P-248 - EXPANDED NEWBORN SCREENING PROGRAM IN THE HEALTH SERVICES OF THE MEXICAN NAVY: A 6-YEAR EXPERIENCE.

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**INTRODUCTION:** The purpose of an expanded newborn screening program is the early detection of congenital metabolic disorders that otherwise could produce serious clinical consequences. Nowadays, newborn screening is part of the health care system of a large number of countries and institutions. Since 2012, the Secretariat of the Navy of Mexico has implemented a program for the detection of these conditions in newborns. **OBJECTIVE:** To report the results obtained in the expanded neonatal screening program of the Secretariat of the Navy of Mexico. **MATERIALS AND METHODS:** From July 2012 to December 2018, blood samples were taken from the newborn's heel (NB) in 32 medical units of the Mexican Navy, located in 18 states of Mexico. All samples were analyzed by immunofluorometric analysis (AutoDELFIA © / GSP ©), tandem mass spectrometry, isoelectric focusing and high performance liquid chromatography. **RESULTS:** 16,781 NB were screened; 61.22\% of the samples were taken between 3-5 days of life, (0.9\% of the samples were considered inadequate), 249 samples were considered as suspected cases, 90.8\% were located and re-examined. Sixty-one cases were confirmed, with a false positive rate of 0.95\%. The detected diseases were 24 cases of endocrinopathies, 33 cases of hemoglobinopathies and other hematological disorders (230 carriers of Hb), 1 case of organic acidemia and 3 cases of other congenital metabolic diseases. All confirmed cases initiated specialized medical treatment at an average of 16 days of age. All affected families received genetic counseling. **CONCLUSIONS:** In the studied population, the prevalence of congenital metabolic defects was 1/275 NB. The most prevalent ones were Congenital Hypothyroidism (1: 1,199 NB) and Glucose 6 Phosphate Dehydrogenase Deficiency (1: 524 NB). The expanded screening program allowed the early detection of 61 affected newborns.