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Survey of Blind Schools in North West Frontier Province (An Institutional Based Study)

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Objectives: To find out the common causes of blindness in children necessitating admission in blind school in NWFP. To identify the possible risk factors. To analyze the anatomical sites of abnormality. To recommend measures to prevent childhood blindness in NWFP. Design: It is a study of students admitted to four blind schools in NWFP. Place and duration: Children of blind schools of Peshawar (Girls and Boys) Mardan and Kohat were examined over a period of four days from 24th February to 28th February 1998. Methods: The principals of the blind schools were informed through proper channel. A modified Standard WHOIPBL examination card was used. In addition to the name, age, sex, father's name, father's occupation and address, inquiries were made into consanguinity, family history and previous eye surgery. Detailed ocular assessment was done for decision making purposes. The ophthalmic disorders were classified according to their anatomical sites of abnormality and also on etiological basis. On anatomical basis, the disorders were divided into disorders affecting whole globe, cornea, lens, uvea, retina and optic nerve. On etiological basis, they were divided into hereditary, intrauterine, prenatal, postnatal and diseases of unknown etiology. On the basis of intervention, they were divided into those who could benefit from medical treatment, those who could benefit from surgical treatment and those who could benefit from both medical and surgical treatment. Children who could benefit from optical treatment were provided with glasses and optical aids. Unfortunately there were still many students who could not benefit from any treatment at all. Prognosis for vision was described, as could be improved, likely to remain stable or likely to deteriorate. Results: 61 Children were examined from Blind Schools of Peshawar (Girls & Boys), Mardan and Kohat. Retinal disorders were the most common cause of blindness in the children and accounted for 22 (36.06%), disorders of whole globe accounted for 14 (22.95%), Lens for 12 (19.67%), Optic nerve for 8 (13.11%), and Cornea for 3(4.91%). On etiological basis it was observed that hereditary factors accounted for 29(47.54%), intrauterine factor for 11(18.03%), postnatal for 5(8.19%), and cases where etiology could not be determined accounted for 16(26.22%). Consanguinity was present in 31 (50.8%). Family history of same condition was present in 28(45.9%) children. The prognosis for vision in 96% of children was poor. It was observed that 9 (15%) children were not blind according to WHO criteria for blindness. 4(7%) children could be taken out of the blind school by surgical and optical intervention. Thus 22% of the children were misplaced in the blind schools. It was observed that no proper Ophthalmic Examination was carried out before admitting the children in the blind schools. Proper education facilities and vocational training was not provided to the children. Conclusions: Retinal disorders were the most common cause of blindness necessitating admission in Blind School. Hereditary factors accounted for 50% of blindness. No case of Ophthalmia neonatorum and retinopathy of prematurity were found in this study. 3.22% of children are misplaced in blind schools. 15% of children of blind school do not need admission in blind schools. 7% can be taken out of the blind school by medical, surgical or optical intervention.