

Unmet Supportive Care Needs and related Factors in Chronic Myeloid Leukemia (CML) Patients Receiving Targeted Therapy



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Introduction

- Oral targeted therapy is the main treatment for chronic myeloid leukemia (CML) patients in chronic phase with around 90% disease control rate. Although these patients can be treated in outpatient clinic with relatively stable condition, the impacts of CML may still have some symptoms and increase patients’ care needs. However, relatively limited information has been reported.
- The purposes of this study were to explore (1) the levels of symptoms, and (2) supportive care needs and related factors in CML patients receiving targeted therapy (Glivec, Sprycel and Tasigna).

Methods

- A cross-sectional study was conducted to recruit CML survivors receiving targeted therapies from hematological outpatient department at a medical center in northern Taiwan.
- Patients were assessed by a trained research nurse using a set of questionnaires, including Short-Form item-34 Supportive Care Needs Survey (SCNS-SF34), ECOG Performance Status, Symptom Severity Scale (SSS), and Patient Information Form. IRB approval and patients’ consents were obtained before data collection.

Table 1 Background Information (N=102)

Variable	Number (%)
Gender	
Male	65 (63.7)
Female	37 (36.3)
Age	
0-35	20 (19.6)
36-45	30 (29.4)
46-55	29 (28.5)
56-65	13 (12.7)
>65	10 (9.8)
Educational level	
Junior high	16 (15.7)
Senior high	21 (20.6)
College	47 (46.1)
Master and above	18 (17.6)
Occupation	
Full-time employed	57 (55.9)
Unemployed/part-time employed	45 (44.1)
Marital status	
Unmarried	35 (34.3)
Married	67 (65.7)
Personal income (month)	
No income	33 (32.4)
<NTD30,000	11 (10.8)
NTD30,000-50,000	22 (21.6)
>NTD50,000	36 (35.2)
Religion	
None	43 (42.2)
Buddhism/Taoism	47 (46.0)
Christianity	11 (10.8)
Other	1 (1.0)
Main caregiver	
Oneself	85 (83.3)
Partner	7 (6.9)
Other	10 (9.8)

Table 2 Symptom severity of TKIs target therapy (N=102)

Variable	mean (SD)	0 No n(%)	1-3 Mild n(%)	4-6 Moderate n(%)	≥7 Severe n(%)
Skin color change	5.2 (4.5)	35 (34.3%)	9 (8.8%)	12 (11.8%)	46 (45.1%)
Weight change	3.1 (3.8)	51 (50.0%)	12 (11.8%)	16 (15.7%)	23 (22.5%)
Fatigue	3.0 (3.0)	41 (40.2%)	15 (14.7%)	35 (34.3%)	11 (10.8%)
Muscle spasm	2.6 (3.2)	49 (48.0%)	24 (23.5%)	18 (17.6%)	11 (10.8%)
White hair	2.4 (3.5)	60 (58.8%)	13 (12.7%)	12 (11.8%)	17 (16.7%)
Eyelid edema	2.5 (3.1)	55 (53.9%)	17 (16.7%)	18 (17.6%)	12 (11.8%)
Insomnia	1.7 (3.3)	73 (71.6%)	12 (11.8%)	5 (4.9%)	12 (11.8%)
Pain	1.6 (2.4)	63 (61.8%)	19 (18.6%)	14 (13.7%)	6 (5.9%)
Skin rash	1.5 (2.6)	67 (65.7%)	17 (16.7%)	12 (11.8%)	6 (5.9%)
Dry mouth	1.4 (2.3)	68 (66.7%)	14 (13.7%)	15 (14.7%)	5 (4.9%)

Table 3 Care Needs of CML Patients Receiving Oral Target Therapy

SCNS items	No %	Satisfied Need %	Low Need %	Moderate Need %	High Need %	Unmet Need %
Physical and daily living						
—Lack of energy/tiredness	35.3	17.6	38.2	5.9	2.9	47.1
—Feeling unwell a lot of the time	79.4	4.9	11.8	2.0	2.0	15.7
—Pain	63.7	21.6	13.7	1.0	—	14.7
Psychological						
—Worry that the results of treatment are beyond control	35.3	22.5	27.5	7.8	6.9	42.2
—Uncertainty about the future	40.2	23.5	22.5	7.8	5.9	36.3
—Fears about the cancer spreading	38.2	26.5	27.5	2.9	4.9	35.3
—Anxiety	45.1	24.5	17.6	9.8	2.9	30.4
—Feeling down or depressed	47.1	26.5	16.7	6.9	2.9	26.5
—Feelings of sadness	5.2	24.5	15.7	2.9	4.9	23.5
Health systems and information						
—Having access to professional counselling (eg, psychologist, social worker, counsellor, nurse specialist) if you, family or friends need it	24.5	5.2	13.7	4.9	4.9	23.5
—Being given written information about the important aspects of your care	16.7	66.7	9.8	3.9	2.9	16.7
—Being treated like a person not just another case	55.9	27.5	16.7	—	—	16.7
—Being informed about things you can do to help yourself to get well	17.6	65.7	7.8	3.9	4.9	16.7

Results

- A total of 102 CML patients completed the assessments. Patients reported to have mild symptoms.
- The top five symptoms were change of skin color, weight change, fatigue, muscle spasms, and orbital edema.
- The highest unmet supportive care needs were (1) fatigue, (2) worry about the treatment outcome, (3) future uncertainty, (4) fear of cancer progression, and (5) anxiety.
- The overall care needs were related to symptom severity, responses to treatment, financial status, functional status, having related teaching resources, and medication disturbance.
- The 6 factors explained 45% variance of the unmet care needs. Among the different domains of care needs, patients reported to have relatively high unmet care needs in psychological domain.

Discussion

The results of this study provide the information about CML patients’ symptoms and unmet care needs during targeted treatments. Future studies to develop and test related intervention of its effects are strongly suggested.