Probabilistic Inventory Methods in Health Institutions for Beginners

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All organizations use some form of inventory planning and control system. In the field of inventory methods, besides many simple methods, there are also many mathematical models to be used for solving complex problems. Probabilistic inventory methods are needed in cases where the demand for a good changes over time and this is not known precisely, and the lead time cannot be determined exactly. It is desired that this study provides simple and understandable information that will serve as a guide to those who have just started on the subject of probabilistic inventories methods in health institutions. In the fixed-period (P) system, inventories are ordered at the end of a certain period. In fixed order quantity (Q) systems, the same fixed quantity is added to the inventories each time an order is placed for each item. Apart from these, there are also three different probabilistic inventories models to be used when demand is variable and lead time is fixed; lead time is variable and demand is constant; both demand and lead time are variable. Another method, ABC analysis, is based on the principle of classifying stocks according to their importance. The degree of importance of inventories is determined on the basis of the amount of material used and its price. In health institutions, it is possible to ensure that the service delivery is not interrupted and that when the material needs arise, it can be done in the desired amount, at the desired time, with high quality and economically, thanks to the correct inventory management. It is recommended that the health managers benefit from these methods that will help them in their decision-making processes.