 years while maximum females were in younger age group of 20 to 30 years. Kumar et al. [23] in their cross-sectional analysis of India's National Sample Survey (2017-18) concluded that a clear gender discrimination existed for resorting to distressed financing of hospitalization costs amongst the younger and older age groups. Craigie et al. [24] and Sengupta [25] have observed a lower priority being given to older women in comparison to the younger ones due to their lower 'economic-value' in the household. Our health system needs to focus on reducing such age-wise and gender-wise disparity.

In our study, a very high number of beneficiaries who were provided financial assistance could not produce a valid BPL card (64.1%) and Income Certificate was missing in 71.8% files. Though these patients were eventually considered eligible after thorough investigation by the Medical Social Workers of PPC, it is an important observation worth pondering that such a large number of the poor are not able to produce basic documents and steps need to be taken by governments to strengthen this system of establishing their socio-economic status especially in case of medical emergencies. Sood et al. [26] observed a similar situation in the state of Karnataka where around 30% poor could not produce a valid BPL card.

We observed that amongst our beneficiaries, about 90% were having earnings lesser than ₹ 50,000 per annum, i.e. less than ₹ 137 per day. Furthermore, about 39% earned meagerly lesser than ₹ 25,000 per annum, i.e. less than Rs. 69 per day.

There were few beneficiaries earning just lesser than ₹ 16 per day! To add to the misery, the average number of dependents on these earning heads was more than 5, going up to as high as 10. Also 98% had more than 2 dependents on them. Considering an average income per household be ₹ 2736 per month (₹ 32,830 per annum), an average OOP treatment cost of ₹ 319 for minor morbidities to ₹ 4,569 for long-term ailments in a public facility as estimated by Barik and Desai [27] seems to have quite catastrophic effect on socio-economic status of these poor families. Balarajan et al. [13] have demonstrated how such OOPs push a considerable number of even the Above Poverty Line (APL) families to BPL status. Although PPC of PGIMER could support 57.5% beneficiaries with full expenditure on their ailment leaving no need of OOP by them, 42.5% still got only partial amounts and had to bear OOP for their treatment. In a single case, the difference amount was as high as ₹ 2 lakh. This indicates a need for more funding under these schemes. One of the probable reasons for this may also be attributed to delays in the process of getting funds sanctioned and these needs to be reformed for speedy allocation and sanctions. On the other hand, beneficiaries got considerable relief under these schemes as high as ₹ 3 lakh. Such financial schemes prove to be the backbone of care for the poor in our country. NIAF/RAN and HMC PF have been providing relief to a considerable section of our society and the same was observed in this study also. [28,29]

Limitations of the study: Firstly, all the poor patient welfare schemes in the institute could not be evaluated in this study. Secondly, records of all beneficiaries of the PPWF were not assessed.

CONCLUSION

The financial assistance schemes run by the government for poor patients seeking healthcare have been beneficial in saving them from the catastrophic effects of out-of-

pocket-expenditure on their socio-economic status. Assistance cells like the Poor Patient Cell of PGIMER help considerably in utilization of such schemes by the otherwise ignorant and financially strained families. Such establishments along with special funding sources like PPWF must be created in every public sector hospital. Despite various initiatives taken to help the poor evade distressed financing for healthcare expenditures, government and the healthcare institutes on their individual levels still have to go a long way in providing full financial assistance to all needy.

Ethical Statement: This study was approved by the Institutional Ethics Committee of PGIMER Chandigarh. No human subject was involved in the study.

Conflict of Interest Statement: The authors declare that there are no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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