

August 1, 1961

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My dear Doctor Butterfield:

I chortled aloud when I saw the epigram. It is very clever and certainly original. You might like to hear a greeting I received at Boston Lying-In one day by a secretary, who said "I didn't know Apgar was a person, I thought it was just a thing."

In reply to your question about premies and the scoring system, I have extracted a few figures from a paper which I hope to get finished this month. In it are discussed 30,000 babies, of whom 698 are under 2000 grams. You are right that there is no predictive value of survival for tiny babies under 1000 grams, but in the other weight groups, there are highly significant differences.

If the three clinical states are compared (Poor-0,1,2,3; Fair-4,5,6; Good-7,8,9,10) using neonatal deaths as the criteria for comparison, the results are as follows:

<u>Weight</u>	<u>No. of Infants</u>	<u>χ^2</u>	<u>d.F.</u>	<u>p.</u>
501-1000 gms.	97	5.15	2	.06 > p > .05
1001-1500 "	192	32.8	2	p < .001
1501-2000 "	409	37.7	2	p < .001
2001-2500 "	1724	118.4	2	p < .001

If, in the smallest group, groups of five and under (all the good babies) are omitted, since chi square is not reliable in groups of that size, the results do become significant. $\chi^2 = 7.8974$, d.f. = 1, p < .01. Naturally, I believe the results in a group of 698 infants are more reliable than in 14 infants in Boston.

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Stan James at Presbyterian Hospital has quite a bit of evidence for a positive correlation of score and respiratory distress. Murdina Desmond at Baylor has much information about the course of infants of varying scores.

Hope to see you the next time I am in Denver.

Sincerely yours,

Virginia Apgar, M.D., M.P.H.
Director, Division of
Congenital Malformations

VA:bm