

Child adoption in the Western Highlands Province of Papua New Guinea

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SUMMARY

This study investigated the epidemiology of child adoption in the Western Highlands Province of Papua New Guinea. A prospective case-control study of 100 adopted and 100 control children matched by age and sex was done in 1995. The age at the time of adoption ranged from 7 days to 8 years with 64 being adopted in the neonatal period. 28 were adopted because the biological mother had died, 23 because the adoptive mothers had been unable to bear children and 16 because the biological mother was unmarried or 'too young'. Only 11 adopted children were not blood relatives of the adoptive mother; 10 children had been abandoned and 1 had been bought for cash. 97 adoptive mothers were married. The majority (61%) had no formal education and 95% were not in paid employment. Compared with the mothers of the control children fewer adoptive mothers had received any formal education and more of them smoked cigarettes, drank alcohol or chewed betelnut. Social characteristics of the adoptive fathers were similar to the fathers of the control children. Of the 66 living biological mothers for whom information was available, 39 (59%) were married, 16 (24%) single, 8 (12%) divorced and 3 (5%) widowed. For 21 (32%) of the biological mothers the adopted baby was their first. 19 adopted babies were breastfed, 8 exclusively, 6 with the addition of non-human milk and 5 with additional solid feeds. Two-thirds of the adopted children and only 5 controls were bottle-fed. There were no significant differences in nutritional status between the two groups and immunization status was similar. There was widespread ignorance about legal adoption procedures. Only 8 adoptive mothers had any knowledge of and only 2 had followed formal adoption procedures. In this group of adopted children it appeared that most were well cared for, as their nutritional status and immunization status were similar to non-adopted children. There have, however, been suggestions that adoption is a risk factor for child abuse in Papua New Guinea and adoption has recently been associated with severe malnutrition and mortality in a highlands hospital inpatient population. Information relating to formal adoption processes should be more widely disseminated throughout Papua New Guinean communities to protect the rights of adopted children and their adoptive parents.

Introduction

Adoption is widely accepted and considered desirable in many societies, not only for motherless babies, but also for children without

a family at any age. In western societies, many adopted children are either orphans or have been removed by state welfare authorities from dysfunctional families. In contrast, in traditional cultures in developing countries

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many adopted children are not orphans. Adoption is usually arranged by the natural parents and the adopting family for various reasons such as initiation of a gift relationship; a child is often adopted to families with no or few children or no grandchildren, or to those who have recently lost a child, or to other family members (1). Children are highly valued in most, if not all, Pacific communities. In his study of a Sepik River community Sturt mentioned that "illegitimate children are freely adopted from one family to another" especially by grandparents and childless couples (2), a matter also alluded to in a study of infertility in the highlands Asaro region (3). Most people believe that 'a house without children is a house without life'.

In some Pacific societies, adoption is a common event. In the Kosrae community of Micronesia approximately 20-25% of the inhabitants have been adopted. Here, the adopted child is raised by the adoptive parents while continuing to maintain contact with the biological family and retaining all the kinship rights and duties with which he or she was born. In effect, the adopted child has two identities rather than a change of identity (4).

Historically attitudes to adoption and fosterage have varied between different Papua New Guinea (PNG) communities. The adoptive parents, the community at large and the adopted child may report an adoptive relationship as a blood relationship. In such communities any questions about the status of adopted children would be considered embarrassing and perhaps offensive (5). In some societies a 'conspiracy of silence' surrounds adoption, whereas in others adopted children are made aware of their biological parents' identities at an early age, though not forced to reside with them against their will (5).

Adoption is recognized as being common in Papua New Guinea, but adequate information on prevalence and processes of adoption is lacking. The objective of the present study was to gain information on adoption and its effects in Western Highlands Province. The study aimed to determine the social factors that contribute to child adoption and to determine the nutritional status of adopted babies

compared with a non-adopted group of children.

Methods

The study was done in the Outpatients Department of Mt Hagen General Hospital between April and August 1995. As far as was practicable consecutive adopted children and their adoptive parents were recruited. The first non-adopted child of the same age and sex seen after an adopted child was recruited as a control. The children were examined, the parents were interviewed and the child's health record book examined. 100 adopted children and 100 matched controls were recruited to the study.

Data recorded about the adopted child and the non-adopted control (where applicable) were: sex, age at presentation and at adoption, place of birth, feeding practices, sleeping practices, immunization status and reasons for adoption. Where more than one reason was given, the one considered the most important was recorded. Data recorded about the adoptive mothers and control mothers were: age, relation to the baby, religion, marital status, number of biological children, educational attainment, occupation, social activities and knowledge of adoption processes. The educational status and occupation of the adopting fathers and the health, marital status and parity of biological mothers of the adopted children were also recorded where possible. All babies were examined and weighed.

The data were collected using a pretested questionnaire. Data entry and analysis were done using the Epi Info version 5 statistical package. Proportional differences between the groups were examined for statistical significance using the χ^2 test with Yates' correction and a p value of <0.05 was considered significant. Odds ratios (ORs) with their 95% confidence intervals (CIs) were calculated where appropriate.

Results

During the study period 21,048 children were seen at the Children's Outpatients Department (COPD). Thus 1 adopted child

TABLE 1

SEX DISTRIBUTION AND AGE ON ADOPTION

Age on adoption	Male N=58	Female N=42	Total N=100
Birth to < 1 month	36 (62%)	28 (67%)	64
1 - < 6 months	14 (24%)	6 (14%)	20
6 months - < 1 year	6 (10%)	5 (12%)	11
> 1 year	2 (4%)	3 (7%)	5

was seen for every 210 children attending COPD. 58 adopted children were male.

The age of the children at presentation ranged from 7 days to 8 years (mean 3 months). Table 1 shows the age of the children at adoption. 64 were adopted within the first month and only 5 after 1 year.

The place of delivery and the number of maternal deaths are shown in Table 2. Approximately half of both study and control groups had been delivered in the hospital. Of the 23 maternal deaths 19 had followed home delivery and only 4 followed hospital delivery (OR for death after home delivery 6.59 (1.89-28.7), p=0.002).

TABLE 2

PLACE OF DELIVERY OF ADOPTED AND CONTROL BABIES

Place of delivery	Adopted babies (maternal deaths)	Control
Hospital	47* (4)	54
Health centre	3 (0)	0
Home	50* (19)	46

* OR for maternal death after delivery at home 6.59 (CI 1.89-28.7), p=0.002

28 children had been adopted because the biological mother had died, 23 because the adoptive mother had been unable to have children, 16 because the biological mother was 'too young' and/or not married and 11 because the biological mother had too many children. Other reasons were: marriage break-up in 9, maternal illness in 6 and mental retardation of the mother in 2. In 2 cases the mother had run

away. Failure to pay brideprice, death of the father and remarriage of the mother, and sex selection were given as the reasons for 1 case each. Only 11 adopted children were not blood relatives of the adoptive mother; 10 children had been abandoned and 1 had been bought for cash.

97 of the adoptive mothers were legally or customarily married; 1 was divorced, 1 widowed and 1 unmarried. Only 11 knew their age (18-30, mean 23 years). 51 had no biological children, 34 had 1-3 and 15 had 4 or more.

Socioeconomic characteristics of the adoptive and control mothers are shown in Table 3. The educational status of control mothers was significantly better than that of the adoptive mothers, who were also more likely to smoke, drink alcohol or chew betelnut. The employment status of the two groups was similar.

Characteristics of the adopting fathers and their controls are shown in Table 4. There were no significant differences between the two groups.

Some information relating to 66 of the biological mothers was obtained from the adoptive mothers. In many cases there was some uncertainty over personal details. The age range was estimated at between 15 and 40 years. 39 (59%) were said to be married, 16 (24%) single, 8 (12%) divorced and 3 (5%) widowed. For 21 biological mothers of adopted children (32%) the adopted baby was their first child, but 18 of these mothers had more than 4 previous children.

Details of infant feeding practices, nutrition and immunization status are shown in Table 5.

TABLE 3

CHARACTERISTICS OF ADOPTIVE AND CONTROL MOTHERS

Characteristic	Adoptive mothers	Control mothers
Education status		
No formal education	61*	45*
Post-primary education	17	22
Occupation		
Unemployed/housewife	95	91
Semi-skilled/professional	5	7
Social activities		
Smoke	33**	10**
Alcohol	5**	0**
Betelnut	54**	21**

*OR 1.91 (CI 1.05-3.49), p=0.034

**p<0.001

TABLE 4

CHARACTERISTICS OF ADOPTIVE FATHERS AND CONTROLS

Characteristic	Adoptive fathers N=97	Control fathers N=99
Number of wives		
1	72	70
2	20	21
≥3	5	8
Educational status		
No formal education	39	44
Post-primary education	35	31
Occupation		
Unemployed	39	49
Subsistence farmer	11	12
Unskilled	31*	19*
Semi-skilled/professional	16	19
Social activities		
Smoke	42	51
Alcohol	44	55
Betelnut	49	58

*OR 1.98 (CI 0.98-4.03), p=0.06

TABLE 5

INFANT FEEDING, NUTRITION AND IMMUNIZATION STATUS

Feeding	Adopted babies	Control babies
Pre-weaning		
Exclusive breast	8	24
Pre-weaning		
Breast + non-human milk	6	1
All ages		
Bottle-feeding	62/92 (67.4%)	4/72 (5.3%)
All ages		
Cup and spoon	4/92 (4.3%)	0
Breastmilk, solids, drinks	5	59
Non-human milk, solids, drinks	55	3
Solids, drinks	15	13
Weight for age		
>100%	18*	30*
80-100%	44	40
60-79%	34	27
<60%	4	3
Immunization		
Up-to-date+complete	41/92	43/92

*OR=0.51(CI 0.25-1.05), p=0.07

19 of the adopted babies were breastfed either by the adopting mother or by relatives, 8 exclusively, 6 with the addition of non-human milk and 5 with additional solid feeds.

Two-thirds of the study group were bottle-fed but only 5 of the control group. There were more babies in the control than the study group with weight above 100% standard weight for age but this difference was not significant (Yates corrected p value 0.07). There was no significant difference in the number of babies with weight for age less than 80%. The immunization status of the two groups was similar.

Only 5 of the adopted children were not sleeping with their adopted mothers. These

children were all older than 4 years and they usually slept with other siblings or other family members.

Only 8 of the adopting mothers indicated any knowledge of formal adoption procedures and only 2 of these had signed adoption forms at a Welfare Office. The remaining mothers assumed that adoption was a family agreement and did not consider signing any papers.

Discussion

We have established some key features of the epidemiology of adoption in the Western Highlands. Death of the biological mother was the most frequent reason given for adoption, occurring in 28%. Tragically 23 of the

mothers died in childbirth and 19 of these gave birth at home. Whilst the study did not aim to determine causes of maternal death the much lower proportion of deaths in those delivering in hospital compared with those delivering at home suggests that many of the home deaths were preventable. There is much to be done to improve access to and use of obstetric services for the women of the Western Highlands. Until this occurs there will continue to be a large number of children adopted because of maternal death.

Almost one-quarter of the living biological mothers were single and it is likely that many of them were teenagers. The ongoing changes from traditional to western society and the accompanying loss of traditional checks and balances relating to sexual behaviour and its outcomes will almost inevitably result in an increase in the number of children born to young single mothers. The problem may in part be addressed by improving sex education in schools and making family planning more readily available for young sexually active people.

23% of the mothers adopted because they were unable to have children of their own. Only 3 such mothers had sought medical help; 2 had had an operation and 1 had been told of her husband's low sperm count. In contrast, 11 children had been adopted because their biological mothers had had too many children. Since multiparity is a major risk factor for maternal death, the wider availability and use of family planning and family completion services are likely to have a significant effect on the reduction in the number of children being adopted.

Almost two-thirds of the study babies were adopted in the first month of life. This has major implications for safe infant feeding. It is not at all uncommon in traditional society for adopting mothers to breastfeed the new child. Often an adopting mother will be already breastfeeding one of her own children. Non-lactating but parous women may begin lactating under the stimulus of the new child's suckling. Sometimes lactation will occur in a highly motivated nulliparous adopting mother. Induction of lactation can be greatly assisted by the use of dopamine antagonists

(chlorpromazine or metoclopramide) with or without oestrogen priming (6). In the present study, however, only 8 adopted babies were exclusively breastfed and only 19, compared with 84 control babies, were receiving any breastmilk. Two-thirds of the adopted babies were being fed with a bottle and 61% of the adopting parents had obtained the bottles in contravention of the Baby Feed Supplies Control Act which aims to protect breastfeeding and regulate bottle-feeding (7). Attention has recently been drawn to the problem of non-enforcement of this legislation (8).

The nutritional status and immunization status of the two groups were comparable, although it should be noted that the groups had not been matched for their presenting complaint.

The form of legal adoption found in the common law countries today is a creation of statute, first introduced in New Zealand in 1881, in some Australian states around the turn of the century and in England in 1926. The effect of an adoption order made under the legislation is to sever, for almost all purposes, the legal ties between the natural parents and the child and to put the child in the position of being the legitimate offspring of the adopting parents (9). In Papua New Guinea, statutory adoption, which can only be effected by an order of the National Court, was regulated by the Adoption of Children Act 1968.

Customary adoption was covered by the Adoption of Children (Customary Adoptions) Act 1969. This Act, in the words of one National Court judge, was intended to give statutory recognition "to the institution of customary adoption that has existed in Papua New Guinea for centuries". The current Adoption of Children Act, which came into effect under the Revised Laws in 1982, combines the 1968 and 1969 Acts. No court order is required to effect a customary adoption, although a local court may on application issue a certificate stating that customary adoption has taken place (10). This certificate has a section on limitations and conditions of adoption, which includes the possibility of limited duration.

Although laws relating to adoption have been in place since 1968, current practices of adoption appear to have changed little. Most adopting couples do so at will and without consideration of legal implications. Although the Western Highlands Welfare Office receives a number of enquiries relating to adoption (personal communication), there is still limited awareness by the public about adoption procedures. Only 8 of the adoptive mothers had some idea of the legal requirements for adoption and only 2 completed the procedures and obtained an adoption certificate. The other 6 appeared to hold the general view that adoption is a blood-related exchange so there should be no formalities involved.

While customary adoption has been accepted as a normal procedure in the Western Highlands and in other Papua New Guinean societies it has not always been free of deleterious social consequences. Under the custom of bride-price, whereby goods are exchanged for the bride, the biological parents may exert pressure on the adopting family to return the child for the purpose of obtaining bride-price. Without the protection of a legal framework for adoption, the adopting parents may not be able to resist such pressure. Of more immediate concern is that although most adopted babies are well cared for, evidence is accumulating that adoption is a risk factor for both child morbidity and mortality. A small hospital-based study in the Eastern Highlands found adoption to be a risk factor for child abuse (11) and a more recent study found it to be associated with death from severe malnutrition. Adoption of young infants by non-lactating women, or infant abandonment, were responsible for 59 (45%) of 131 children who were admitted with marasmus to Goroka Hospital in 13 months from November 1997 (12).

Our small study has delineated reasons underlying adoption in the Western Highlands. We have indirectly shown the tragic burden of maternal mortality, its relationship to village

births and later consequences of adoption. Only a small minority of adopting parents is aware of legal adoption procedures. There is a need for a much greater awareness by health professionals and communities of adoption, adoption procedures and the consequences of adoption for children if the rights of those children – and of their adoptive parents – are to be protected.

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REFERENCES

- 1 **Collins M.** The influence of western adoption laws on customary adoption in the third world. In: Bean P, ed. *Collection on Adoption*. London: Tavistock Press, 1983.
- 2 **Sturt RJ, Sturt AE.** Natality, fertility and marriage status in a Sepik River population of New Guinea. *Trop Geogr Med* 1974;26:399-413.
- 3 **Collins AM.** Infertility among Asaro Valley women. *PNG Med J* 1988;31:253-256.
- 4 **Ritter PL.** Adoption on Kosrae Island. *Solidarity Sterility Ethnol* 1981;1:45-61.
- 5 **McDevitt TM.** Adoption practices and population data collection, with special reference to vital rates estimation. *Hum Relations Area Files (Ethnography Series)* 1987:59-100.
- 6 **Nemba K.** Induced lactation: a study of 37 non-puerperal mothers. *J Trop Pediatr* 1994;40:240-242.
- 7 **Government of Papua New Guinea.** *Baby Feed Supplies (Control) Act 1976 and Amendment 1984*. Port Moresby: Papua New Guinea Government Gazette, 1976, 1984.
- 8 **Friesen H, Vince J, Boas P, Danaya R.** Protection of breastfeeding in Papua New Guinea. *Bull World Health Organ* 1999;77:271-274.
- 9 **Bromley PM.** *Family Law*, 2nd edition. London: Butterworths, 1981.
- 10 **Jessop O, Luluaki J.** *Principles of Family Law in Papua New Guinea*, 2nd edition. Port Moresby: University of Papua New Guinea Press, 1994.
- 11 **Hwaihwanje I.** Child abuse at Goroka Base Hospital. Diploma in Child Health Project. Department of Child Health, University of Papua New Guinea, Port Moresby, 1989.
- 12 **Duke T.** Decline in child health in rural Papua New Guinea. *Lancet* 1999;354:1291-1294.