

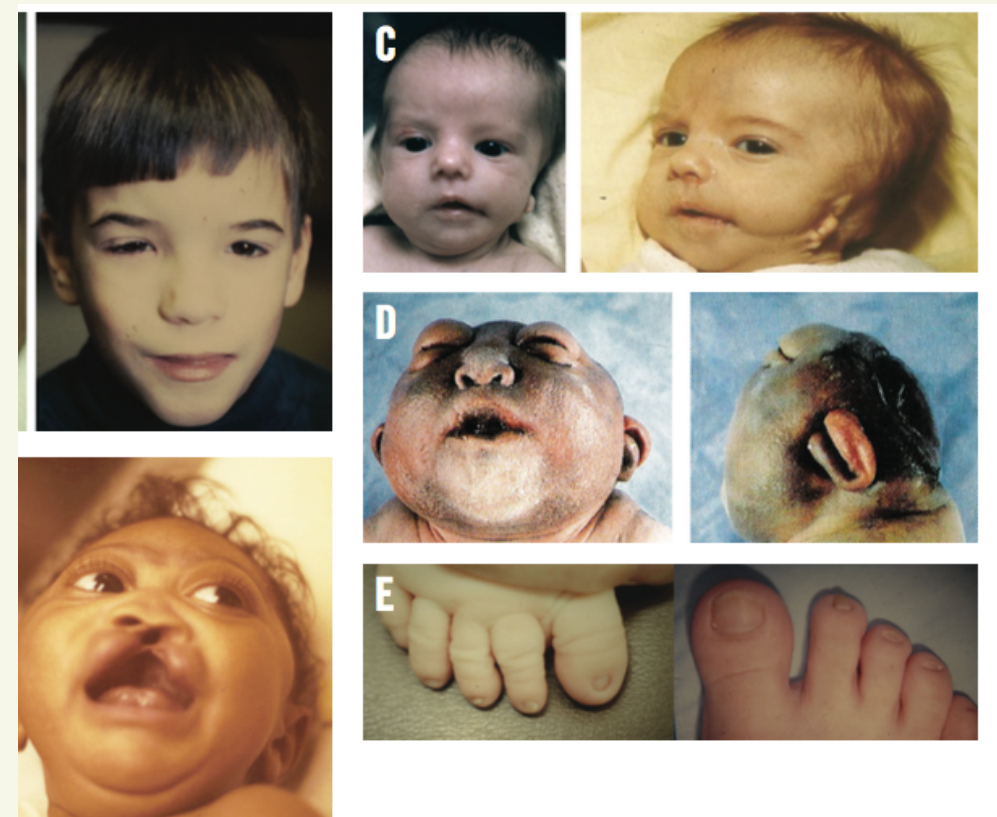
PREVALENCE OF CONGENITAL DEFECTS AMONG CONSANGUINEOUS MARRIAGES IN PAKISTAN – A SYSTEMATIC REVIEW

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INTRODUCTION

Consanguineous marriage is the marriage within the family between two first cousins. The Hallmark of consanguineous marriages is congenital defects among offspring. Pakistan has been showing the highest trend of consanguineous marriages. Consanguineous unions have remained under continuous investigation by social scientists, medical researchers, biologists, and physicians. However, it received less attention in mainstream demographic research. Major congenital abnormalities or birth defects carry significant medical, surgical, cosmetic and lifestyle consequences. Such abnormalities may be syndromic, involving multiple organ systems, or can be isolated. Overall, 2% to 4% of live births involve congenital abnormalities. The risk for birth defects in the offspring of first cousin parents is substantially higher than in the offspring of non-consanguineous parents. An investigation of the trend of consanguineous marriages in Pakistan from 1990 to 2018 presented its strong association with increased rates of abortion, stillbirths, pregnancy terminations, low birth weights, increased mortality, and congenital malformations.

OBJECTIVE

To determine the prevalence of congenital defects resulting from consanguineous marriages in Pakistan

METHODOLOGY

The search approach adhered to PRISMA) checklist (9) and the PRISMA guidelines were followed throughout. An extensive systematic search of three electronic databases; PubMed, Google scholar and The Cochrane Library was undertaken. Studies done between 2014 and September 2022 were selected. Combination of the following terms was used for the search:
 Category 1: Population (Children of consanguineous marriages couples of Pakistan)
 Category 2: Disease (Congenital defects and congenital diseases)
 Category 3: Prevalence or Epidemiology
 With the search criteria mentioned above, a new search was run on each electrosearch engine one by one. Additional publications were found by manually searching the reference list searches. The articles were added on the mendeley desktop and duplications were removed.

RESULTS

Prevalence of congenital abnormalities among children of consanguineous marriages were very high . 35 percent of children as a result of consanguineous marriages suffered from genetic disease or postnatal death. Complications found: Mental retardation 51% Physical disability 20% Mute and deaf 19.44% Congenital abnormality 8.33% Bar columns show the results



CONCLUSION

There is an increased risk of congenital defects among consanguineous marriages in Pakistan. Children of such couples have an enhanced risk of developing physical and mental abnormalities. They are at higher threat to suffer from mental retardation, congenital deafness, congenital heart diseases, Charcot-Marie Tooth Syndrome and autosomal recessive disorders. There is a dire need for Mass awareness campaigns and counseling sessions among the public so that people could comprehend the greater risk of developing congenital defects and autosomal recessive disorders among the consanguineous couple's children. In this way, we can reduce these preventable disorders from our country.

