

Patient reported quality of life and adherence of patients to oral oncology and neurology specialty medications provided by a specialty pharmacy

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BACKGROUND

Specialty pharmacy drugs (SP-D) are high-cost medications that treat complex conditions. Improving adherence and quality of life (QoL) contribute to desired treatment outcomes. SP Medication Therapy Management (SPMTM) contributes to optimization of QoL and better adherence.^{1,2,3,4}

OBJECTIVE

(1) Measure adherence to oral oncology (O) and neurology (N) SP-D/SPMTM and (2) compare quality of life (QoL) of patients in SP-D/SPMTM pre- and during-COVID19.

METHODOLOGY

Beginning Index Year ((IY) 1/1-12/31/2019) to COVID-19 Years 2020-2021, a retrospective, descriptive, observational study of n=1600 unique O+N patients' QoL and adherence to oral SP-D was conducted. Patient Assessments (PA) included EQ-5D-5L, having 5 dimensions with Likert scales (5-point) and a visual analog scale (VAS100). Dimensions summarized: Mobility (M), Self-Care (S), Usual Activities (U), Pain/Discomfort (P/D), and Anxiety/Depression (A/D). Likert scales summarized: None, Slight, Moderate, Severe, and Extreme plus VAS100 for Overall Health State (OHS). Calculate Dimension means for IY and COVID-19 Years; compare for differences=improved/diminished QoL. The mean of the adherence metric, Proportion Days Covered (PDC), were calculated for IY and COVID-19 Years. Pearson's Correlation Coefficient (PCC) calculated for means of Dimensions/VAS100 vs PDC.

RESULTS

Completed PAs=1600 (20% of 8000 offered). Difference in mean PDC between IY and COVID-19 Years=0.0036 (0.39%). Differences between Dimension means IY and COVID-19 Years: M=+0.02 (22.2%), S=-0.12 (110%), U=-0.02 (53.1%), P/D=-0.03 (15.9%), A/D=+0.24 (67.5%), OHS=-0.81 (15.1%). ("-" difference=improvement in Dimensions 1-5; "+" difference=improvement in OHS. PCC R² + interpretations: M=0.0158, S=0.0227, U=0.01, P/D=0.0422, A/D=0.069, OAH 0.116, all indicating weak correlations. PDC slightly improved in COVID-19 Years=0.9361 compared to IY=0.9325 (0.36%). See Table 1 for Results Summary.

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CONCLUSION

During the COVID-19 Years, PDC improved slightly 0.36% with both IY and COVID-19 Years being higher than industry standard=0.8. On average all QoL Dimensions (except M and A/D) improved COVID-19 Years compared to IY. Possible explanations associated with the worsened QoL metrics IY vs COVID-19 Years are: more challenges to access health care, e.g., social distancing constraints, fear of contracting COVID-19 by going out of the home into public places, increased financial challenges associated with loss/reduction in employment and reduced access to other supportive medications and medical services or other challenges associated with other social determinants of health care access.⁵ Larger comparative studies suggested.

Table 1
Results Summary of Pearson's Correlation Coefficients

	M vs PDC 2019-2022	S vs PDC 2019-2022	U vs PDC 2019-2022	P/D vs PDC 2019-2022	A/Dep vs PDC 2019- 2022	OAH vs PDC 2019-2022
Pearson's R						
CC	-0.1255	-0.1505	-0.1001	-0.2055	-0.2626	-0.1077
R² Correl.						
Deter.	0.0158	0.0227	0.01	0.0422	0.069	0.0116
Interpretation	WEAK	WEAK	WEAK	WEAK	WEAK	WEAK

AUTHORS' STATEMENTS

Statement of Inclusion:

All persons who meet authorship criteria are listed as authors, and all authors certify that they have participated sufficiently in the work to take public responsibility for the content, including participation in the concept, design, analysis, writing, or revision of the manuscript. Furthermore, each author certifies that this material or similar material has not been and will not be submitted to or published in any other publication.

No Conflict of Interest:

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