

Abstract: P769

Title: THE HUMANISTIC AND ECONOMIC BURDEN OF TRANSFUSION-DEPENDENT LOWER-RISK MYELODYSPLASTIC SYNDROMES ON PATIENTS IN NORTH AMERICA AND EUROPE

Abstract Type: Poster Presentation

Topic: Myelodysplastic syndromes - Clinical

Background:

Patients with lower-risk myelodysplastic syndromes (LR-MDS) often require RBC transfusions to manage anemia. However, the emotional, physical, and time impact of this transfusion burden is not well understood, and little is known about the indirect economic burden of LR-MDS on patients.

Aims:

To describe the emotional, physical, time, and indirect economic burden among patients with transfusion dependent (TD) LR-MDS.

Methods:

From August 2023 to January 2024, adult (≥ 18 years of age) patients with LR-MDS who self-reported being TD (≥ 2 RBC transfusions in the prior 4 months) completed a web-based survey in North America and Europe. Survey outcomes included: emotional, physical, and time burdens associated with RBC transfusions, out-of-pocket (OOP) treatment costs including OOP prescription and over-the-counter (OTC) medication costs, and indirect economic burden assessed through work productivity and activity impairment (WPAI; as measured by the WPAI scale). Descriptive analyses were reported for the overall sample, among subgroups of LR-MDS patients with lower versus higher transfusion burden, and among patients who were erythropoiesis-stimulating agent (ESA) treatment-naïve versus those who had previously received ESAs.

Results:

Ninety-eight eligible patients completed the survey; 8 patients in the United States, 17 in Canada, 29 in Germany, 10 in France, 31 in Italy, and 3 in Spain. About half (51%) of the patients were male; mean age at MDS diagnosis was 63 years (standard deviation [SD] 11), and mean age at survey completion was 67 years (SD 9). Most (77.6%) participants reported being upset they were RBC-TD. On a 5-point scale (1=never, 5=always), patients also reported feeling sad about the amount of time spent on transfusions (median 4). The majority (58.1%) of participants reported that the transfusion process was a high/very high emotional burden. Overall, 81.6% of patients reported side effects from RBC transfusions, with the most reported being dizziness (40.8%), fever (32.7%), iron overload (27.6%), and pain/bruising (26.5%). The overall mean time spent for all transfusion activities was 8.15 hours (489.2 minutes) per transfusion visit (Table). The mean time spent for specific transfusion activities prior to transfusion visits ranged from 43.3 to 55.9 minutes and on the day of transfusion ranged from 29.9 minutes spent in the waiting room prior to transfusion to 129.6 minutes spent receiving transfusion. In the 6 months prior to survey completion, the mean number of visits to any MDS healthcare provider was 9.4 for laboratory/blood tests, 8.6 for transfusions, and 5.1 for other MDS-related visits, while the mean number of emergency department visits and hospitalizations was 0.4. The highest reported OOP costs/visit associated with both MDS therapy and RBC transfusion were for hotel stay and childcare. Overall, patients reported that they missed 40.6% of work time and were impaired 51.5% of their time at work, resulting in a 65.7% impairment in overall work productivity. Additionally, they reported 64.5% of activity impairment due to their health. Overall, the emotional, time, OOP cost, and WPAI burden were higher among patients with higher transfusion burden and those who were ESA naïve.

Summary/Conclusion:

Patients with TD LR-MDS experience considerable emotional, physical, time, and indirect economic burden. RBC transfusion activities accounted for over 8 hours of patients' time overall per transfusion visit, most of which was on the day of the transfusion visit. Analysis of the burden among caregivers for these patients is underway.

Table. Burden associated with RBC transfusions

	Overall sample N = 98	
	Mean	SD
Overall time spent for all transfusion activities, minutes	489.21	262.29
Time spent during specific RBC transfusion activities, minutes		
Administration procedures		
Office visit with doctor to examine if you need a transfusion or other related reasons	52.39	38.31
Having tests done and blood drawn for transfusion visit	43.31	42.27
Traveling to and from the doctor office location (total round-trip time)	55.90	37.80
Day of transfusion visit		
Prepping for transfusion (ie, getting blood drawn)	35.04	65.64
Waiting for blood to arrive	35.35	68.02
Waiting in the waiting room prior to the transfusion	29.93	64.73
Receiving the transfusion	129.60	66.38
Recovering from the transfusion at the transfusion center	44.31	33.84
Traveling to and from the transfusion location (total round-trip time)	56.24	33.58
Other activities (N = 15)	46.73	30.11
OOP costs/visit, USD		
MDS treatment-related		
Childcare (N = 3)	482.33	621.96
Transportation (N = 49)	49.45	52.59
Hotel (N = 4)	300.00	141.42
Parking/tolls (N = 18)	56.28	129.87
Prescription medication(s) (N = 21)	94.48	142.79
OTC medication (N = 19)	103.84	227.05
Takeout food (N = 11)	53.18	58.45
RBC transfusion-related		
Childcare (N = 3)	733.33	503.32
Transportation (N = 57)	53.02	57.62
Hotel (N = 4)	325.00	125.83
Parking/tolls (N = 20)	54.30	94.02
Prescription medication(s) (N = 8)	163.75	197.55
OTC medication (N = 15)	67.40	118.53
Takeout food (N = 24)	44.46	58.24

Keywords: Clinical outcome, Patient, Myeloid, Blood transfusion