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Assessment of social and economic impact of healthcare with homoeopathy for haemophilia in cognizance with patients' perspective: a cross-sectional survey

Kundu Rita^{1,2}, Kundu Tapas^{1,3}*, Shaikh Afroz^{1,4}, Sheikh Aafiya¹, Bothra Hiral¹, Kumat Omkar¹, Mirza Gulfisha¹, Barve Uday⁵

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*Correspondence: Dr. Kundu Tapas,

E-mail: dr_kundu2002@yahoo.co.in

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ABSTRACT

Background: Haemophilia imposes clinical as well as an economical burden on family and society. To assess the social and economic impact of healthcare in haemophilia from patients' perspective a questionnaire was formed. Out of 900 patients treated at homoeopathy in haemophilia centers, 478 patients participated in the survey in the time period of January 2017 to June 2017. This questionnaire consisted of five categories. Part A included preliminary information, part B included the disease information, part C included direct cost incurred in terms of factor therapy, and part D included indirect cost incurred whereas part E included additional information regarding therapy satisfaction.

Methods: It was a cross-sectional survey-based study. Simple random sampling was used for sample collection at the multicentres of homoeopathy in haemophilia. Study duration was 5 months. Selection criteria was patients diagnosed with haemophilia and patients willing to participate in the survey. Ethical approval was received from Institutional Ethics Committee of Motiwala (National) Homoeopathic Medical College, Nasik, Maharashtra, India. Average was calculated to summarize the data, mentioned in discussion.

Results: 56% haemophilia patients benefitted with homoeopathy treatment with SOS use of factor, 28% patients experienced homoeopathy is beneficial therapy and 16% patients experienced conservative management. 95.6% patients experienced satisfaction with treatment. 95.2% patient said homoeopathy is most economic therapy, 1.3% patient said it is a conservative management and 3.6% did not acknowledge anything.

Conclusions: According to patients' perspective, homoeopathic therapy was found to reduce the cost of care and burden of high-cost management.

Keywords: Economic, Haemophilia, Healthcare, Homoeopathy, Social

¹Homoeopathy in Haemophilia, c/o Sakha, The Centre of Research and Charity, Sairaj Apartment, Upnagar, Nashik, Maharashtra, India

²Department of Physiology, ³Department of Medicine, Motiwala (National) Homoeopathic Medical College, Nashik, Maharashtra, India

⁴Department of Pharmacy, Dhanwantari Homoeopathic Medical College, Nashik, Maharashtra, India

⁵Epidemiologist, Integrated Disease Surveillance Programme, Health Department, Nashik, Maharashtra, India

INTRODUCTION

Haemophilia a rare genetic bleeding disorder imposes not only clinical burden on patients with haemophilia but also an economic burden on family and society through in pocket and out of pocket expenditure of the disease management.¹⁻⁴ Besides affecting the individual on physical plane, the disease effects on psychological level as well and the high cost of its management adds to its severity.⁵⁻⁷ With the advent in modern science this fatal disease is now transformed into a well-managed disease. The treatment cost of haemophilia varies based on disease severity and its complications. The economic burden of the disease can be measured in terms of in-pocket expenditure of the disease, which includes direct treatment cost i.e. cost of antihaemophilic factor, cost of hospitalization and cost of medical and surgical procedures. PWH with severe deficiency of Factor VIII or IX may bleed 2-3 times a week in a growing child.8 In India, a developing country 80% of PWH resides in rural area and do not have access to health care facilities and cannot afford to have factor replacement even on demand basis. Thus, prophylaxis treatment for such PWH is beyond consideration. Acute bleeding into the joints is the most common presentation and the repeated bleeding into the joints is the cause of morbidity in haemophilia. Various complications in Haemophilia include formation of psuedocyst in joints, compression of the nerve etc. Such complication further increases the cost of treatment. Some serious complication of the factor replacement therapy include infection with hepatitis C virus, HIV and development of antibodies to the deficient clotting factor i.e. Inhibitor state. A study conducted at NIIH by Pinto et al reported 6.07% PWH positive for inhibitor. 9 Also, it is estimated that 25-30% of severe haemophilia A patients develop inhibitor and the incidence is 3-5% in severe haemophilia B patients. 10 Total annual cost of treatment for haemophilia A patient with inhibitor is 4.8 times higher than for a patient without inhibitor. 11 Out of pocket expenditure: The out of pocket expenditure of the disease is also an important measure which contributes to increase the economic burden of the disease. This is related with health-related quality of life which affects the productivity of PWH at work place. 12-14 The of out-ofpocket expenditure can also be measured by days of absenteeism of PWH or family members from the work place, loss of wages on account of hospital visits. In a developing country like India where 80% haemophiliacs reside in remote villages are associated with the occupation of farming and works on daily wages. This rare bleeding disease is not covered by any health insurance policies as well leading to increase economic burden on PWH and society. Also, India is home to various traditional medicines like Avurveda and Homoeopathy. Modern interventions of factor replacement therapy are effective in episodes of haemarthrosis but does not prove beneficial in reducing the recurrence of bleeding episodes. In circumstances prophylactic factor infusion recommended for the PWH. The prophylactic treatment by many PWH is unendurable on account of its high cost. Homoeopathic medicines have been proved effective in reducing the bleeding episodes in PWH as well as managing the acute bleeding episodes. ¹⁵⁻²⁵ In such scenario the homoeopathic medicines in reduction of cost of care in PWH needs to be evaluated.

METHODS

Study setting

Homoeopathy in Haemophilia is a self-governing Research Organization providing treatment to PWH on charity basis since December 2007. The project started at single center (Nashik, Maharashtra, India). Till date, it has expanded its service to Mumbai, Amravati, Surat and Nagpur. The data for the present study was collected from 478 PWH from Nashik (277), Mumbai (73), Amravati (42), Surat (35) and Nagpur (51) centers during the period between January 2017 to June 2017.

Method

Samples were collected using simple random sampling. A questionnaire was formed to gain the information regarding type of the disease, cost of the management of the disease by conventional therapy and with homoeopathic intervention.

RESULTS

Outcomes of the survey

Part A: preliminary information of patient

Distribution of patients seeking treatment for haemophilia at different chapters

Total 478 patients were registered for haemophilia treatment under chapter Nashik, Mumbai, Amravati, Surat and Nagpur. 57.9% patients registered and seek treatment in Nashik (n=277) chapter, 15.3% in Mumbai (n=73), 10.7% in Nagpur (n=51), 8.8% in Amravati (n=42) and 7.3% in Surat (n=35).

Distribution of age and sex of patients seeking treatment for haemophilia at different chapters

Out of 478 registered haemophilia patients under different chapters, 467 were male haemophilia patients and 11 were female haemophilia patients. 88.06% haemophilia patients belonged to age group between 1 to 30 years (n=421) of which 38.70% (n=185) were 11 to 20 years, 30.12% (n=144) were 1 to 10 years and 19.24% (n=92) were 21 to 30 years.4.59% haemophilia patients belonged to age group between 31 to more than 61 years (n=57) of which 7.32% (n=35) were 31 to 49 years, 2.09% (n=10) were 41 to 50 years, 1.88% (n=9) were 51 to 60 years and 0.62 (n=3) were more than 61 years age group.

Distribution of marital status of patients seeking treatment for haemophilia at different chapters

84.9% (n=406) haemophilia patients were unmarried, 14.6% (n=70) were married and 0.4% (n=2) were separated.

Distribution of educational status of patients seeking treatment for haemophilia at different chapters

25.5% (n=122) haemophilia patients completed primary education, 23.8% (n=114) completed secondary education, 14% (n=67) completed graduation, 11.5% (n=55) passed standard 12th, 10.7% (n=51) passed standard 10th, 4% (n=19) completed diploma or related courses, 2.7% (n=13) completed post-graduation, 3.1% (n=15) did not complete schooling, 0.8% (n=4) completed masters or and higher education. 3.8% (n=18) were not able to recognize their educational status.

Distribution of occupation of haemophilia patients seeking treatment at different chapters

66.5% (n=318) haemophilia patients were students, 13% (n=62) patients were employed, 6.9% (n=33) patients were unemployed, 6.7% (n=32) were doing self-business, 0.6% (n=3) were home-makers, 1.7% (n=8) were working on daily wages, 1% (n=5) were farmer, 0.2% (n=1) were retired and 3.3% (n=16) were not applicable for the question.

Distribution of annual family income of haemophilia patients seeking treatment at different chapters

32.5% (n=153) haemophilia patients' annual family income was between Rs.50,001 to Rs.1.00 lakh, 20.3% (n=97) haemophilia patients annual family income was below Rs.50,000. 18.6% (n=89) patients annual family income was between Rs.1.00 Lakh to Rs.1.50 lakhs. 29% (n=139) of haemophilia patients annual family income were between Rs.1.50 lakh Rs.3.00 lakh and above.

Distribution social status of haemophilia patients seeking treatment at different chapters

61.9% (n=296) haemophilia patient possess orange ration card, 25.3% (n=121) haemophilia patient possess yellow ration card, 12.1% (n=58) haemophilia patient possess white ration card and 0.6% (n=3) patients didn't have any ration card.

Distribution of possession of medical insurance by haemophilia patients seeking treatment at different chapters

Only 11.08% (n=58) patient with haemophilia disease possessed medical health insurance. 2 patients informed about coverage of haemophilia under medical health insurance.

Part B: details about disease suffering

Distribution of type of haemophilia among patients seeking treatment at different chapters

63% (n=301) haemophilia patient were suffering from haemophilia A severe, 18.4% (n=88) were haemophilia A moderate sufferers, 5.9% (n=28) were haemophilia B severe sufferers, 5% (n=24) were haemophilia A mild, 3.8% (n=18) were haemophilia B moderate sufferers, 2.7% (n=13) suffers from rare factor deficiencies, 0.8% (n=4) were haemophilia B mild and 0.4% (n=2) were VWD sufferers.

Distribution of duration of illness of haemophilia patients seeking treatment at different chapters

97.9% (n=468) haemophilia patients were having illness more than one year and 2.1% (n=10) were suffering from less than one year.

Table 1: Distribution of family members of haemophilia patient suffering from haemophilia.

		Inhibitor sta	Inhibitor status		Domoont
		Positive	Negative	Total	Percent
Family member suffering	Yes	10	199	209	43.72
from haemophilia	No	19	250	269	56.18
Total		29	449	478	100

Table 2: Distribution of trauma accident condition of haemophilia patients seeking emergency factor infusion.

		Emergenc	y Factor Infusion	— Total	Percent
		Yes	No	Total	Percent
T	Yes	294	42	336	70.29
Trauma accident condition	No	2	140	142	29.71
Total		296	182	478	100

Table 3: Distribution of the number of factors required for haemophilia patients during trauma/accident.

Number of factors infused during emergency	Frequency	Percent
0	1	0.34
1 to 100	291	98.98
101 to 200	0	0
201 to 300	0	0
301 to 400	0	0
401 to 500	0	0
More than 501	2	0.68
Total	294	100

Table 4: Distribution of expenses occurred on haemophilia patients during trauma/accident.

Emergency expenses paid by haemophilia patient (in Rs.)	Frequency	Percent
0 to 10000	110	23.0
11000 to 20000	53	11.1
21000 to 30000	40	8.4
31000 to 40000	35	7.3
41000 to 80000	62	13.0
81000 and above	34	7.1
Total	334	69.9

Table 5: Distribution of bleeding management of haemophilia patients.

Bleeding Management	Occasionally	Every time	Rarely	Not Taken	Total
Homoeopathy	147 (30.8%)	317 (66.3%)	14 (2.9%)	0	478 (100%)
Cold fomentation	49 (10.3%)	419 (87.7%)	10 (2.15)	0	478 (100%)
Tranexamic acid	259 (54.2%)	88 (18.4%)	131 (27.4%)	0	478 (100%)
FFP	104 (21.8%)	3 (0.6%)	202 (42.3%)	169 (35.3%)	478 (100%)

Table 6: Distribution of factor buying by haemophilia patient from haemophilia society.

Arm 1: factor buying from haemophilia society		
Buying from H. society	Frequency	Percent
Yes	450	94.1
No	28	5.9
Total	478	100.0
Buying for each bleed episode		
Yes	16	3.3
No	462	96.7
Total	478	100.0
No. of factors infused		
0	22	4.60
1 to 100	433	90.58
101 to 200	18	3.77
201 to 300	2	0.42
301 to 400	0	0
401 to 500	2	0.42
More than 501	1	0.21
Total	478	100
Cost per single factor paid by patient to society		
0 to 2500	132	27.6
2501 to 5000	197	41.2
5001 to 7500	83	17.4
7501 to 15000	53	11.1
15001 and above	13	2.7
Total	478	100.0
Patient is getting any sponsorship from NGO		
Yes	11	2.3
No	467	97.7
Total	478	100.0
Paying to nurse and doctor for each factor infusion		

Continued.

Arm 1: factor buying from haemophilia society				
Yes	51	10.7		
No	427	89.3		
Total	478	100.0		
Cost per factor paying to nurse and doctor for each infusion				
Less than 100	15	29.41		
Rs.101 to Rs.200	33	64.70		
More than Rs.201	3	5.88		
Total	51	100		
Travel cost paid by patient in Rs				
0 to 500	428	89.5		
501 to 1000	40	8.4		
More than or equal to 1001	10	2.0		
Total	478	100.0		

Table 7: Distribution of factor infused by haemophilia patients from government civil hospital.

Arm 2: factor infused from government civil hospital		
Factor infused in civil hospital	Frequency	Percent
Yes	201	42.1
No	63	13.2
Only during emergency bleed	214	44.8
Total	478	100.0
Factor availability in civil hospital	Frequency	Percent
Yes	122	29.4
No	293	70.6
Total	415	100
Cost paid for case paper per visit in Rs.	Frequency	Percent
5	93	22.4
10	321	77.6
Total	415	100
Travel cost paid by patient in Rs	Frequency	Percent
0 to 500	357	86.03
501 to 1000	52	12.53
More than or equal to 1001	6	1.44
Total	415	100

Table 8: Distribution of haemophilia patients taking factor therapy with homoeopathy.

Arm 3: factor therapy with homoeopathy		
Patient seeking treatment from homoeopathy haemophilia centre	Frequency	Percent
Yes	478	100.0
No	0	0
Total	478	100.0
Cost paid per visit/single visit by patient to HHC		
0	370	77.40
Less than 100	2	0.42
Rs.101 to Rs.200	45	9.41
More than Rs.201	61	12.76
Total	478	100
Reduction in frequency of factor infusion after homoeopathy treatment		
Yes	476	99.58
No	2	0.42
Total	478	100
Reduction in factor infusion when homoeopathy treatment started		
25% or more	46	9.6

Continued.

Arm 3: factor therapy with homoeopathy		
50% or more	159	33.3
75% or more	83	17.4
Requires occasionally	95	19.9
Not required	93	19.5
Same as before	2	0.4
Total	478	100.0
No. of factor infused since homoeopathy treatment started		
0	106	22.18
1 to 100	372	77.82
101 to 200	0	0
201 to 300	0	0
301 to 400	0	0
401 to 500	0	0
More than 501	0	0
Total	478	100
Reduction in healing time since homoeopathy treatment started		
Yes	470	98.3
No	8	1.7
Total	478	100.0
Effectiveness of homoeopathy medicine in open acute bleeds		
Yes	334	69.9
No	69	14.4
Not experienced	75	15.7
Total	478	100.0
Travel cost paid by patient in Rs		
0 to 500	380	79.5
501 to 1000	60	12.6
More than or equal to 1001	38	7.9
Total	478	100.0

Distribution of type of co-morbidity of haemophilia patients seeking treatment at different chapters

29.1% (n=139) of haemophilia patients were suffering from co morbidity. 6.3% (n=30) were suffering from dental problems requiring surgical extraction. 2.5% (n=12) were suffering from kidney related abnormalities, 1.9% (n=9) suffering from obesity/overweight, 1.5% (n=7) were suffering from chronic hepatitis C, 1.5% (n=7) suffering from hypertension, 0.4% (n=2) from cardiovascular disease and 0.8% (n=4) suffering from diabetes. 75.54% (n=105) haemophilia patients were suffering from co-morbidities (n=139) require regular treatment for the co-morbid conditions.

Part C: direct cost incurred

Direct cost incurred by the patients is represented in Tables 6-8.

Part D: indirect cost incurred

Indirect cost incurred by the patients is represented in Tables 9.

Table 9: Distribution of indirect cost incurred by haemophilia patient and their relatives.

Loss of wages of patient per day in Rs.	Frequency	Percent
0 to 500	459	96.0
501 to 1000	10	2.1
1001 and above	9	1.9
Total	478	100.0
Loss of wages of care giver/at	tendee per da	y in Rs.
0 to 500	402	84.1
501 to 1000	44	9.2
1001 and above	32	6.7
Total	478	100.0
Loss of time of mother in care	e giving in 24	hours.
0	25	5.23
1 to 24 hours	452	94.56
More than 24 hours	1	0.21
Total	478	100

Part E: about therapy satisfaction

Distribution of therapy satisfaction is shown in Table 10.

Table 10: Distribution of therapy satisfaction of haemophilia patient.

Beneficial therapy	Frequency	Percent
Conservative management	78	16
Homoeopathy	132	28
Homoeopathy with SOS use of factor	268	56
Total	478	100.0
Satisfaction with homoeopat	thy therapy	
Yes	457	95.6
No	21	4.4
Total	478	100.0
Economic therapy		
Conservative management	6	1.3
Homoeopathy	455	95.2
Not known	17	3.6
Total	478	100

DISCUSSION

Haemophilia is a rare genetic bleeding disorder, managing the condition costs money, which places a financial strain on families and society in addition to clinical burdens on haemophilia sufferers. The disease not only affects the person physically, but also psychologically, and the expensive cost of its treatment increases the severity of the condition. Total 478 patients were registered for Haemophilia treatment under chapter Nashik, Mumbai, Amravati, Surat and Nagpur. 57.9% patients registered and seek treatment in Nashik (n=277) chapter, 15.3% in Mumbai (n=73), 10.7% in Nagpur (n=51), 8.8% in Amravati (n=42) and 7.3% in Surat (n=35) as described in result in Part A a) Out of 478 registered haemophilia patients under different chapters, 467 were male haemophilia patients and 11 were female haemophilia patients. 88.06% haemophilia patients belonged to age group between 1 to 30 years (n=421) of which 38.70% (n=185) were 11 to 20 years, 30.12% (n=144) were 1 to 10 years and 19.24% (n=92) were 21 to 30 years. 4.59% haemophilia patients belonged to age group between 31 to more than 61 years (n=57) of which 7.32% (n=35) were 31 to 49 years, 2.09% (n=10) were 41 to 50 years, 1.88% (n=9) were 51 to 60 years and 0.62 (n=3) were more than 61 years age group as described in Part A b) 84.9% (n=406) haemophilia patients were unmarried, 14.6% (n=70) were married and 0.4% (n=2) were separated as described in Part A c) 25.5% (n=122) haemophilia patients completed primary education, 23.8% (n=114) completed secondary education, 14% (n=67) completed graduation, 11.5% (n=55) passed standard 12th, 10.7% (n=51) passed standard 10th, 4% (n=19) completed diploma or related courses, 2.7% (n=13) completed post-graduation, 3.1% (n=15) did not complete schooling, 0.8% (n=4) completed masters or and higher education. 3.8% (n=18) were not able to recognize their educational status as described in Part A d) 66.5% (n=318) haemophilia patients were students, 13% (n=62) patients were employed, 6.9% (n=33)

patients were unemployed, 6.7% (n=32) were doing selfbusiness, 0.6% (n=3) were home-makers, 1.7% (n=8) were working on daily wages, 1% (n=5) were farmer, 0.2% (n=1) were retired and 3.3% (n=16) were not applicable for the question as described in Part A e) 32.5% (n=153) haemophilia patients' annual family income was between Rs.50,001 to Rs.1.00 Lakh, 20.3% (n=97) haemophilia patients annual family income was below Rs.50,000. 18.6% (n=89) patients annual family income was between Rs.1.00 lakh to Rs.1.50 lakhs. 29% (n=139) of haemophilia patients annual family income were between Rs.1.50 Lakh Rs.3.00 lakh and above as described in Part A f) 61.9% (n=296) haemophilia patient possess orange ration card, 25.3% (n=121) haemophilia patient possess vellow ration card, 12.1% (n=58) haemophilia patient possess white ration card and 0.6% (n=3) patients didn't have any ration card as described in Part A g) Only 11.08% (n=58) patient with haemophilia disease possessed medical health insurance. 2 patients informed about coverage of Haemophilia under medical health insurance as described in Part A h) 63% (n=301) haemophilia patient were suffering from haemophilia A severe, 18.4% (n=88) were haemophilia A moderate sufferers, 5.9% (n=28) were haemophilia B severe sufferers, 5% (n=24) were haemophilia A mild, 3.8% (n=18) were haemophilia B moderate sufferers, 2.7% (n=13) suffers from rare factor deficiencies, 0.8% (n=4) were haemophilia B mild and 0.4% (n=2) were VWD sufferers as described in Part B a) 97.9% (n=468) haemophilia patients were having illness more than one year and 2.1% (n=10) were suffering from less than one year as described in Part B b) 29.1% (n=139) of haemophilia patients were suffering from co morbidity. 6.3% (n=30) were suffering from dental problems requiring surgical extraction. 2.5% (n=12) were suffering from kidney related abnormalities, 1.9% (n=9) suffering from obesity/overweight, 1.5% (n=7) were suffering from chronic hepatitis C, 1.5% (n=7) suffering from hypertension, 0.4% (n=2) from cardiovascular disease and 0.8% (n=4) suffering from diabetes. 75.54% (n=105) haemophilia patients were suffering from co-morbidities (n=139) require regular treatment for the co-morbid conditions as described in Part B c) 43.72% (n=209) family members suffering from haemophilia of which 10 family members had positive inhibitor status as described in Part B (Table 1). 70.29% (n=336) haemophilia patient had suffered from trauma/accident conditions of which 87.5% (n=294) required immediate emergency factor infusion as described in Part B (Table 2). 98.98% (n=291) patient suffering from haemophilia required between 1 to 100 factors infusion during emergency. 0.68% (n=2) required more than 501 factor infusion and 0.34% (n=1) required no infusion of factor during emergency condition described in Part B (Table 3). 23% (n=110) haemophilia patients or family members had direct expenses up to Rs.10,000 for management of emergency traumatic conditions. 13% (n=62) had between Rs.41000 to Rs.80,000, 11.1% (n=53) had between Rs.11,000 to Rs.20,000, 7.3% (n=35) had between Rs.31000 to Rs.40,000 and 7.1% (n=34) had more than Rs. 81,000

direct expenses for management of trauma/accident condition as described in Part B (Table 4). 30.8% (n=147) haemophilia patients managed their bleeding occasionally with homoeopathy medicine, 66.3% (n=317) every time and 2.9% (n=14) rarely. 54.2% (n=259) haemophilia patients managed their bleeding occasionally with tranexamic acid, 18.4% (n=88) every time and 27.4% (n=131) rarely. 10.3% (n=49) haemophilia patients managed their bleeding occasionally with cold fomentation, 87.7% (n=419) every time and 2.15% (n=10) rarely. 21.8% (n=104) haemophilia patients managed their bleeding occasionally with FFP, 0.6% (n=3) every time, 42.3% (n=202) rarely and 35.5% (n=169) not taken FFP as described in Part B (Table 5). 94.1% (n=450) haemophilia patient were buying factor from society of which 3.3% (n=16) were buying for each bleed episode. Out of 478 haemophilia patients 90.58% (n=433) patients infused factor between 1 to 100. 4.82% (n=23) patients infused more than 100 factors till date. 4.69% (n=22) patients not yet infused any factor. 41.2 % (n=197) haemophilia patient paying between Rs. 2501 to Rs.5000 for society for single factor, 27.6% (n=132) paying up to Rs.2500, 17.4% (n=83) paying between Rs.5001 to Rs.7500, 11.1% (n=53) paying between Rs.7501 to Rs.15000, 2.7% (n=13) paying above Rs.15001.

Only 2.3% (n=11) haemophilia patients were getting any sponsorship from non-government organization (NGO). 10.7% (n=51) haemophilia patient were paying to nurse and or doctors for each factor infusion. 64.70% (n=33) paying between Rs. 101 to Rs.200, 29.41% (n=15) paying less than Rs.100 and 5.88% (n=3) were paying more than Rs.201.

89.5% (n=428) haemophilia patient were paying up to Rs.500 for travelling to society for buying a single factor. 8.4% (n=40) were paying between Rs.501 to Rs.1000 and 2% (n=10) were paying more than Rs.1001 for each visit to society as described in Part C (Table 6). 44.8% (n=214) haemophilia patient were infusing factor from government civil hospital only during emergency bleeding condition. 42.1% (n=201) were infusing for each bleed episode. 70.6% (n=293) haemophilia patients complained about non availability of factor in government civil hospital during emergency bleed. 77.6% (n=293) haemophilia patient paid Rs.10 for drawing case paper from civil hospital and 22.4% (n=93) paid Rs.5.

86.03% (n=357) haemophilia patient were paying up to Rs.500 for travelling to civil hospital. 12.53% (n=52) were paying between Rs.501 to Rs.1000 and 1.44% (n=6) were paying more than Rs.1001 for each visit to society as reported in Part C (Table 7). 478 haemophilia patients were taking homoeopathy treatment in different chapters as mentioned in Part A of result. 77.40% (n=370) haemophilia patient didn't require to pay any rupees for homoeopathy treatment. 0.42% (n=2) paying less than Rs.100. 22.17% (n=106) haemophilia patient were paying more than Rs. 100 for homoeopathy treatment. 99.58%

(n=476) haemophilia patient experienced reduction in factor infusion after starting of homoeopathy treatment. 19.5% (n=93) haemophilia patient were not required single factor during homoeopathy treatment. 19.9 % (n=95) required factor occasionally. 17.4% (n=83) experienced 75% and more reduction in factor infusion after starting of homoeopathy treatment. 33.3% (n=159) experienced 50% and more reduction, 9.6% (n=46) experienced 25% and more reduction in factor infusion. 0.4% (n=2) haemophilia patient not experienced any change after homoeopathy treatment initiation.

77.82% (n=372) haemophilia patient were infused factor below 100 after initiation of Homoeopathy treatment. 22.18% (n=106) haemophilia patient didn't require single factor after homoeopathy treatment. 98.3% (n=470) haemophilia patient experienced reduction in healing time since homoeopathy treatment started. 69.9% (n=334) experienced effectiveness of homoeopathy medicine in open acute bleeds.

79.5% (n=380) haemophilia patient were paying up to Rs.500 for travelling to homoeopathy haemophilia centres. 12.6 % (n=60) were paying between Rs.501 to Rs.1000. 7.9% (n=38) were paying more than Rs.1001 for each visit to homoeopathy haemophilia centers as described in Part C (Table 8). 96% (n=459) haemophilia patient loss their wages below Rs.500 per day during suffering, 2.1% (n=10) loss wage between Rs.501 to Rs.1000 and 1.9% (n=9) loss wages above Rs.1001.

84.1% (n=402) haemophilia patients care giver/attendee loss their wages below Rs.500 per day during management, 9.2% (n=44) loss wage between Rs.501 to Rs.1000 and 6.7% (n=32) loss wages above Rs.1001.

94.56% (n=452) haemophilia patients mother loss their 24 hrs for management/care giving and 0.21% (n=1) haemophilia patients mother loss their more than 24 hrs for management/care giving. We calculated the loss of mother's time in monetary value. Each patients' mother loss approximately Rs. 433.86 per day as reported in Part D (Table 9). 56% (n=268) haemophilia patients benefitted with homoeopathy treatment with SOS use of factor, 28% (n=132) experienced homoeopathy is beneficial therapy and 16% (n=78) were experienced conservative management. 95.6% (n=457) haemophilia patient were experienced satisfaction with homoeopathy treatment. 95.2% (n=455)haemophilia patient were homoeopathy is most economic therapy, 1.3% (n=6) conservative management and 3.6% (n=17) did not acknowledge anything as described in Part E (Table 10).

In developing nations, like India, Bangladesh, Pakistan, etc., where the cost of the disease is the fundamental concern for the family and society and imposes an economic burden on the nation, are capable of carrying out this kind of study as it reduces the cost of care and burden of high-cost management. In comparison to other haemophilic patients, the patients who used add-on

homoeopathy reported a decreased and fewer requirement for factor infusion. Enhancing health outcomes and possibly lowering treatment costs for the government, the patients, and their families are two benefits of integrating add-on homoeopathy with contemporary management²⁶.It is a challenging task to carry out such studies in developed nations where the cost of the disease management is not an issue.

CONCLUSION

This survey conducted from the time period of January 2017 to June 2017 assessed the social and economic impact of healthcare in haemophilia from patient's perspective. It was found that maximum patient belonged to haemophilia A, severe category with associated comorbidities. Economically homoeopathic therapy was found to reduce the cost of care and burden of high-cost management.

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