A cross-sectional study examining the impact of ageing on the psychosocial experiences of patients with lymphoma

LYMPHOMA COALITION

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INTRODUCTION

Patients with lymphoma face various emotional consequences as a result of their diagnosis and treatment. Progress in providing high-quality care for the psychosocial impacts of lymphoma has not matched the advances in lymphoma detection and treatment. Patients in different life stages may experience different psychosocial issues or varying intensities of psychosocial issues because of their lymphoma.

OBJECTIVE(S)

Using data from the Lymphoma Coalition (LC) 2020 Global Patient Survey (GPS) on Lymphomas and CLL, this study examines the impact of ageing on the psychosocial experiences of patients with lymphoma.

METHOD(S)

Study Design
- This study is a sub-analysis of the LC 2020 GPS, which is a biennial online global survey
- The LC 2020 GPS was hosted on a third-party portal from January-March 2020 in 19 languages

Respondents
- Globally, there were **11,878** respondents from 90+ countries, including **9,179** patients and **2,699** caregivers
- **9,078** patients who self-identified their age were included in this study; these patients were grouped into **five age groups** for analysis (table 1)

Table 1. Age group breakdown of patient respondents

Age Group	Number of Patients (n=1)
18-29	638
30-39	1,196
40-59	3,261
60-69	2,216
70+	1,767
Total	**9,078**

Statistical Analysis
- Raw data was entered, merged, and cleaned in IBM SPSS v27
- Demographics of the five age groups were compared
- Descriptive statistics were performed for all questions relating to psychosocial issues

RESULTS

The five age groups differed significantly (p< 0.001) in all the demographic categories examined, which included lymphoma subtype, sex, area of residence, education level, and employment and household status. The breakdowns for subtype, sex, and area of residence are shown in table 2.

RESULTS CONT.

Table 2. Demographic comparison of patient age groups

	18-29 Count (%)	30-39 Count (%)	40-59 Count (%)	60-69 Count (%)	70+ Count (%)	X2 (p-value)
Subtype						3328.07 (p< 0.001)
CLL/SLL	14 (2)	34 (3)	543 (17)	651 (29)	498 (28)	
Burkitt's	17 (3)	32 (3)	36 (1)	6 (0)	0 (0)	
Diffuse large B-cell lymphoma (DLBCL)	94 (15)	167 (14)	367 (11)	191 (9)	120 (7)	
DLBCL germinal centre B-cell (GCB)	24 (4)	44 (4)	93 (3)	16 (1)	6 (0)	
DLBCL activated B-cell (ABC)	35 (5)	67 (6)	136 (4)	31 (1)	20 (1)	
Follicular	15 (2)	162 (14)	733 (22)	391 (18)	207 (12)	
Hodgkin	310 (49)	422 (35)	424 (13)	87 (4)	58 (3)	
MALT/MZ	4 (1)	24 (2)	110 (3)	44 (2)	26 (1)	
Mantle cell	1 (0)	12 (1)	85 (3)	65 (3)	57 (3)	
Peripheral T-cell	6 (1)	18 (2)	62 (2)	23 (1)	9 (1)	
Anaplastic	20 (3)	27 (2)	23 (1)	10 (0)	5 (0)	
Extranodal natural killer T-cell	24 (4)	48 (4)	49 (2)	6 (0)	2 (0)	
Transformed	4 (1)	8 (1)	61 (2)	31 (1)	23 (1)	
WM/LPL	1 (0)	5 (0)	161 (5)	336 (15)	443 (25)	
Other indolent	9 (1)	21 (2)	96 (3)	89 (4)	99 (6)	
Other aggressive	30 (5)	49 (4)	76 (2)	48 (2)	39 (2)	
Don't know	11 (2)	19 (2)	46 (1)	38 (2)	56 (3)	
Cutaneous	4 (1)	7 (1)	34 (1)	19 (1)	13 (1)	
Mycosis fungoides	15 (2)	30 (3)	117 (4)	109 (5)	81 (5)	
Sézary syndrome	0 (0)	0 (0)	9 (0)	25 (1)	5 (0)	
Sex						210.37 (p< 0.001)
Male	229 (36)	397 (33)	1288 (39)	993 (45)	989 (56)	
Female	406 (64)	798 (67)	1969 (60)	1220 (55)	776 (44)	
Intersex	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	
Prefer not to say	3 (0)	1 (0)	4 (0)	2 (0)	2 (0)	
Residence						257.06 (p< 0.001)
Urban	385 (60)	751 (63)	1778 (55)	963 (43)	730 (41)	
Suburban	93 (15)	170 (14)	714 (22)	609 (27)	539 (31)	
Rural	160 (25)	275 (23)	769 (24)	644 (29)	498 (28)	

*CLL/SLL chronic lymphocytic leukaemia/small lymphocytic lymphoma; MALT/MZ mucosa-associated lymphoid tissue/marginal zone; WM/LPL Waldenström's macroglobulinaemia/lymphoplasmacytic lymphoma

Patients were asked which psychosocial issues they had experienced over the last 12 months because of their lymphoma diagnosis. The oldest age group (70+) reported the lowest prevalence of every psychosocial issue listed (table 3). The oldest age group (70+) also reported the highest prevalence of experiencing no psychosocial issues ('none')(39%). In all cases, each psychosocial issue was most prevalent in the youngest age groups (18-29 and 30-39), with prevalence decreasing with increasing age (table 3).

Table 3. Psychosocial issues that patients reported experiencing over the past 12 months

	Prevalence of Issues by Age Group					
Psychosocial Issues	18-29 %	30-39 %	40-59 %	60-69 %	70+ %	X2 (p-value)
Loss of self-esteem	43	38	25	14	7	578.10 (p< 0.001)
Concerns about body image	51	45	28	20	14	497.18 (p< 0.001)
Changes in relationships	34	30	19	11	8	379.57 (p< 0.001)
Isolation	29	24	20	15	10	156.86 (p< 0.001)
Depression	48	39	33	24	17	298.96 (p< 0.001)
Anxiety	51	51	37	24	14	559.45 (p< 0.001)
Fear of cancer relapse	68	69	56	41	29	474.69 (p< 0.001)
Fear of lymphoma progression	39	42	41	41	31	49.60 (p< 0.001)
None	9	9	15	24	39	512.98 (p< 0.001)

RESULTS CONT.

Patients who reported experiencing symptoms of lymphoma/CLL were asked how these symptoms impacted their life (table 4). The lowest prevalence for each of these impact categories was observed in the oldest age group (70+). The highest prevalence for each impact, except for social life, was observed in the youngest age group (18-29).

Table 4. Impacts of lymphoma/CLL symptoms on day-to-day life of patients

	Prevalence of Impacts by Age Group					
How lymphoma/CLL symptoms affected day-to-day life (those who strongly agree or agree)	18-29 %	30-39 %	40-59 %	60-69 %	70+ %	X2 (p-value)*
Negative impact on everyday activities	60	53	56	53	47	146.49 (p< 0.001)
Unable to work/change job or working pattern	50	49	48	38	18	632.39 (p< 0.001)
Negative impact on social life	50	49	51	43	33	254.50 (p< 0.001)
Created problems with partner, friends, relatives	44	43	37	23	14	574.02 (p< 0.001)

*Chi square values calculated based on the inclusion of all question response options

Patients who reported experiencing treatment-related side effects were asked how these side effects impacted their life (table 5). The lowest prevalence for each of these impact categories was observed in the oldest age group (70+). In all cases, the greatest prevalence of each impact was observed in the youngest age groups (18-29 and 30-39), with the prevalence of each issue decreasing with increasing age.

Table 5. Impacts of treatment side effects on day-to-day life of patients

	Prevalence of Impacts by Age Group					
How treatment-related side effects affected day-to-day life (those who strongly agree or agree)	18-29 %	30-39 %	40-59 %	60-69 %	70+ %	X2 (p-value)*
Negative impact on everyday activities	68	66	63	56	49	212.17 (p< 0.001
Unable to work/change job or working pattern	59	57	53	38	16	781.49 (p< 0.001)
Negative impact on social life	59	61	54	45	34	353.27 (p< 0.001)
Created problems with partner, friends, relatives	43	45	34	21	13	537.56 (p< 0.001)

*Chi square values calculated based on the inclusion of all question response options

CONCLUSION(S)

This analysis revealed that compared to the mid to oldest patient groups, younger patients with lymphoma are disproportionately affected by psychosocial issues resulting from their disease and treatment. These psychosocial issues can negatively impact quality of life.

Psychosocial assessment and intervention should be high priority for all patients with lymphoma; however, younger patients may require additional attention and support. In the future, LC would like to explore how demographic differences may have confounded results.

CONTACT INFORMATION

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