

Investigating the Impact of Chronic Graft-Versus-Host Disease on Patient and Carer Health-Related Quality of Life: A Quantitative Study

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BACKGROUND

- Chronic graft-versus-host disease (cGvHD) is a multisystemic condition that affects 20–50% of post-hematopoietic stem cell transplantation patients and is associated with long-term morbidity and mortality.¹
- Patients with cGvHD frequently suffer with skin, eye, and musculoskeletal symptoms, often leading to physical debilitation and in severe cases, death.
- These effects are further exacerbated by adverse effects of multiple lines of therapy (LOTs).^{2,3}
 In the UK, there is a lack of health-related quality of life (HRQoL) data that describes the physical
- and emotional impact of cGvHD on both patient and carers.
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METHODS

- Patients/carers of patients with a diagnosis of cGvHD who had received ≥2 LOTs and had ongoing symptoms were included in this study; these patients were invited to complete a 25-minute online survey in September 2022.
- Survey questions covered areas pertinent to the physical, psychological, and social/economic impact of cGvHD.

RESULTS

Respondent characteristics

- In total, 27 participants (17 patients; 8 current carers; 2 previous carers) were enrolled in the study.
- Demographics and characteristics varied between the patient and carer groups and are summarised in **Table 1**.

Table 1. Participant demographics and characteristics

	Patient* n=27	Carer n=10
Gender, n (%)		
Male	21 (78)	3 (30)
Female	6 (22)	7 (70)
Ethnicity, n (%)		
White	26 (96)	10 (100)
Asian/Asian British	1 (4)	0 (0)
Employment status, n (%)		
Working full-time	5 (19)	3 (30)
Working part-time	2 (7)	3 (30)
Retired	8 (30)	2 (20)
Unable to work due to illness	10 (37)	1 (10)
Student	1 (4)	0 (0)
Unemployed	1 (4)	0 (0)
Stay at home parent/carer	0 (0)	1 (0)

Physical symptoms experienced by cGvHD patients

*Calculation based on responses from 17 patients and 10 carers who were asked about the patients they care for

- Commonly reported symptoms experienced by patients included skin symptoms (100%), fatigue (93%), and eye symptoms (81%).
- Most symptoms presented daily or frequently, with skin (78%), eye (63%), and joint (67%) symptoms being most prevalent.
- In general, symptoms with the highest incidence in cGvHD patients (eye, skin, lung, and infection symptoms) had the highest impact on daily life.

Treatment of cGvHD

- Many patients (61%) had undergone ≥3 LOTs and were taking 5.3 different cGvHD treatments at the time of survey participation, indicating a significant treatment burden.
- 81% of participants indicated they had used other systemic treatments, including intravenous drips or oral tablets at some point.
- Many patients reported needing additional treatments to control cGvHD symptoms and side effects.
- 74% reported using antibiotics and 67% antivirals.
- Medication for digestion, breathing, nausea, osteoporosis, and depression/anxiety were also common.

Treatment-related side effects

- The majority (92%) of patients reported experiencing treatment-related side effects.
- A significant proportion (78%) of patients encountered general and gastrointestinal side effects, including fatigue (67%), moon-face (56%), oedema (44%), weight gain (41%), constipation (37%), and diarrhoea (33%).
- Less than 50% of patients experienced sensory systems side effects; however, the impact on daily life was high.

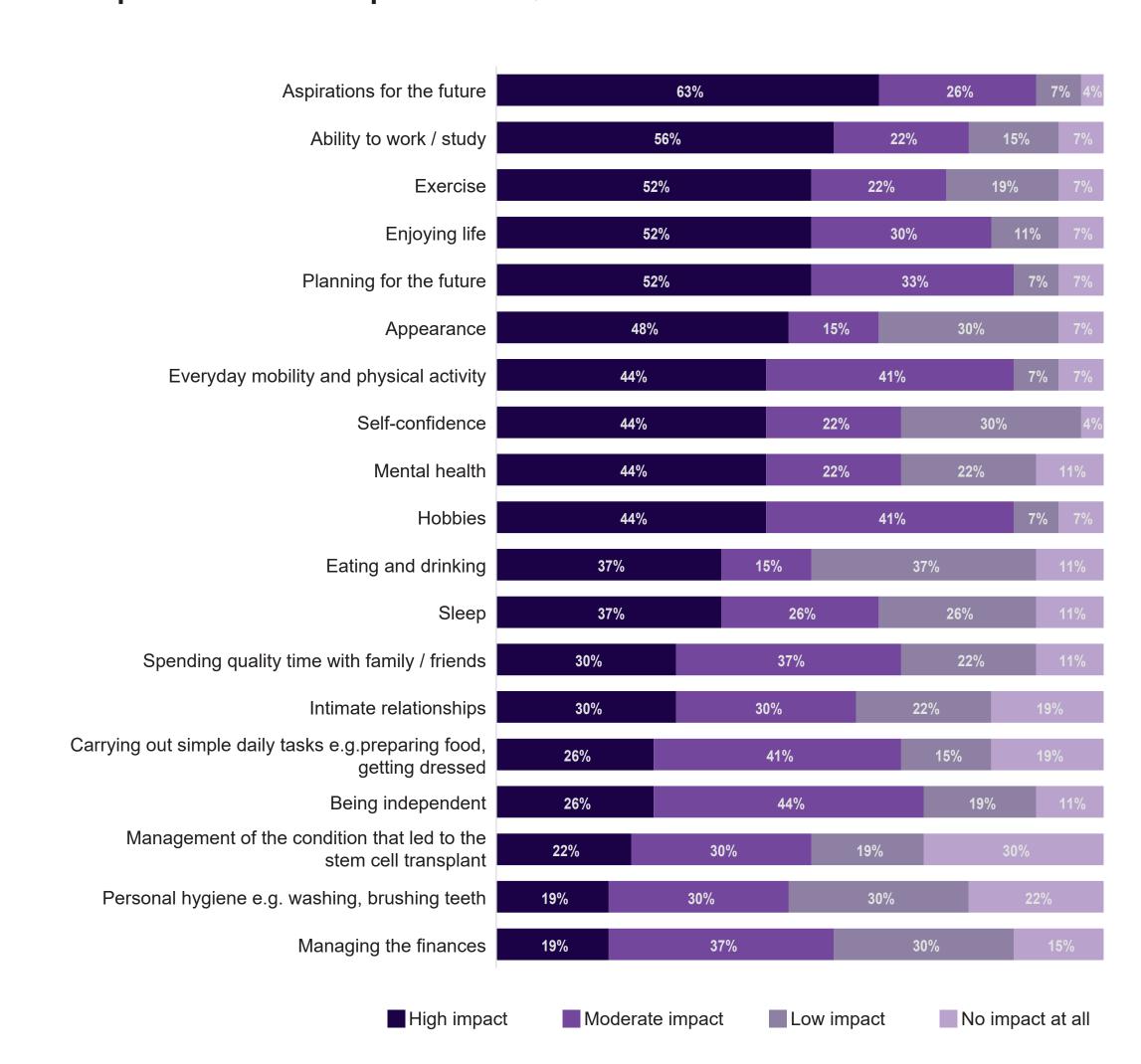
Medical appointments

- Medical appointments represented a substantial burden for respondents; 48% of patients attended appointments at least once a month while 26% of patients attended once a week; 37% had unplanned hospital visits once a month or a few times a year.
- Survey respondents have typically seen a mean of five different healthcare professionals (HCPs) in relation to their cGvHD, including hematologists (89%), dermatologists (70%) and opthalmologists (59%).
- Most patients (66%) expressed the need for improved communication between HCPs that manage their cGvHD and 48% preferred the use of one doctor to manage their cGvHD.

The impact of cGvHD on HRQoL

- The greatest impact of cGvHD on patient HRQoL was on aspirations for the future (89% reported a moderate to high impact).
- More than 50% of respondents reported that cGvHD had a high impact on patients' ability to work, exercise, enjoy life, and plan for the future (**Figure 1**).

Figure 1. The impact of cGvHD on patient HRQoL

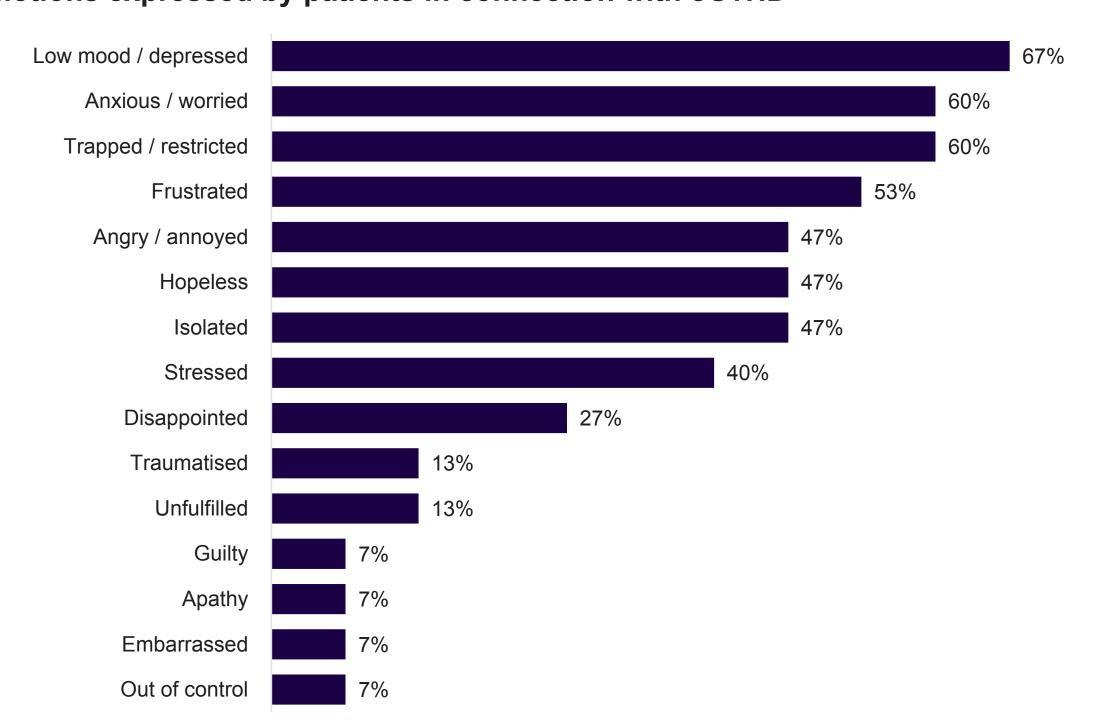


Survey respondents: n=27 (17 patients, 10 carers); Q9: Please tell us how much impact chronic GvHD has on each of these aspects of your daily life / please tell us how much impact chronic GvHD has on each of these aspects of the daily life of the person you care(d) for. cGvHD, chronic graft-versus-host disease; HRQoL, health-related quality of life.

Mental health challenges associated with cGvHD

- Many patients (69%) reported that cGvHD impacted their mental health, and 78% felt they were a burden to others due to their condition. The challenges associated with mental health are summarised in **Figure 2**.
- Only 35% of patients were offered and accepted mental health support, while 35% were not offered any mental health support; many patients and carers (74%) feel that people with cGvHD need more emotional support than is currently available.

Figure 2. Emotions expressed by patients in connection with cGvHD



Survey respondents: n=15 patients, 4 participants chose to skip this portion of the survey; Q10: Which of the following emotions, if any, have you experienced in connection with your chronic GvHD? cGvHD, chronic graft-versus-host disease.

Carer QoL

- The majority of carers (90%) felt that caring for someone with cGvHD impacted their ability to plan for the future or work/study and 60% said their finances were affected.
- All carers reported feeling anxious or worried when caring for someone with cGvHD and expressed the need for more emotional support.

CONCLUSIONS

- The treatment burden, side effects, medical appointments, impacts on daily life, and mental health challenges associated with cGvHD can all contribute to a diminished HRQoL for patients and carers.
- Addressing these factors and providing support for individuals according to their needs is crucial to improve HRQoL and alleviate the multifaceted burden of cGvHD.

References

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