

## ABSTRACT

Increasing number of diphthery cases in Sidoarjo Regency, with occurrence of cases in those who had received DPT immunization shows the existence of problem concerning to immunization. The efficacy itself, depends on the quality of vaccines given. Insufficiency in cold chain may lower the quality of DPT vaccines. This research inteneded to analize relationship between component factors and quality of cold chain for DPT vaccines in a health centers in Sidoarjo.

This research is a descriptive research with cross sectional design. Sample used were total population, which includes all 26 health centers within Sidoarjo. The relationship among knowledge of the officers, their attitude, their history in immunization programmes training, supervision frequency for cold chain, condition of equipments in vaccines cold chain, DPT vaccines storage, and register for DPT vaccines in cold chain quality, were analized wih spearmen correlation test.

The result shows that the knowledge of the officer were sufficient (42%), attitude of the officer were good (50%), participation in immunization programmes training in the past (84%), health centers were not routinely supervised (81%), equipments condition for cold chain vaccines were good, DPT vaccines storage were also good (58%), register for DPT vaccines cold chain were insufficient (77%), and the quality of cold chain in health centers were also good (62%). Relationship between DPT vaccines storage and the cold chain quality in health centers were strong and positive.

Conclusion for this research is, the better the storage for DPT vaccines in health centers, the better its cold chain quality in health cares, with majority had insufficient register for DPT vaccines' cold chain. Improvement in officers' obedience in storing DPT vaccine in health centers and its register concerning to the cold chain which appropriate according to procedures, were really needed.

**Keywords:** cold chain, DPT vaccines, components, quality

## ABSTRAK

Peningkatan kasus difteri di Kabupaten Sidoarjo dan terdapat kasus dengan status sudah diimunisasi DPT menunjukkan adanya masalah pada program imunisasi. Keberhasilan imunisasi tergantung kualitas vaksin yang diberikan. rantai dingin vaksin DPT yang kurang dapat menurunkan kualitas vaksin DPT. Penelitian ini bertujuan untuk menganalisis keeratan faktor komponen dengan kualitas rantai dingin vaksin DPT di pelayanan kesehatan statis (puskesmas) Kabupaten Sidoarjo.

Penelitian ini merupakan penelitian deskriptif dengan desain penelitian cross sectional. Besar sampel yang digunakan adalah *total population* yaitu semua puskesmas di Kabupaten Sidoarjo sebanyak 26 puskesmas. Keeratan antara pengetahuan petugas, sikap petugas, riwayat pelatihan program imunisasi, frekuensi supervisi rantai dingin vaksin, kondisi peralatan rantai dingin vaksin, penyimpanan vaksin DPT, pencatatan rantai dingin vaksin DPT dengan kualitas rantai dingin vaksin DPT dianalisis dengan uji korelasi spearman.

Hasil penelitian menunjukkan pengetahuan petugas cukup (42%), sikap petugas baik (50%), petugas pernah ikut pelatihan program imunisasi (84%), puskesmas disupervisi tidak rutin (81%), kondisi peralatan rantai dingin vaksin baik, penyimpanan vaksin DPT tergolong baik (58%), pencatatan rantai dingin vaksin DPT termasuk kurang (77%), dan kualitas rantai dingin vaksin di puskesmas tergolong baik (62%). Keeratan antara penyimpanan vaksin DPT dengan kualitas rantai dingin vaksin DPT di puskesmas adalah kuat dan positif.

Kesimpulan penelitian ini adalah semakin baik penyimpanan vaksin DPT di puskesmas semakin baik kualitas rantai dingin vaksin DPT di puskesmas dan pencatatan rantai dingin vaksin DPT mayoritas kurang. perlu meningkatkan kepatuhan petugas dalam hal penyimpanan vaksin DPT di puskesmas dan pencatatan tentang rantai dingin vaksin DPT yang sesuai dengan prosedur.

**Kata kunci:** rantai dingin, vaksin DPT, komponen, kualitas