A tournament containing no directed cycles is called transitive. A tournament $T = (V, A)$ is called $m$-partition transitive if there is a partition $V = X_1 \cup X_2 \cup \cdots \cup X_m$ such that the subtournaments induced by each $X_i$ are all transitive, and $T$ is $m$-partition $k$-transitive if $\max |X_i| = k$. Two tournaments are equivalent if they have the same out-degree sequence. We show that every tournament $T$ of order $n$ which contains a transitive subtournament of order $k \geq \frac{n}{2}$, there is a 2-partition $k$-transitive tournament $T^*$ equivalent to $T$. As a corollary, we obtain similar results for $m$-partition $k$-transitive tournaments, extending a theorem originally conjectured by Brualdi and Shen.