Decision-Making Software Use for patients: Immediate and Post-Treatment Evaluation

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INTRODUCTION:
Patients harbor increasing difficulty choosing a treatment modality among multiple existent options.

METHODS:
Eighteen patients from UCLA Neurosurgery Clinic used VisionTree(VT) Healthcare decision-making software. Patients had multiple diagnoses. Mean age was 55.2 years, 6 were female. Therapeutic options were rated considering effectiveness, complications, recovery time, number of visits (Physician rating) and personal issues (patient rating). Physician's rating considered current literature data. Software presented a normalized score(0-100) reflecting patient's willingness for each option. Immediate and post-treatment evaluation surveys were completed using 1-5 scale(5=best). Post-treatment surveys were obtained for patients who used and did not use VisionTree. Controls were selected among patients with similar diagnosis/age and were evaluated within one week time interval at the Clinic.

RESULTS:
Mean score for first option treatment was 86.3±8.6. For second and third options was 65.2±19.2 and 39.7±15.5, respectively. All but two(11.11%) patients moved forward with their selected treatment option. First options all scored above 70 on VT. Immediate survey rates were 4.2±1.4 for software usefulness, 4.8±0.4 for friendly navigation, 4.6±0.7 for recommendation to others, 4.5±0.9 for satisfaction with the tool. Eight patients completed treatment and responded to the questionnaire. Post-treatment score for software friendly-use was 5, for satisfaction with the tool was 4.5±0.6. Post-treatment welfare measured as patient's overall well being was 4.5 for VT and 3.5 for control group, a 20% improvement. Only one patient in the VT group felt that more information regarding treatment options was necessary.

CONCLUSIONS:
The decision-making software use in clinical practice is innovative and effective. Software evaluation according to patient's impression was positive and consistent through time. Initial consult options were confirmed through software and the software was considered a very helpful tool for treatment option decision-making process and stored in the patient's electronic medical records for informed consent.