

Letter to the Editor

Paraguayan Parents' Supernatural Beliefs on Causes of Birth Defects

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Dear Editor,

Birth defects, also known as congenital disorders, are a significant health issue impacting at least five million births annually worldwide¹. In 2001 there were 9,342 children born with a birth defect in Paraguay, out of 170,000 total births, for a prevalence of 55 per 1,000 live births². Birth defects contribute substantially to the burden of morbidity and mortality³. Congenital anomalies are the second most common cause of death in children under 5 years of age in Paraguay, after prematurity². Neonatal mortality from congenital malformations was approximately 25 per 100 live births in Paraguay in 2016³.

The supernatural is phenomena or entities that are not subject to the laws of nature. The term of supernatural is attributed to non-physical entities, such as angels, demons (also known as satan and devil), gods, and spirits. Birth defects have been known since ancient ages⁴. In history, births defects were often taken as omens, signs of Allah, or moral warnings to be wielded by society at large as a tool for manipulation in various ways^{4,5}. Sixteenth century medical authors associated biomedical explanations with social upheavals and theology in order to understand the individual sins and the signs of the times presented by Allah through malformed human births. Today, many people in many cultures of the world have believed the effects of supernatural powers can cause birth defects since early medieval^{4,5}. Herein, we discuss parents' supernatural beliefs on causes of birth defects to draw attention to the importance of supernatural powers.

Researchers have shown that some cultural groups

believe that a family is "given" a child with a disorder as a punishment from Allah for parental sin. The "evil eye," an eye or glance held capable of inflicting harm, is a force that gets much recognition in Middle Eastern, African American, European American, and Hispanic cultures for being the determinant of bad fortune, including birth defects⁶. Cohen et al.⁶ assessed ethnocultural beliefs regarding the causes of birth defects and genetic disorders. The questions of "someone casting the evil eye or spell", "Allah punishing the parents for a sin" and "having bad thoughts" were found statistically significant between all ethnic groups. Most participants (62%) were Christians (Catholic>Protestant) in that study⁶. In the study of Felipe-Dimog et al.⁷, three (17%) mothers stated that the birth defect was given by Allah. In cases where it was difficult to determine the reason for the child's birth defect, about one or two of the mothers mentioned that the doctor would say that it is only Allah that knows what caused it. Most participants were of Ilocano ethnicity, and identified themselves as Roman Catholic Christians in this series⁷.

Taye⁸ analyzed parents' perceived knowledge and beliefs on congenital malformations and their causes in the Amhara region, Ethiopia. Most of the Amhara people are Christians with a good number of Muslims. The majority of the respondents stated that most of the society believed that the causes of congenital malformations were punishment by Allah due to estrangement from Allah or sins committed by affected children's parents/families considered as cursed and evildoers by the community⁸. In the study of Croot et al.⁹, all parents, Muslims, made reference to theological

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explanations as to why they had a child with a disability; however, most parents also gave biomedical or other explanations. Theological reasons for disability were as follows: gift from Allah, test from Allah, destiny of parents, a punishment from Allah, as a result of a curse or the work of evil spirits (Jinn)⁹. In another series, there were many beliefs around the causes of congenital anomalies including “extra-marital sex”, “being possessed by demons” and “Allah’s plan.” The community in this study are largely Christian, and very religious¹⁰. According to the best of knowledge, no study has been performed about parents’ perceptions and beliefs on the causes of birth defects in Paraguay.

In conclusion, birth defects, known since ancient times, are a health problem with high morbidity and mortality seen all over the world. The supernatural causes that parents reported as the

cause of birth defects emerged in nine themes: (a) Allah’s will; (b) destiny (fate or qadar); (c) a warning from Allah; (d) a test from Allah; (e) a gift from Allah; (f) a punishment from Allah; (g) evil eye (nazar); (h) jinn possession; and (i) magic (sorcery or sihr). We strongly believe that these themes, mentioned by parents as a cause of birth defects are right, real, and true, but not superstition or misconception. These supernatural causes may be responsible for birth defects in some children. Allah says “No kind of calamity can occur, except by the leave of Allah¹¹.” Lastly, we think that comprehensive studies should be performed on parents’ knowledge, perceptions and beliefs on the causes of birth defects in Paraguay. These studies will helpful contribution to health professional understanding and the literature.

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