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Extremely low birthweight infants in Switzerland: A database of the Swiss neonatology group

Prospectively defined data on mortality and morbidity of liveborn infants weighing between 500 and 999 g in Switzerland were collected for the years 1979–81, 1983–85, and 1989–91. The information was gathered annually with a questionnaire that had to be filled in for each infant.

Results have been analysed and discussed in two thesis:

Doris J. Bühler: Neugeborene mit einem Geburtsgewicht von 500–999 g in den Jahren 1983–85 in der Schweiz: Überlebensraten, Früh- und Spätmorbidität, Zürich 1992: 39 Seiten.

Renate Strelbel: Mortalität und Frühmorbidität bei Lebendgeborenen mit einem Geburtsgewicht von 500 bis 999 g in den Jahren 1989, 1990 und 1991 in der Schweiz, Zürich 1993: 46 Seiten.

This communication will concentrate on follow-up results of these infants. Information on outcome at approximately two years of age was collected for the infants born 1983, 84, and 85 and is compared with four similar regional surveys: Switzerland has about the same proportion of apparently normal infants as Canada and the Netherlands and has a lower handicap rate as these two countries.

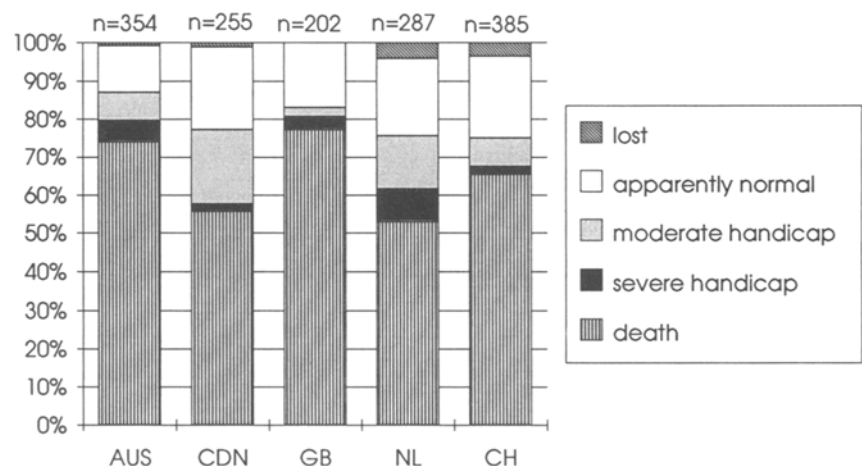


Figure 1. Outcome of ELBW infants born 1980–85.

AUS: State of Victoria, Australia (Kitchen et al. *J. Pediatrics* 1987; *111*:761–6)

CND: Master Region, Central West Ontario, Canada (Saigal et al. *J. Pediatrics* 1984; *105*:969–76)

GB: Mersey Region, Liverpool, Great Britain (Powell et al. *Lancet* 1986; *i*:539–43)

NL: Netherlands (Verloove-Vanhorick SP et al. Project on preterm and small for gestational age infants in the Netherland 1987)

CH: Switzerland (Thesis D. Bühler see above)

Severe handicap includes cerebral palsy and severe mental retardation (> 3 SD below mean).

Moderate handicap includes isolated severe visual and hearing problems and moderate (2 to 3 SD below mean) mental retardation.

There are two problems with the interpretation of these data: Firstly, there is no uniform definition of severe or moderate handicap. Secondly, cerebral palsy or mental retardation present at two years may improve as the child grows or in contrast apparently normal infants at two years may show severe deficits at school age.

We therefore suggest that these infants born 1983 to 85 should be reassessed at school age. Part of these infants are followed up regularly in a center. The remaining

infants could probably be evaluated by a questionnaire sent to the parents, the paediatrician and/or the teacher.

Conclusion: In Switzerland, infants weighing 500–999 g at birth seem to have a relatively high mortality and a relatively low risk for handicap. This impression has to be confirmed by assessing outcome at school age.