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NAVAJO CHILD ABUSE AND NEGLECT STUDY: A COMPARISON GROUP EXAMINATION OF ABUSE AND NEGLECT OF NAVAJO CHILDREN

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Abstract—The presence of vastly different cultural influences on child rearing and family life in Native Americans than are found in the general population offers an opportunity to examine the issue of child abuse and neglect in a different cultural context. A study was conducted to obtain baseline data and to isolate types and circumstances associated with maltreatment of Navajo children under 9 years of age. Records from tribal and state courts, the Bureau of Indian Affairs (BIA), state social services and a sample of ambulatory pediatric cases were reviewed to elicit abuse or neglect status data for calendar year 1975. Data on 365 abuse or neglect cases were compared with 867 nonabused or nonneglected children (comparison group). A double blind case numbering system was employed to ensure confidentiality of data obtained. Abuse cases were dichotomized according to litigation status (e.g., adjudicated versus documented by clinical findings). Neglect cases were categorized by perceived parental control over circumstances leading to the neglect (e.g., voluntary versus involuntary neglect). Reliability sub-studies were conducted by study staff and Navajo volunteers to assess the degree of agreement in the classification of study case status. Tribal census data for 1975 provided baseline information from which the incidence of abuse or neglect involving Navajo children was established. Extrapolated study data suggests up to 8.6% of the reservation resident Navajo children under age 9 to have been abused or neglected. Various sociodemographic characteristics differentiating the abusive and neglectful families from those of the nonabused or nonneglected children in the comparison group are reported.

Résumé—Le problème des sévices et négligence à l'égard d'enfants se présente tout différemment chez les Américains "natifs" (par rapport aux Américains venus de l'extérieur) à cause d'importantes différences culturelles bien sûr. Les auteurs de cet article ont compulsé des dossiers provenant de tribunaux de tribu et d'état, du Bureau des Affaires Indiennes, des services sociaux de l'Etat ainsi qu'un certain nombre de cahiers de consultations pédiatriques ambulatoires. Ces documents se rapportaient à l'Année 1975 et aux enfants de moins de 9 ans. Les auteurs ont accumulés 365 cas de mauvais traitements, qu'ils ont comparés avec 867 situations où les enfants Navajos n'avaient pas été maltraités, ces derniers servant de groupe témoin. Pour assurer une certaine objectivité, les chercheurs ont utilisé une numérotation des documents dite à double insu. Les cas de sévices ont été partagés en deux catégories: ceux où après jugement on a conclu qu'il y avait eu sévices, et ceux où le traumatisme non-accidentel était évident cliniquement. Les cas de négligence furent divisés en: négligence volontaire et négligence involontaire. Des aides, notamment des volontaires Navajos, vérifièrent de façon indépendante que les cas étaient bien classés où ils devaient l'être. Pour la fréquence et la prévalence, la statistique a été fondée sur le recensement tribal de 1975. Il est apparu que le 8.6% (chiffre maximum) des enfants de la Réserve indienne Navajo, âgés de moins de 9 ans, ont été victimes de violence physique ou de négligence. On a pu établir des différences sociodémographiques entre les familles maltraitantes et les autres.

INTRODUCTION

CHILD ABUSE and neglect research has not always been successful in generating the quality of data necessary for developing prevention or intervention programs. This has been due to a lack of sufficiently quantifiable or precise definitions of abuse and neglect and a lack of representative comparison or control groups. Failure to differentiate between various types of abuse and neglect continues to be an impediment to developing a more thorough knowledge of these conditions. Bias believed present on types of conditions reported and specific groups more likely to be reported has inhibited systematic examination.

Passage of reporting statutes during the last two decades has led to dramatic increases in the visability of abuse and neglect. Among Native American populations such documentation has been less convincing since some Native American groups are not readily included in state-reported data because of jurisdictional divisions in health, social service and legal programs for Native Americans. Furthermore, there may well be a tendency to deny that such child maltreatment even exists by ascribing aberrant child care practices to cultural differences.

Agencies within and surrounding the Navajo Nation expressed interest in ascertaining the presence of child maltreatment to place into perspective those opinions which tend to deny any child maltreatment by ascribing abused child practices to cultural differences. Also, the interest in developing means to intervene early required knowledge of social circumstances associated with abuse or neglect.

The only data available on the nature and extent of Navajo child maltreatment is in the form of isolated agency counts of reported cases. The imprecision of definitions, reliance on single agency identification and a lack of consistency within or between agencies in reporting circumstances necessary for generalizing the findings to a broader group, contribute to a fragmented picture of child maltreatment. Collaboration between agencies is at best fragmented and population mobility adds to the problems of identification, intervention and, most importantly, programs designed for prevention.

THE NAVAJO NATION

The Navajo Nation, located in southwestern United States, has an estimated 120,000 (Navajo Tribal census data, 1970) Navajo Indians living within a 25,000 square mile area within the states of Arizona, New Mexico and a small portion of Utah. Most Navajo nationals live in varying degrees of rurality ranging from quasi-urban cities contiguous to the reservation to remote rural extended family communities on the reservation. There has been suggestion that the traditional Navajo extended matrilineal family is weakening [1]. Various social problems such as chemical abuse, suicide, and family dissolution have received investigative attention which suggests their extensive, but certainly not unique, presence among the Navajo [2–6].

National attention to child abuse and neglect during the last decade has had its impact on the Navajo Nation through passage of specific abuse and neglect Tribal legislation, provision of federal health and social services on the reservation, and activities by state and local agencies. In 1969 the Navajo Tribal Court identified procedures for handling abuse and neglect cases referred under its jurisdiction [7]. Surrounding states enacted their own legislation and increased responsibility for detection and reporting was placed upon medical and social agencies serving the reservation area.

STUDY METHODS

The study utilized data for 1975 as the base. Records from 29 agencies were reviewed to classify the type of abuse or neglect, and to obtain relevant sociodemographic data about the victim,

perpetrator, and pertinent socioeconomic conditions associated with each. Four gradients of abuse and neglect involving Navajo children under age 9 years were utilized and grouped as follows:

Group I—*Adjudicated Abuse:* adjudicatory proceedings concluded subject was abused.

Group II—*Documented Abuse:* substantiated that nonaccidental physical attack or injury was inflicted upon a child by one or more caretakers.

Group III—*Voluntary Neglect:* harm or risk to subject without documentation of abuse and under circumstances perceived as preventable by parents or caretakers, regardless of adjudication status.

Group IV—*Involuntary Neglect:* nonaccidental harm or risk to subject without documentation of abuse and from circumstances believed beyond control of parents or caretakers. All cases not clearly identified as voluntary neglect were assigned to Group IV, regardless of adjudication status.

Some controversy had been raised by child abuse and neglect specialists regarding separation of neglect into categories denoting parental complicity or involvement. Such a separation by perceived etiology had not been incorporated into other studies. It was judged essential to describe the circumstances under which the neglect exists so as to distinguish those circumstances over which the parents or caretakers were perceived to have some element of control. Also, such distinctions aid in identifying circumstances of sociocultural or socioeconomic status where social and health programs may be more capable of early intervention.

STUDY POPULATION

All cases adjudicated by Navajo Tribal or state court, and those derived from review of records of Navajo Area Bureau of Indian Affairs and state social agencies were included. Additional cases were sought from a systematic random sample of pediatric outpatient cases seen in 1975 at any of the Indian Health Service or private medical facilities serving the reservation area (Table 1). The pediatric OPD case review yielded 52 abuse or neglect cases and provided all 867 comparison children for the study. No significant difference was found between study and comparison children on measures of age or sex of the child, or ethnicity of parents.

Data collection was conducted using a double blind instrument method [8] which provided a range of sociodemographic and medical data while ensuring confidentiality and the capacity for duplicate removal to prevent overcounting.

Consistency in data abstraction between raters was conducted to determine the precision of measurement with multiple raters and to elicit suggestions of cultural differences in the classification of the study cases. The Bureau of Indian Affairs cases were abstracted by BIA staff with a 10% random sample rerated by study staff. A reversed procedure was used for Tribal Court data. Indian Health Service data were collected by a study staff team member who randomly exchanged a 4% sample of records for independent rerating by a second team member. Although some variation was found in recording sociodemographic data, all multiply abstracted cases were rated in the identical manner for the category of abuse, neglect or comparison status. Thus, at least consensual validity was achieved in status classification between raters and the reliability of data abstraction provided added confidence in the study conclusions.

RESULTS

A total of 2,026 records from the 29 sources were searched to derive study data. The 794 records of children omitted included 71 duplicate records and 723 records of non-Navajo children or people over age 9.

Data on 1,232 children were collected, including information on 867 (70.4%) comparison children drawn from the medical facilities and 365 (29.6%) abused or neglected children. Since

Table 1. Residency and Study Status by Primary Data Source Group

Study Status and Residency	Courts (7)	Social Services (10)	IHS Facilities (9)	Other Medical (3)	Subtotal	Total
I & II						
Abused Children						
On Reservation	1	41	0	2	44	
Off Reservation	0	8	0	0	8	52
III						
Voluntary Neglect Children						
On Reservation	46	114	7	1	168	
Off Reservation	7	40	5	0	52	220
IV						
Involuntary Neglect Children						
On Reservation	1	21	14	16	52	
Off Reservation	0	34	6	1	41	93
V						
Comparison Children						
On Reservation	0	0	643	99	742	
Off Reservation	0	0	103	22	125	867
Subtotal						
On Reservation	48	176	664	118	1,006	
Off Reservation	7	82	114	23	226	1,232
Total	55	258	778	141		1,232

all records were checked for duplication by child's and mother's names, dates of birth and sex, it is believed these numbers represent different individuals at the time of first diagnosis. Of the 365 Navajo children, 264 (72.3%) were residents of the reservation while the remaining 101 lived in contiguous communities.

Identification of 365 abuse and neglect cases was primarily through social service records with 47.4% (n = 173) of the 365 cases recorded by the BIA Social Services. An additional 23.4% (n = 85) of the cases were identified from state social service records, while only 14.2% were from medical facilities and the remaining 15.1% (n = 55) from court sources. Thus, 70.7% of all abuse or neglect cases were identified from the BIA and state social service records.

Abused or neglected versus comparison children (n = 1,232). Two abuse associated fatalities were noted. Of the 365 cases involving abuse or neglect, records indicated that only 117 (32.1%) received medical care related to the abuse or neglect incident. Only 55 children (15.1%) were formally handled by the courts.

Selected sociodemographic data suffered from incompleteness, depending upon variable, due to the retrospective design. This problem was especially acute with comparison children where demographic and family data were not routinely collected.

Although the abused and neglected children revealed higher rates of low birth weight, mental retardation, and chronic physical handicapping conditions than did the comparison children, the differences were not statistically significant (χ^2 = 4.38).*

Difference in family size, as inferred by number of siblings, was statistically significant between

*Unless otherwise noted, the Chi square test for independence was used for testing significance.

the groups. Regardless of inclusion ($\chi^2 = 51.3$, $p < .001$) or exclusion ($\chi^2 = 220.4$, $p < .001$) of the 33% with missing sibling data, the difference revealed the comparison children to have had significantly fewer siblings.

A statistically significant difference was also found in the parental marital status of abused or neglected and the comparison children ($\chi^2 = 113.7$, $p < .001$). Only 52.3% of the abused or neglected children had married parents compared to 85.5% of the nonabused or nonneglected children.

Mothers' ages, derived from birth certificate notations or recorded references from other data sources, were complete for 83% of the abused or neglected and 55% of the comparison group. The group differences are statistically significant whether including ($\chi^2 = 158.2$, $p < .001$) or excluding ($\chi^2 = 63.4$, $p < .001$) the unknown data. The mean age of the mothers of the abused or neglected children was 29.00 (S.D. 7.02) years while the comparable statistic for comparison mothers was 25.44 (S.D. 5.98) years. Among those with known maternal age data, 23.7% of the abused or neglected and 9.2% of the comparison children had mothers aged 35 or older.

Age data on the fathers were less complete than for mothers. The father's age, however, shows a trend similar to mothers where a statistically significantly higher proportion were in the older age group.

Family income source data were especially difficult to ascertain. The differences were, however, statistically significant regardless of whether the unknown group was included ($\chi^2 = 394.9$, $p < .001$) or excluded ($\chi^2 = 164.7$, $p < .001$) from analysis. Family income for 48.5% of the abused or neglected children was derived from governmental sources compared to only 4.7% for the comparison children. The percentage figures, when excluding unknown groups became 64.5% and 14.8%, respectively.

Differences between abused and neglected children ($n = 365$). Data in Table 2 are provided to isolate differences between the 52 children classified as abused (adjudicated and documented categories combined), the 220 voluntary neglect cases and the 93 involuntary neglect cases. For 94% of the study children both parents were Navajo and the remaining 6% had one Navajo parent. There was no significant difference in abuse or neglect status by parental ethnicity ($\chi^2 = 1.53$).

A statistically significant difference was found between the abuse or neglect status and severity of injury or harm ($\chi^2 = 29.2$, $p < .001$) suggesting that severity of harm may not be directly

Table 2. Selected Differences Between Abused and Neglected Children ($n = 365$)

	Abused Children ($n = 52$)		Voluntary Neglect Children ($n = 220$)		Involuntary Neglect Children ($n = 93$)		
Variable	Number	Percentage	Number	Percentage	Number	Percentage	p Value
Both parents Navajo	50	96.1	204	92.7	89	95.7	N.S.
Severe injury sustained	10	19.6	56	25.7	22	25.0	$p < .001$
Referred for social services	51	98.1	208	94.5	57	61.3	$p < .001$
Referred for medical care	14	26.9	66	30.0	36	38.7	$p < .001$
Disposition: To own home	21	40.4	53	24.1	42	45.1	$p < .001$
Parents married	28	53.8	112	50.9	51	54.8	$p < .001$
Income from public funds	21	40.4	124	56.4	23	24.7	$p < .001$

associated with deliberate assault (sic: abuse) on the child. A greater percentage of involuntarily neglected children (25.0%) sustained severe injury than did the abused children (19.6%). Referral for medical care at the time of abuse or neglect diagnosis was also found significantly associated with case status ($\chi^2 = 12.5$, $p < .001$). The involuntary neglect cases were more likely than other groups to have received a medical referral.

Social service referral at the time of diagnosis and involvement was present for 318 (87.5%) of the children and was significantly associated ($\chi^2 = 60.2$, $p < .001$) with the abuse or neglect status. Nearly all (98.1%) of the abused children were so referred while 94.5% of the voluntary groups and 61.3% of the involuntary neglect groups were so referred.

Case disposition for those abused or neglected revealed that 116 (31.7%) were maintained in their own homes, 132 (36.2%) were placed with relatives or foster care and the remaining 117 (32.1%) were pending disposition in a medical facility or temporarily sheltered. The abused and involuntarily neglected children were found more likely to remain in their own home, whereas those experiencing voluntary neglect were least likely ($\chi^2 = 22.0$, $p < .001$).

Marital status, whether legal or consensual, was not found different between the abuse or neglect groups. Parents of children classified as voluntarily neglected were dependent on public funds for support in 56.4% of the cases compared to 40.4% for abusive parents and 24.7% for the involuntary neglect parents.

INCIDENCE

The study revealed 264 reservation resident cases of abuse or neglect plus 101 cases involving Navajo children under age 9 living in surrounding communities. Since 1975 Tribal census data reflected 25,542 reservation resident Navajo children under age 9, observed and extrapolated incidence rates are calculated on the 264 cases involving children living on the reservation. Table 3 is calculated on the number of reservation resident children ($n = 264$) and shows a rate of 10.34 observed cases per 1,000 children.

The Fort Defiance agency area revealed the highest recorded rate, over 50% higher than the mean, and suggested: (1) increased awareness and identification of cases; (2) differences in mobility and residence characteristics of the population; or (3) actual differences in abuse and neglect occurrence. Incidence data are presented for the Navajo agency areas since recent agency mid-census datum was made available covering the same time period used for this study.

Table 3. 1975 Navajo Child Population <9 Years by Agency and Rate of Abuse or Neglect

Agency	Population <9 Years*	Number of 1975 Abuse/Neglect Cases†	Rate per 1,000 Children
Chinle	3,469	34	9.80
Eastern	5,733	50	8.72
Fort Defiance	5,967	94	15.75
Shiprock	4,566	47	10.29
Western	5,807	39	6.72
Total	25,542	264	10.34

*Revised Navajo population figures for agencies within the Navajo Nation, (5/3/78) with <9 year population cited by Dr. Ronald G. Faich, Director of Research.

†Includes only reservation resident children.

Table 4. Comparison of 1975 Data for IHS and Non-IHS Medical Facility

	IHS	Non-IHS	Total
Estimated unduplicated number of Navajo children (0–8 years) seen at reservation area medical facilities during 1975			
Reservation resident	33,235	1,438	34,673
Off reservation resident	5,706	256	5,962
Study sample	779	140*	919
Percentage of universe	2.00	10.95	2.26
Number of abuse/neglect cases recorded	33	19	52
Percentage of sample found abused or neglected	4.24	13.57	5.66

*Small numbers of Navajo children seen at these facilities demanded an alteration in sampling procedures. One facility with only 49 Navajo children under age 9 seen in 1975 had the total population included; a second facility provided a 10% random sample while the third provided a 3.6% random sample.

DISCUSSION

The comprehensiveness of data sources and methods employed to remove any possible duplicate cases or comparison children make it such that it was more likely to have missed cases of abuse or neglect than to have erroneously included nonabuse or neglect cases.

While the OPD records for developing a comparison group cannot be assumed representative of the Navajo child population, the frequency of abuse or neglect found may be used for extrapolation purposes. If one assumes that abuse or neglect did exist among the IHS outpatient population at the same rate as found within the sample (viz: assume an unbiased sample) and assume reservation resident children use OPD services at a pace similar to those living in surrounding areas, the total abuse and neglect cases would represent 4.24% of that population (Table 4). Indian Health Service figures suggest 33,235 unduplicated reservation resident Navajo children under 9 years of age were seen at their facilities during 1975. Tribal census suggests a maximum of 25,542 children under age 9 existed in 1975. This discrepancy makes incidence calculations tenuous since rates cannot be calculated only on sound numerator data. However, using IHS and Tribal census statistics separately as a denominator suggests abuse and neglect rates among reservation resident Navajo children under 9 years of age to be 80.58 and 67.77 per 1,000 respectively (i.e., observed number from court and social service agencies plus expected number from OPD sampling). Although it may be uncomfortable to accept either projected figure, the study design directs attention to an incidence within that range. Therefore, the actual observed figure revealed 1.03% while the projected figures suggest that between 6.8% and 8.6% of the reservation resident Navajo children under age 9 years were subjected to a defined abuse or neglect condition on at least one occasion during 1975. Any likelihood that abused or neglected children may be seen more frequently in medical facilities would reduce the extrapolated calculation. These

incidence figures should not be considered as maximum, since it is entirely possible that abused or neglected children may not have come to the attention of agencies or were not so diagnosed when they did appear.

IMPLICATIONS FOR DETECTION AND PREVENTION

The study objectives and ascertaining the presence of child maltreatment, assessing sociodemographic characteristics and obtaining baseline estimates of incidence were accomplished. Use of a comparison group and the comprehensiveness of data source measures used to remove possible duplicate records contributed to the precision of detecting cases. Court derived frequency data most likely represent an undercount, while medical facility data were within limits of that which would be expected. Consistency between IHS figures and those detected in this study suggest the representativeness of sample cases.

The abused or neglected child was found to be from larger and more socially incomplete families than those in the comparison group. The parents were more frequently unemployed and supported by public funds. Although authorities have frequently suggested early age at first pregnancy as associated with abuse or neglect, it is possible their data reflected a somewhat different pathogenesis and other factors, not measured, may have been elicited to produce results found by this study. This issue merits additional analysis with sibling age data.

There is little doubt that low income was associated with those identified as experiencing abuse or neglect. The impressively high social service referral rate, however, warrants cautious interpretation. It should be remembered that 70.7% of the total identified abuse or neglect cases came from social service sources. When adding the court derived cases, which are almost universally known to social services, the percentage increases to 85.8% and suggests that few of the medical facility derived cases may have been referred for social service intervention.

The involuntarily neglected group was over six times more likely (36.0% vs. 5.5%) not to be referred as was the voluntary neglect group. While there is reason to believe all abused or neglected children should have been referred, the group least likely to have been referred was the one for whom social services might have resources for effective secondary intervention (sic: the involuntary neglect group). This was the group who, by definition, had neglected children through circumstances outside their own control. The precipitating factors—whether social, cultural, economic or religious—are ones for which programs involving health education, income maintenance, flexibility in drawing folk and modern medicine closer together, job training and placement, housing and food supplementation may be effective for providing earlier identification or prevention.

Placement in the home was likely influenced by a perceived capacity of the home to provide care. A high proportion of parental absence and parental substance abuse (primarily alcohol) was found among the voluntary neglect group and likely contributed to the high proportion receiving out-of-home care. This is another area where community programs may achieve some measure of success if the substance abuse can be effectively addressed so as to reduce consequences such as child maltreatment.

The various types of family pathologies previously reported, revealed the abused and neglected child to be quite unlike the comparison child. The differences appear in areas which have traditionally been difficult to specifically prevent on an individual basis. However, program administrators need to carefully evaluate these data to design programs for primary prevention where possible and, at the very least, to implement early detection and intervention to prevent further abuse or neglect.

These study data do have limitations and other areas must be examined to further isolate factors which can be used to maximize the developmental opportunities for children. Psychosocial data are necessary to more fully understand the means by which the family can provide for its young and to gain information on factors which may tend to make some children a higher risk for

maltreatment than others. Documentation of the presence of child maltreatment within the specific Native American population has been made and it is now incumbent on the community, including the health and social service agencies, to take deliberate action. Development of prevention programs and analysis of their impact is essential.

This study, while giving caution to the specific rates given, does reflect frequencies of abuse and neglect among Navajo children. The problem is real. What is to be done about the problem provides an ominous challenge to those charged with the responsibility of protecting and promoting the social, physical and emotional health of children.

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