

BACKGROUND & AIMS

Shared Decision Making (SDM) involves an exchange of information between clinicians and patients pertaining to the risks and benefits of available treatment options and the patient's priorities and goals of care. In advanced cancer, where the benefits of anti-cancer treatment are uncertain and may lead to significant toxicity, SDM can ensure patient's preferences for extended survival or enhanced quality of life are reflected in treatment decisions. Despite advocacy by healthcare organisations and potential benefits such as reduced decision conflict¹, SDM has not been widely implemented into treatment decision making.

This study examined the perceptions of SDM occurring in advanced cancer consultations and whether patient and consultation characteristics may predict these perceptions.

METHODS

We conducted a secondary analysis of control arm data collected during a cluster randomized controlled trial evaluating a goals of care intervention.

Patients with advanced cancer from six oncology disease groups were invited to participate following a consultation where treatment decisions relating to systemic anti-cancer treatment (SACT) were discussed.

Participants completed the SDM-Q-9 questionnaire which examined patients' perceptions of SDM behaviours occurring within their consultations.

Age, gender, clinical group or presence of an informal caregiver in the consultation were inputted as variables within linear regression models to determine their influence on SDM-Q-9 scores.

Linear regression models except where variables may have a moderating effect on other variables. In this instance gender and clinical group were inputted into a multiple regression model together given the participation of breast and gynaecological cancer patients.

RESULTS

SDM-Q-9 scores (n=211) were high (mean = 80.7; SD = 20.2); a ceiling effect was observed in the data (27% of participants reporting the highest score).

Models using participant gender and presence of a caregiver as predictor variables had large (>1) and statistically significant F-ratios indicating they were more successful at predicting SDM-Q-9 scores than the mean (table 2).

The above models each accounted for less than 5% of the variance in SDM-Q-9 scores.

Gender and presence of an informal caregiver were statistically significant predictors (p<0.05) for SDM-Q-9 total scores.

Table 3: Model Co-efficients (significant F-ratios)



Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Bootstrap Sig	Bootstrapping 95.0% Confidence Interval for B	
		B	Std. Error					Beta	Lower Bound
2 (Gender)	(Constant)	85.504	2.002		42.702	0	<0.001	82.098	88.674
	Gender	-8.808	2.724	-0.218	-3.234	0.001	<0.001	-14.026	-3.842
4 (Clinical group - Gender)	(Constant)	84.615	3.987		21.224	0	<0.001	77.445	92.25
	Clinical group	0.232	0.898	0.018	0.258	0.797	0.811	-1.692	1.961
	Gender	-8.605	2.842	-0.213	-3.028	0.003	0.003	-13.828	-3.119
5 (Caregiver)	(Constant)	74.321	2.578		28.826	0	<0.001	68.284	80.027
	Caregiver	8.917	3.038	0.199	2.935	0.004	0.007	2.495	15.44

Table 1: Model summaries

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1 (Age)	0.032	0.001	-0.004	20.198
2 (Gender)	0.218	0.048	0.043	19.721
3 (Clinical group)	.077	0.006	0.001	20.147
4 (Clinical group - Gender)	.219	0.048	0.039	19.765
5 (Caregiver)	.199	0.040	0.035	19.804

Table 2: Model F-Ratios

Model		Sum of Squares	df	Mean Square	F	Sig.
1 (age)	Regression	84.729	1	84.729	.208	.649
	Residual	85262.356	209	407.954		
	Total	85347.085	210			
2 (Gender)	Regression	4066.242	1	4066.242	10.456	.001
	Residual	81280.844	209	388.904		
	Total	85347.085	210			
3 (Clinical group)	Regression	511.434	1	511.434	1.260	.263
	Residual	84835.652	209	405.912		
	Total	85347.085	210			
4 (Clinical group - Gender)	Regression	4092.270	2	2046.135	5.238	.006
	Residual	81254.815	208	390.648		
	Total	85347.085	210			
5 (Caregiver)	Regression	3379.443	1	3379.443	8.617	.004
	Residual	81967.643	209	392.190		
	Total	85347.085	210			

CONCLUSION

Patient gender and the presence of an informal caregiver appeared to influence the perceptions of SDM behaviours occurring within advanced cancer SACT treatment consultations.

The overall level of SDM was perceived to be high by participants potentially indicating effective SDM behaviours.

Positive opinions relating to clinicians and the treatment centre biasing responses cannot be ruled out and may be responsible for the observed ceiling effect.

The participants of this study were primarily white British, potentially limiting the generalisability of the findings.

REFERENCES

1.. Lee YH, Chou XY, Lai YH, Liang YH, Hung CT, Hsiao CC, Gao ZX. Decisional conflict and its determinants among patients with cancer undergoing immunotherapy combined with chemotherapy or targeted therapy: a cross-sectional study. Sci Rep. 2023 Aug 5;13(1):12715.

