Clinical Scale For A Safe And Earlier Hospital Discharge For The Mother/Infant (M/I) Dyad Participating In A Kangaroo Program (KP)

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OBJECTIVE. To identify parameters of M/I participating in a KP, and build a scale, able to predict a safe hospital discharge of premature infants (PI) with birth weight <1500g. SUBJECTS AND METHODS. Parameters from 33 M/I were identified and dimensioned in a pilot study. The maternal parameters were: 1) Health status and attachment to KP, 2) Participation in KP, 3) Milk production rate, 4) Self confidence to handle her baby and 5) Acceptance or request to continue the KP at home. For the infant were: 6) Health status, 7) Time tolerated out of incubator 8) Tolerance for kangaroo position, 9) Sucking development and 10) Growth velocity. The scale was graded as: 0, when the characteristic was absent or evidently immature; 2, when the characteristic was fully present; 1 when the clinical evaluation was in-between. Scoring of all parameters was significantly associated with the day at discharge ($R^2 = 0.88$). When the 5 less relevant parameters were excluded from the regression, R^2 changed to 0.84. The scale combining parameters of the mother and infant was used to assess the evolution of the 42 M/I participants in a KP, on admittance and every week there after. When M/I scored 9-10 points on this 5-variable scale, infants were discharged to continue KP at home. Body weight at discharge and days hospitalized were compared with those of 52 PI treated in a conventional premature ward (C). Comparisons were made using Student's t test and χ^2 . Associations were assessed by multiple regression. Significance was established at a p level of 0.05.

RESULTS: All K infants discharged returned to the clinic two days later; 88% gained weight (17 g/day) and 81% were still exclusively breast -feeding. By the 5th day, all were gaining weight (24 g/d) and 71% were exclusively breast-feeding. The discharge weight was 1606 g and 1848, hospital stay was 35 and 44 days for K and C infants, respectively.

CONCLUSIONS. The proposed scale, including milk production, maternal self-confidence, request or acceptance to continue KP at home, mature sucking and growth velocity, proved useful to predict a safe hospital discharge of PI in KP, decreasing risks such as nosocomial infections, and curbed medical expenses. In addition, this intervention promotes the delivery of the babies' own mother's milk, with the added benefit of offering all the bioactive substances that promote infant's brain development.