Hello everbody,
I'm working on vaccine doses received by under-5 children. Precisely, each children may receive either one, two or three doses of this vaccine (DTP-1, 2 and 3 report cumulative numbers -children who received 3 doses are included in dose 2 which are also included in dose 1). In my best understanding, this outcome may be considered as a count on which I can apply Poisson or Negative binomial ML modelling techniques according to the distribution pattern (equivalence of mean and variance or not. The problem is that a colleague (statistician) has suggested to preferentially analysis this outcome as ordered or unordered multinomial categories rather than a count. This seems very intriguing. Finally, I am wondering about the most appropriate choice in this situation.
Many thanks for your valuable assistance.