The word “lean”, in the meaning of bare, plain, simple, has begun to use as one of the strategic planning, strategic manufacturing, strategic cost concepts which emerged with the first stages of globalization. “Lean thinking”, based on the waste elimination, has been used as lean manufacturing, lean management, lean accounting and lean supply chain in practice. Lean supply chain management is a management philosophy which focuses on simplifying supply chain to reduce the costs of the manufacturer - end user process and maintain an active, continuous and efficient flow. Its revealed in studies that simplifying of supply chain makes a positive effect on all processes of a business with elimination of non value creating activities. This study aims to mention lean practices and benefits of these practices in a tertiary care hospital pharmacy and reveal how these lean practice improves the supply chain being used to transporting medicine to inpatient. For that purpose its planned that observing processes in tertiary care hospital pharmacy and comparing processes after and before lean manufacturing. With this study it's shown that, only at pharmacy section of hospital, acquired positive outcomes about workload, time, cost and waste. It's been considered that realizing these positive outcomes in all sections of hospital may possible using lean techniques at all departments of hospital.