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Patient Perceptions Regarding Multiple Myeloma and Its Treatment: Qualitative Evidence From Interviews With Newly Diagnosed and Relapsed/Refractory Patients in the United Kingdom, France, and Germany

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INTRODUCTION

- Despite recent treatment advances, multiple myeloma (MM) is an incurable disease[1]; therefore, development of new treatment options is an ongoing priority
- Currently, little is known about the treatment preferences of patients with MM
- A 3-part study is under way to elicit patients' benefit/risk trade-offs on key efficacy and safety outcomes of MM treatments
  - Here, we present the results of the first phase of research, qualitative interviews to assess patients' perceptions regarding MM and its treatment

METHODS

Patients

- Patients were largely identified through clinician referral, in addition to recruiter databases, patient association referrals, and social media
  - Eligible patients were aged ≥18 years, resided in the United Kingdom (UK), France, or Germany, and had a physician-confirmed diagnosis of multiple myeloma
  - Patients provided verbal and written informed consent

Interviews

- Patients participated in semistructured 60-minute telephone interviews
  - Themes in the interview guide were developed from a targeted literature review and conceptual framework[2]
  - The interview structure was as follows:
    - Introduction
    - Disease and symptoms
    - MM treatment: perceived benefits
    - MM treatment: perceived side effects
    - MM treatment: perceived burden
    - Trade-offs using vignettes
    - Conclusion

Analysis Methods

- Two coders completed the analysis using Atlas.ti 8.0 Content analysis methods were used to identify passages of text in the transcripts at the explicit level or surface meaning[3]
- Frequency outputs related to symptoms, benefits, side effects, and treatment burden were used to identify important patterns in the data and key concepts
- All sociodemographic and clinical data were analyzed with descriptive statistics

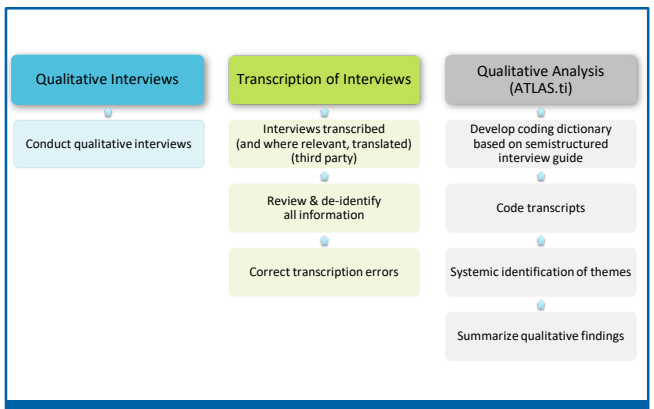

Figure 2. Qualitative Analysis Methods

RESULTS

- Thirty patients from the UK (n=12), France (n=8), and Germany (n=10) were interviewed between June and September 2019; patient characteristics are shown in **Table 1**
  - 18 patients had newly diagnosed MM (NDMM); of those, 12 were transplant eligible and 6 were transplant ineligible
  - 12 patients had relapsed/refractory MM (RRMM)
- The MM symptoms most often discussed were fatigue, bone pain, and "tingling hands or feet/restless leg" (peripheral neuropathy) (**Table 2**)
  - Patient responses were consistent between NDMM and RRMM
  - There was overlap between symptoms and side effects; some patients were unsure if peripheral neuropathy, fatigue, or infections were due to MM or its treatment
- The treatment benefits most often discussed were increased life expectancy, remission/response, and reduced fatigue (**Table 3**)
  - Increased life expectancy was the most important benefit regardless of disease stage
- Overall, the side effects most often discussed were peripheral neuropathy, diarrhea/constipation, and cognitive impairment (**Table 4**)
  - Among patients with NDMM, cognitive impairment was the most frequently mentioned side effect (94%), while among patients with RRMM, the most frequently mentioned side effect was peripheral neuropathy (92%)
- Regardless of disease stage, the treatment burden most often discussed was treatment duration (83% NDMM and 75% RRMM) (**Table 5**)
  - Treatment duration was the burden most often reported in the UK and Germany, while patients in France most often cited location/travel

Table 1. Participant Characteristics

	Overall N=30	NDMM – TE N=12	NDMM – TIE N=6	RRMM N=12
Sex, male	15 (50)	5 (41.7)	4 (66.7)	6 (50)
Mean age, years (SD)	60.3 (10.7)	56.8 (12.6)	67.3 (6.8)	60.4 (9.1)
Employed full- or part-time	8 (26.7)	5 (41.7)	1 (16.7)	2 (16.7)
Country				
UK	12 (40)	6 (50)	1 (16.7)	5 (41.7)
France	8 (26.7)	3 (25)	2 (33.3)	3 (25)
Germany	10 (33.3)	3 (25)	3 (50)	4 (33.3)
First line of therapy	15 (50)	9 (75)	6 (100)	0
ECOG status				
0	10 (33.3)	4 (33.3)	1 (16.7)	5 (41.7)
1	14 (46.7)	7 (58.3)	4 (66.7)	3 (25)
≥2	6 (20)	1 (8.3)	1 (16.7)	4 (33.3)
Current medications				
PI	19 (63.3)	7 (58.3)	5 (83.3)	7 (58.3)
IMiD	17 (56.7)	7 (58.3)	2 (33.3)	8 (66.7)
Chemotherapy*	8 (26.7)	4 (33.3)	4 (66.7)	0
Steroids	20 (66.7)	7 (58.3)	6 (100)	7 (58.3)
CD-38 inhibitor	5 (17.9)	2 (16.7)	0	3 (25)
Other†	6 (20)	2 (16.7)	0	4 (33.3)

*Bendamustine, cisplatin, cyclophosphamide, doxorubicin, etoposide, melphalan; †Elotuzumab, panobinostat, DT-PACE, valaciclovir, venetoclax, no treatment. Results are n (%) unless stated otherwise. ECOG, Eastern Cooperative Oncology Group; IMiD, immunomodulatory drug; NDMM, newly diagnosed multiple myeloma; PI, proteasome inhibitor; RRMM, relapsed/refractory multiple myeloma; TE, transplant eligible; TIE, transplant ineligible; UK, United Kingdom.

I don't know, that's really hard to say … day to day I'd say reducing the fatigue, but actually it's more important to suppress the disease as soon as possible. So I'd probably say that … it's probably better to deal with the fatigue and suppress the disease quicker.

Symptoms, Patient with NDMM-TIE, UK

You know, the longer I can get in remission the better, regardless of whether I'm on treatment or not, whether I'm on maintenance or not, I'll do whatever I need to, to keep myself alive.

Benefits, Patient with NDMM-TE, UK

It's slow thinking or not being able to remember … it's really quite bad and that's why they haven't let me go back to work.

Side effects, Patient with RRMM, UK

It's a bit burdensome in the long term as it's supposed to be twice a week, and it requires going to the hospital twice a week.

Treatment burden, Patient with RRMM, France

Table 2. Symptoms Most Often Discussed

	n (%)		n (%)
Fatigue	26 (87)	Constipation	4 (13)
Bone pain	26 (87)	Muscle cramps	3 (10)
Peripheral neuropathy	9 (30)	Headache	3 (10)
Infection	8 (27)	Insomnia	3 (10)
Sleepiness	4 (13)	Dizziness	1 (3)

Symptoms mentioned by ≥1 patient; includes spontaneous and prompted responses.

Table 3. Benefits Most Often Discussed

	n (%)		n (%)
Increased life expectancy	26 (87)	Time to response	20 (67)
Remission/response	24 (80)	Improved social life	18 (60)
Reduced fatigue	24 (80)	Planning for the future	18 (60)
Reduced worry	22 (73)	Improved ability to work	12 (40)
Independence	21 (70)	HRQoL	10 (33)
Increased time to recurrence	21 (70)	Reduced dependence (self-care)	8 (27)
Reduced bone pain	21 (70)		

Benefits mentioned by >1 patient; includes spontaneous and prompted responses. HRQoL, health-related quality of life.

Table 4. Side Effects Most Often Discussed

	n (%)		n (%)
Peripheral neuropathy	27 (90)	Risk of infection	23 (77)
Diarrhea/constipation	27 (90)	Hematological	18 (60)
Cognitive impairment	25 (83)	Hematological fatigue	17 (57)
Nausea/vomiting	23 (77)	Kidney infection	3 (10)
Swelling of hands/feet	23 (77)	Hematological fever/infections	2 (7)

Side effects mentioned by ≥1 patient; includes spontaneous and prompted responses.

Table 5. Treatment Burden Most Often Discussed

	NDMM N=18	RRMM N=12	Overall N=30
Treatment duration	15 (83)	9 (75)	24 (80)
Location/travel	14 (78)	8 (67)	22 (73)
Intravenous injection	8 (44)	5 (42)	13 (43)
Subcutaneous injection	6 (33)	0	6 (20)
Side effects	4 (22)	2 (17)	6 (20)
Monitoring	3 (17)	0	3 (10)
Oral administration	1 (6)	1 (8)	2 (7)

n (%). Burdens mentioned by >1 patient; includes spontaneous and prompted responses. NDMM, newly diagnosed multiple myeloma; RRMM, relapsed/refractory multiple myeloma.

CONCLUSIONS

- Qualitative interviews identified aspects of MM and its treatment that are most important to patients
  - The symptoms of fatigue and bone pain, benefit of increased life expectancy, side effects of peripheral neuropathy and diarrhea/constipation, and treatment burden of treatment duration were the aspects most commonly discussed
- These findings will inform future research to identify patient treatment preferences, which could potentially impact treatment choice and improve HRQoL for patients with NDMM and RRMM

REFERENCES

1. Moreau P et al. *Ann Oncol* 2017;28(suppl 4):iv52-61.
2. Baz R et al. *Support Care Cancer* 2015;23:2789-97.
3. Friese S et al. Carrying out a computer-aided thematic content analysis with ATLAS.ti. MMG Working Paper. Available at: https://www.mmg.mpg.de/62142/WP_18-02_Friese-Soratto-Pires_AtlasTI.pdf. Accessed May 4, 2020.

DISCLOSURES

JH, AL, KG, RK, DP, CG, and **NT** are employees of Janssen. **AD, HC,** and **TT** are employees of Evidera.

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