

A Study on the Causes of Intellectual Disability in Children and Adolescents of Kabul City of Afghanistan

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ABSTRACT: The present study, attempting to examine major causes of intellectual disabilities of children and adolescents in the age range of 7-21 years, was conducted in Kabul city of Afghanistan country. The research methodology was descriptive, survey. To this end, 53 people in the age range of 7-21 years were chosen from all intellectually disabled children and adolescents of Kabul city through available sampling, by referring to hospital and rehabilitation centers. To gather data, a researcher-made inventory for examining the prevalence rate and frequency of disabilities was utilized and its validity and reliability was checked psychometrically. The findings revealed that genetic and prenatal factors had the highest share as the causes of disability and this priority is also evident in its effectiveness on both sexes. According to the results, low level of culture and awareness of families as regards effective factors which result in disability is apparent and demands serious attention on the part of policy makers of health and cure domain of Afghanistan country.

Keywords: Intellectual Disability, Children, Adolescents

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INTRODUCTION

Health as an individual-social value, in line with the guidelines of WHO and from the viewpoint of all nations and schools of thought, has been regarded as the most principal and primary rights and needs of human that achieving its highest level is considered a social-national goal of all governments. Further, health has been conceived as the most long-lasting social phenomenon and the oldest value of human's life; in a way that for centuries many cultures, values, beliefs, policies, ethnicities and even clothing and accent have greatly changed but the human's need for health and survival has still remained strong and unchangeable. Human beings are constantly on the verge of some illnesses, events and unwanted damages that can deprive them of the gift of health and an independent life temporarily or permanently. Different factors threaten human's life and some parts of the population of every country always will suffer from disabilities and physical, mental, sensory and motor pathologies [1].

One type of disability is intellectual disability which has been the greatest problem of human societies. Intellectually disabled children have special developmental and health care needs. Intellectual disability or in other terms, mental retardation is not a fresh and new topic and in every period and time there have been people in society who were not normal in respect of intellectual activities [2]. Intellectual disability which involves 2-3 per cent of children is a long-term disability due to which general functioning of intelligence in comparison to chronological age of the child is significantly lower than average and it is accompanied by defections in coping behavior of the child. Emergence rate of intellectual disability in different races varies and has reported to be 3.7 per thousand births in European countries and 5.9 per thousand births in non-European countries. The causes for intellectual disabilities were diverse and genetic as well as environmental factors are involved; in its mild form environmental factors and in its extreme kind biological factors are mostly involved. However, more than half of the cases, the causes have remained unknown [3].

In regards to the rate of children's disability and people with disabilities in Afghanistan, no valid and comprehensive statistics exist and the numbers reported in this paper are approximate which rest on the statistics derived from the disabled people census in Afghanistan as well as international pieces of research that have considered special condition of Afghanistan that includes disabilities stemmed from war, restricted access to hygiene service, malnutrition and also cousin marriages [4]. In accordance with the statistics of Afghanistan Public Ministry of Health 5909400 disabled persons live in Afghanistan despite the fact that educational ministry and UNICEF have estimated the number of the disabled to be 631000 and UNPF estimated them to be 807300. According to facts and figures of Handicap International Institute , 655930 disabled people exist in Afghanistan that their dispersion differs in different areas of Afghanistan. Number of the disabled varies with respect to time and its definition. For instance, different kinds of disabilities resulted from the wars of recent three decades in Afghanistan did not exist in last 50 years, or currently, the number of disabilities resulted from paralysis is undoubtedly less

than one century ago. Hence, disability is attributed to a set of physical or psychological disorders which hinder an individual from continuing an ordinary and independent life individually or socially. In other words, disability is associated with deprivation that an individual experiences as a result of some disorders and disabilities. Disability is likewise subject to the relationship between the disabled and their environments; and it occurs when these individuals encounter with cultural, physical, or social obstacles that impede them to enjoy the society's different systems that are accessible for other residents. Therefore, disability is called a lack or a decrease of opportunities to share social life as equal as others [5].

The percentage of different disabilities particularly in rural and urban areas, compared with international averages is drastically remarkable and also adaptation in families with disabled children is weaker than those families who do not have a disabled child. Moreover, the presence of a disabled child in family is regarded as a crisis [6]. That passing it entails restructuring of goals, structures and style of family's life as well as instructional services, counseling and psychological supports so as to make an appropriate adaptation [7]. Accordingly, the recognition and explanation of the various causes of the emergence of intellectual, sensory and motor-physical disabilities of children and adolescents in different stages of growth and eventually the preparation of a plan to prevent disabilities in Afghanistan are on the operators of the country's ministry of education, health and cure. Thus, the current study targeted at elucidating the major causes of disabilities and creating an information bank on the causes of intellectual disabilities of children and adolescents of Kabul city is to aid and design a kind of descriptive method for preventing any disabilities in school-aged children and adolescents of urban and rural areas of Afghanistan country.

MATERIAL AND METHODS

This study enjoyed a descriptive (survey) methodology. In such studies the researcher looks for the situation itself and the relationships between the phenomena as they are and h/she does not manipulate the research variables.

Research population and sample

The statistical population comprised all intellectually disabled children and adolescents ranged in age from 7 to 21 in Kabul city (Afghanistan). As there were no exact statistics about this group in Kabul city, 53 people were selected from the patients through available sampling method by referring to hospital and rehabilitation centers.

Data gathering instruments

In order to collect data, researcher-made inventory for examining the prevalence rate and frequency of disabilities was made use of. This inventory is set on five scales: children or adolescents' profiles, the child situation from the beginning of birth, early growth stages of the child, child's family, the probable cause or causes of disability. Each scale consists of a number of questions and the scale of the causes of disability covers 25 questions. The reliability and validity of this questionnaire were examined from a psychometric view. Face and content validity of the questionnaire were verified by specialists. Additionally, the reliability of this questionnaire was obtained to be 0.76 by Alpha Cronbach.

Statistical methods of data analysis and interpretation

To examine all questions of the research, descriptive statistical methods including frequency, percentage and average were used and for an inferential interpretation, Chi-square statistical method was used.

RESULTS

It is shown in table 1 that 23 cases (43.4 percent) of intellectual disability are hereditary, 19 cases (35.8 percent) are related to the problems of pregnancy period, 1 case (1.9 percent) is due to the problems of birth and 10 cases (18.9 per cent) are attributed to the illnesses and events of growth period.

Table 1. The causes of intellectual disability

| The causes of disability | Number | Percentage | Cumulative Percentage |
|---------------------------------------|--------|------------|-----------------------|
| Hereditary | 23 | 43.4 | 43.4 |
| Pregnancy period | 19 | 35.8 | 79.2 |
| birth time problems | 1 | 1.9 | 81.1 |
| illnesses and events of growth period | 10 | 18.9 | 100 |
| Total | 53 | 100 | - |

The results of table 2 demonstrate that the calculated chi-square ($X^2 = 21.79$) is meaningful at the level of 0.0001, that is, a meaningful relationship (0.0001) exists between the major causes of intellectual disability and having an intellectually disabled child.

Table 2. Chi-square and the main causes of children's intellectual disability

| Cause | Observed | Predicted | Left |
|---------------------------------------|----------|-----------|-------|
| Hereditary | 23 | 13.3 | 9.8 |
| pregnancy period | 19 | 13.3 | 5.8 |
| birth time problems | 1 | 13.3 | -12.3 |
| illnesses and events of growth period | 10 | 13.3 | -3.3 |
| $\chi^2 = 21.79$ | | | |

Table 3. Causes of intellectual disability in boys

| The causes of disability | Number | Percentage | Cumulative Percentage |
|---------------------------------------|--------|------------|-----------------------|
| Hereditary | 11 | 45.8 | 45.8 |
| pregnancy period | 8 | 33.3 | 79.2 |
| birth time problems | · | · | 79.2 |
| illnesses and events of growth period | 5 | 20.8 | 100 |
| Total | 24 | 100 | - |

It is demonstrated in table 3 that 11 cases (45.8 percent) of intellectual disability of boys are hereditary, 8 cases (33.3 percent) are related to the problems of pregnancy period, 0 cases (0.0 percent) is related to the problems of birth time and 5 cases (20.8 percent) are associated with illnesses and events of growth period.

Table 4. Causes of intellectual disability in girls

| The causes of disability | Number | Percentage | Cumulative Percentage |
|---------------------------------------|--------|------------|-----------------------|
| Hereditary | 12 | 40 | 40 |
| Pregnancy period | 11 | 36.7 | 76.7 |
| birth time problems | 1 | 3.3 | 80 |
| illnesses and events of growth period | 5 | 16.7 | 100 |
| Total | 30 | 100 | - |

It is shown in table 4 that 12 cases (40 percent) of intellectual disability of girls are hereditary, 11 cases (36.7 percent) are attributed to the problems of pregnancy period, 1 case (3.3 percent) is related to the problems of birth time and 5 cases (16.7 percent) are due to illnesses and events of growth period.

DISCUSSION

The main objective of this study was to investigate the causes of intellectual disability in children and adolescents Of Kabul city in the age range of 7-21. In this respect, the results showed that hereditary, problems of pregnancy period, illnesses and events of growth period, and the problems of pregnancy time respectively have had the most influence in making intellectual disabilities. With regard to the causes of intellectual disability in boys, hereditary factors were the most influential factors and problems of pregnancy period had the least effect. Generally, the difference between the causes of intellectual disability in boys is not much remarkable.

Concerning the causes of intellectual disability in girls, hereditary factors, problems of pregnancy period, illnesses and events of growth period and problems of birth time have had the most effect, respectively. The obtained result in this section is different from and inconsistent with the investigation of Keihani Doust et al.[8] that signifies the prime causes of intellectual disability are related to the factors at the time of birth and on the whole, the difference between the causes of intellectual disability in girls is significant.

The results consist with the findings of Rahimi Dastenaie (2010), Zabihi Keiwi (2000), Ahoie (1998), Raeisvand [9], Amgad et al.[10] Egeli et al. [11].

The problems at the time of birth are more associated with medical advances and hospital equipment. While for other three factors, families' cultural and scientific awareness and variables related to parents and the environment of family play a key role and in line with the results, these three factors have a larger share in generating disabilities in Kabul city. Lower levels of development in Afghanistan in comparison to most countries in today's world can account for not developing culturally and scientifically in medical and psychological fields, in a way that as a result of this lack of development the prevalence of disabilities is high and it necessitates serious effort on the part of specialists in the field of children with special needs.

Apart from cultural problems and families, one difficulty in the field of disabilities is lack of specialized and widespread activity of the specialists of psychology of children with special needs' discipline; only one university in this field trains specialists but they are not prepared expertly and they are merely taught the fundamentals and generalizations in the field. According to the results of this and similar pieces of research, it is expected that a scene for enhancing investment and instruction in university centers will be prepared for the reason that promotion of culture for a society is accompanied by elevating people's education and awareness level.

Conducting the current study has met some limitations including: lack of precise statistics on disabilities and the subjects thereof as well as different opinions of various domestic and international organizations about Afghanistan; low educational level of families owing to the fact that they had no clear understanding of the questions and it took a long time to fill them out; inappropriateness of cultural background of many families especially in suburbs which made the communication difficult and influenced the data collection.

Finally, according to the results some suggestions are also raised: promoting the society's awareness level and changing wrong and negative attitudes about types of disability by holding seminars, conferences and using more media; increasing the chances of families to benefit from service, health and cure as well as rehabilitation centers; establishing people-made institutes in the field of different kinds of disabilities so that the families of the disabled can have more chances to be present; preparing relevant academic disciplines in higher education centers to train the specialists of the major of people with special needs; preparing a scene on the part of governmental institutes for the families to benefit from genetic counseling before marriage ,even with receiving lower fees since the increase of the number of the disabled people has much more expense for the society.

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