



CLOSELY RELATED MARRIAGES AND MENTAL DISORDERS IN OFFSPRING

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✓ *Resume*

A closely related relationship (BS) is a reproductive relationship between partners who have one or more common ancestors, an increased number of identical genes and, accordingly, a higher risk of hereditary diseases of genetic origin for offspring.

Traditionally, many peoples support and welcome the practice of creating a new family within a certain clan, nationality or religious group. The common ancestor is often himself a descendant of BS, etc.

In such cases, the "progenitor effect" may be noted: a rather rare hereditary disease or a disease with a genetic predisposition will occur much more often than in the population and manifest in many family members in several generations.

Keywords: closely related marriage, mental disorders, child's age.

БЛИЗКОРОДСТВЕННЫЕ БРАКИ И ПСИХИЧЕСКИЕ РАССТРОЙСТВА У ПОТОМСТВА

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✓ *Резюме*

Близкородственная связь (БС) – репродуктивные отношения между партнерами, имеющими одного или более общих предков, повышенное количество одинаковых генов и, соответственно, более высокий риск наследственных заболеваний генного происхождения для потомства.

Традиционно, у многих народов поддерживается и приветствуется практика создания новой семьи внутри некоего клана, национальности или религиозной группы. Общих предок зачастую и сам является потомком БС и т.д.

В таких случаях может отмечаться «эффект прародителя»: довольно редкое наследственное заболевание или болезнь с генетической предрасположенностью будут встречаться значительно чаще, чем в популяции и проявляться у многих членов семьи в нескольких поколениях.

Ключевые слова: близкородственный брак, психическая расстройства, детской возраст.

АВЛОДЛАРДАГИ РУҲИЙ КАСАЛЛИКЛАР БИЛАН БОҒЛИҚ БЎЛГАН ЯҚИН ҚАРИНДОШЛИК НИКОҲИ

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Яқиндан боғлиқ муносабатлар (БС) - бу бир ёки бир нечта умумий аجدодларга ега бўлган шериклар ўртасидаги репродуктив муносабатлар, бир хил генлар сонининг кўпайиши ва шунга мос равишда насл учун генетик келиб чиқадиган ирсий касалликлар хавфи юқори.

Анъанага кўра, кўплаб халқлар маълум бир клан, миллат ёки диний гуруҳ ичида янги оила яратиш амалиётини кўллаб-қувватлайдилар ва қабул қиладилар. Умумий аجدоднинг ўзи кўпинча БС лар авлодидир ва ҳоказо.

Бундай ҳолларда "насл-насаб эффекти" қайд этилиши мумкин: жуда кам учрайдиган ирсий касаллик ёки генетик мойиллиги бўлган касаллик популяцияга қараганда тез-тез учрайди ва кўплаб оила аъзоларида бир неча авлодларда намоён бўлади.

Калит сўзлар: яқиндан боғлиқ никоҳ, руҳий касалликлар, боланинг ёши.

Relevance

A closely related marriage is considered to be a marriage between relatives of varying degrees. Close people have a higher chance of carrying the same alleles and therefore their children are more homozygous than those born from unrelated unions[2].

Several factors contribute to closely related marriages. These are economic and cultural factors, social and cultural isolation. In Bedouin society, for example, the reasons for cousin marriages were clan solidarity, interpersonal compatibility, preservation of family property, parental rights, and social protection for women[5].

The harmful effects of closely related marriages are high. In this case, the frequency of autosomal recessive hereditary diseases increases significantly[7]. In addition, with closely related marriages, the incidence of schizophrenia, congenital heart defects, such as septal defects (atria, ventricles and atrioventricular) increases somewhat. It is also known about an increase in the frequency of pulmonary artery stenosis and atresia, cystic fibrosis, cystinosis, nephronophthisis, spinal muscular atrophy, albinism, achromatopsia, auditory disorders, central nervous system abnormalities, congenital anomalies, physical disabilities, mental retardation and malignant neoplasms[1,8].

There is also an additional risk of infant and child mortality.

When providing medical and genetic counseling for those wishing to marry and having common relatives, the geneticist takes into account many factors.

Importance is attached to all diseases of relatives, cases of stillbirth, miscarriage, long-term chronic diseases in adults and children, cases of mental retardation or speech development disorders, body features – (abnormally high / low height and /or weight) - that is, all signs that allow us to suspect a hereditary disease[6].

A geneticist evaluates the prognosis of the offspring's health for such a related family.

Specific types of risks (monogenic and chromosomal pathology, congenital malformations) are determined separately for each family during each pregnancy. In some cases, genetic testing is prescribed for the carriage of "harmful" genes and their presence in both spouses [4]. Neither social nor legal norms support closely related relationships with a high degree of kinship. However, in real life such cases occur[9].

At the same time, descendants of such connections who are concerned about their health and the prognosis of their offspring most often turn to medical and genetic counseling[3]. Sometimes information about a closely related relationship is questionable, and in some cases it is possible to conduct a genetic examination (genetic testing).

The purpose of the study. Analysis of the problem of closely related marriages, assessment of their impact on the development of mental pathology in children.

Materials and methods

To solve the tasks set, we conducted a survey of children who are registered in the AOPND. All the patients of Andijan were taken, families with a burdened kinship marriage and a kinship marriage with a mental burden were selected from them.

Having examined these families, we identified 50 children registered in the AOPND who had mental disorders in the form of mental retardation, oligophrenia, the presence of convulsive seizures, mood swings, changes in behavior, as well as children with organic brain damage.

The results of the study

The largest number of children falls at the age of 6-10 years, of which boys – 9 (20%) girls - 11 (22%). In second place are children with mental disorders aged 11-15 years, among them girls — 11 (22%), boys — 8 (16%). 8 sick children aged 16-18 years. Of these, 5 (10%) are boys, 3 (6%) are girls. And the smallest number of identified mentally ill children belongs to the age from 1 to 5 years, this is 1 (2%) boy, 1 (2%) girl. Thus, it can be seen from the contents of the table that the manifestations of mental disorders extend more to the age of 6-15 years. These are 40 (80%) patients, of which boys – 18 (36%), girls - 22 (44%). The control group included children with similar mental disorders, but the parents of these children were not married and did not have mentally burdened heredity, this group was selected based on a 10% representative sample by random numbers (Table No. 2) From 43 examined, the control group included children whose parents are healthy, they are not in a related marriage, without hereditary burdens of mental illness. This group was divided by age and gender. The largest number of children falls at the age of 6-10 years 18 (41.8%) children, of them boys — 8 (18.6%), girls – 10 (23.2%). In second place are children with mental disorders aged 11-15 years,

of which boys — 7 (16.3%), girls — 9 (21.0%), teenagers aged 16-18 years make up the 3rd group, of which boys — 4 (9.3%), girls — 3 (7%), only 7 (16.3%) And the smallest number mentally ill children belong to the age from 1 one year to 5 years, this is 1 (2%) boy, 1 (2%) girl. Thus, it can be seen from this table that the manifestations of mental disorders are more common at the age of 6-15 years. These are 34 (79%) patients, of them boys — 15 (34.9%), girls — 19 (44.2%). When examining children by nosology in thematic patients with related marriages and hereditary burden, the following diseases were identified. In the first place is oligophrenia, in the second place are children with organic damage to the central nervous system and in the third place are children diagnosed with epilepsy.

When analyzing these data, it can be seen that the largest number falls on oligophrenia — 26 (74.3%) of all children examined, among them girls — 16 (45.7%), boys — 10 (28.5%). 5 (14.3%) children were identified with organic damage to the central nervous system, where 4 (11.5%) boys and 1 (2.8%) girls. In third place are patients with epilepsy, only 4 (11.5%) children, 4 of them boys (11.5%).

During the examination of children in related marriages with hereditary burden, the following diseases were identified: on the 1st place, oligophrenia, on the 2nd place, children with organic damage to the central nervous system and on the 3rd place, children diagnosed with epilepsy.

When analyzing these data, it can be seen that the greatest proportion falls on oligophrenia — 34 (68%) of all children examined, of which girls — 21 (42%) boys — 13 (26%) With organic damage to the central nervous system, 10 (20%) children were identified, among which boys — 7 (14%), girls — 3 (6%). There are more people with epilepsy in third place, there are only 6 children (12%), of them boys — 4 (8%), girls - 2 (4%)

When analyzing mental disorders according to nosology in thematic patients in the presence of related marriages without hereditary burden, the following diseases were identified. The largest number of children diagnosed with oligophrenia, only 8 (53.4%) children, of which boys — 3 (20%) girls — 5 (33.4%).

On the 2nd place are children with organic damage to the central nervous system, a total of 5 cases (33.3%), of which boys — 3 (20%) girls — 2 (13.3%) On the 3rd place are children with epilepsy, only 2 (13.3%) children, of which boys — no; girls — 2 (13.3%)

Thus, from this table it can be seen that oligophrenia is the largest number in the examination of children, 8 (53.4%) cases. Of these, boys — 3 (20%) girls — 5 (33.4%) In the control group, the examined children were distributed according to the following nosologies. A total of 43 patients, including 20 boys (46.5%), 23 girls (53.5%).

In the first place - children with a diagnosis of oligophrenia, in the 2nd place — children with organic damage to the central nervous system and in the 3rd place — children with a diagnosis of epilepsy. From these data it can be seen that the greatest proportion falls on oligophrenia — 30 (69.7%), of all the children examined, of them girls — 18 (48%), boys - 12 (27.9%). 7 (16.3) children were diagnosed with organic CNS lesion, where boys — 5 (11.6%), and girls — 2 (4.7%). In third place are patients with epilepsy, only 6 (14%), of which boys — 3 (7%) girls — 3 (7%).

During the examination, 50 children with mental disorders were identified, including 24 boys (48%) and 26 girls (52%) under the age of 18.

This group was divided by age and gender: from 1 to 5 years old, boys make up 1 (2%), girls 1 (2%). Total — 2 (4%) from 6 to 10 years old boys make up 10 (20%), girls 11 (22%) Total — 21 (42%) from 11 to 15 years old boys make up 8 (16%), girls 11 (22%).

In total — 19 (38%) from 16 to 18 years old, boys make up 5 (10%), girls 3 (6%). Nosology data is encrypted by ICD-10 "Clinical guidelines for the diagnosis and treatment of mental and behavioral disorders".

Conclusion

The ban on closely related marriages (between blood relatives of the first line) goes back to ancient times. Such a ban dramatically reduces the likelihood of miscarriage, stillbirth and the development of hereditary diseases in offspring. On the other hand, marriages between cousins (fourth-line relatives) are not uncommon in many countries - but children from such marriages face an increased risk of developing mental illness in adulthood.

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