"Bibliographic Review about Anthropometric Measurements in Mother-Child Dyads"

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Introduction
Anthropometric techniques are diverse and they do require skilled levels in order to be executed. It is important for the nursing workforce to know about the most practical anthropometric techniques to be applied at community or research interventions, especially when mother-child dyads are assessed to know the relationship between Body Mass Index of both. Anthropometric measurements of mother-child dyads are useful in clinics or research, as alterations can be detected on time for preventing health-related issues. Therefore, the objective of this research is to identify the most practical, reliable, and precise anthropometric indicators for mother-child dyads.

Methods
A systematic research was performed at the following databases: Scielo, Nursery Index, EBSCO, and PubMed using the following keywords: anthropometric, child, mother, and boolean operators ("AND", "OR", and "NOT"). Retrieving articles published in the last five years, a total of 277 articles were obtained. After that, 200 outstanding titles were chosen; then, the summaries without key information for the research were dismissed; consequently, the whole texts were read and 150 articles, either in English or Spanish, were chosen. Finally, 50 of the most accurate articles related to the information of anthropometric measurements of the mother-child dyads were selected for this literature review.

Results
The anthropometric measurements most commonly used as key indicators for evaluating the mother-child dyad were the following: 46 (92%) studies used BMI. The BMI being the most recurrent anthropometric indicator; also, 28 (56%) studies used waist girth; 9 (18%) used hip girth; and 1 (2%) used muscle and fat percentage.

In the other hand, the anthropometric measurements used solely on children were the following: skin folds in 11 (22%) studies; arm girth in 6 (12%) studies; and foot-to-foot electrical impedance in 2 (4%) studies. These ones were ruled out in the case of mothers. Only 1 (2%) study measured exclusively the mother’s BMI, which did not occur in the case of the child. It is worth mentioning that only 12% of the articles were performed by researchers who work in the nursing area. Table 1 shows the most relevant articles.

The analyzed articles recommend anthropometric indicators as a practical, reliable, and accurate tool to evaluate nutritional status and detect problems/risks related to the mother-child dyad. Through the analysis of these data, this study suggests that, for the nursing field, the BMI and waist girth measurements are the most convenient to use in clinical practice and to detect health-related problems in a timely manner.

Conclusion
As a conclusion, it could be said that, when evaluating exclusively children, it is recommended to use BMI; tricipital, bicipital, and subcapular skin folds; as well as arm girth. These ones being the most commonly used by researchers. However, when evaluating the dyad, the most common anthropometric measurements are BMI and waist girth for both. It is important because addressing the most commonly used anthropometric measurements helps to identify the most appropriate methodology to conduct research.

The BMI and waist circumference are considered the most practical anthropometric measurements in both child and mothers. Such measurements can be applied by nurses for clinical or research purposes. Finally, it was concluded that the anthropometric measurements must be individualized according to each clinical or research purpose.