

## Evaluation of pharmaceutical distribution system and its environmental conditions

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**Background and Aims:** Pharmaceutical distribution is an important activity of integrated pharmaceutical supply chain management and provides suitable access to efficient, safe and quality pharmaceuticals. So, pharmaceutical distribution assessment and problem recognition may result in improvement of quality of pharmaceuticals and public health services and may be helpful in economical situation by reduction of unusable products and waste.

**Methods:** This study carried out according to pharmaceutical assessment models presented by international organization such as WHO by qualitative methods, in two parts:

A) Document review.

B) Interviews by key personnel of regulatory body, manufacturers, importers, distributors and pharmacies by using semi structured questionnaire. The gathered information was analyzed by Theme Analysis.

**Results:** Documents show sufficient regulations and guidance's were published by regulatory organization, covering basic elements of Good Distribution principles. Key personnel of involved companies have good knowledge of principles. There is significant difference between opinions of distribution customers and distributors, extending from environmental condition to delivery time.

**Conclusions:** Although all involved parts of distribution system are aware about regulations, the management situation of system in terms of providing good transportation condition, appearance of goods, and expiry date of pharmaceuticals products, delivery time table and some of related issues needs improvement. This system fulfils the primary needs of customers, but they are not satisfied. Some suggestions for improvement are: to extend use of vehicles equipped with temperature and humidity control devices, training of transport personnel to make their responsibilities, to establish a customer service department to collect opinions. Importance of latter suggestion is revealed when we consider difference between opinions of distributors with their customers and the most important recommendation is to carry out periodically audits by distribution companies and regulatory organization.

**Keywords:** Distribution system; Pharmaceutical assessment; Qualitative study