P-236 - EXTERNAL QUALITY ASSESSMENT OF NEONATAL SCREENING WITH ULTRAMICROANALYTIC SYSTEM IN LATIN AMERICA. GENERAL EVALUATION OF MORE THAN TWO DECADES OF WORK.


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**INTRODUCTION:** For more than two decades Cuba has been facilitating an External Quality Assessment Program (EQAP) as an important analytical support to more than a hundred laboratories that carry out neonatal screening (NS) in Latin America, using the Ultramicroanalytic System (SUMA® technology).

**OBJECTIVES:** The aim of this study is to present the results of the implementation of this EQAP and its influence on the quality of NS program with SUMA® technology in these countries.

**MATERIALS AND METHODS:** Controls with different concentration levels for each analyte (TSH, T4, 17-OH Progesterone, Galactose and Phe) are provided to each participant on a quarterly basis. The results of variables such as the Average Variation Index (AVI) and the Average Accuracy Index (AAI) are statistically evaluated per month with a software designed for this purpose. The evaluation is made according to the results of AVI obtained by the laboratory; when AVI is 100, the evaluation is Very Good; in case of AVI from 100 to 200, it is Good; from 200 to 250 it is Regular; so, greater than 250 it is Deficient. **RESULTS:** With analytical and technical assistance these indexes have progressively improved in more than 90 % of participants corresponding to a Very Good AVI results, resulting in better intra and interlaboratory precision, with coefficients of variation lower than 10% and 15%, respectively. **CONCLUSIONS:** Our results confirm the relevance of the application of this quality control scheme as an additional component to support the screening program of the SUMA® network of laboratories outside Cuba, guaranteeing a means of monitoring analytical performance and improving their quality.