

## Personal health status of urban and rural primary schools students of Sistan and Balouchestan province

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**Abstract:** The primary purpose of elementary education is physical development of children and creating correct health behavior for them. Since promotion and proper change of children health habits needs the knowledge of their present health status, this study was done to evaluate the health status of students at elementary schools of Sistan and Balouchestan province. In this descriptive analytical study 750 elementary school students (325 girls and 325 boys) were selected by cluster sampling method. The data were collected via check list. They were analyzed by SPSS 15 and statistical tests ( $t$  &  $\chi^2$ ). Results showed that 84.6% of urban girls and 89.6% of urban boys had a desired health status while only 70% of rural girls and 79.9% of rural boys had desired health status. There was a significant statistical relation between the mean score of health status of urban and rural students ( $p < 0.001$ ). Fascinating results demonstrated there was not a significant statistical difference between the mean score of personal hygiene of students regarding the absence or presence of school health officials based on T test ( $p < 0.001$ ). Results of the study also showed that 25.9% of girls and 12.8% of boys had lice eggs. 18.9% of girls and 10.1% of boys had pediculosis. 39.3% of boys and 57.6% of girls have had tooth decay and 19.2% of boys and 27.2% of girls have had bleeding gums. The results of the study showed that there is not any relationship between children's personal health status and the existence of school health official that it is considerable. The rural students' hygiene status was much lower than the urban ones, so some strategies would suggest at the end of study to promote the students' health status especially that of rural ones.

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### Introduction:

General health is an important element in all societies because society's development and improvement depends on the general health of that people are living in that society. Unhealthy habits and adulthood diseases are emanated from nurture and awareness of childhood (1). UNESCO states the primary purposes of elementary education are stimulation, children physical development and creating correct health habits. It also states the most important part of health services programs for elementary education is teaching personal health which includes skin, hair, tooth and clothing health and correct positions of sitting and standing (2). Proper growth, development of children and creating proper health behaviors guarantee their survival and creation of active social forces for the development of societies, thus the development of personal health and prevention from risky behaviors which can intimidate life health is a necessary task in the most critical period of life between birth and adolescence.

A specific aspect of the personal health is not considered in most studies and in most cases oral, dental and hair health have been examined but personal health has not been examined generally. Knowledge and attitude of students toward health is mentioned in many studies, for instance results of the study has carried out by Falahinejad (knowledge and attitudes of Zahedan Guidance school students

toward oral and dental health) showed that knowledge of these students was not in a desired level compared to students in the Tehran (3). Many studies have confirmed the existence of Pediculosis in the head hairs (4&5). It was recognized in these studies that pediculosis is still an important health problem in societies with low level of living and health status. It also seems that the role of school health officials has not been attended enough. The mentioned problems and research limitations in this background motivated the researcher evaluate students personal health status in different regions of Sistan and Balouchestan province and the effect of school health officials on it. We hope that results of this study to be a useful guidance for educational planners moreover achieving basic information about personal health makes the educational planners to plan appropriate programs for this group of students which form the majority of students' community.

### Materials and methods:

This is a cross-sectional study. Data gathered by using observation method and checklists by trained persons. Sampling was done based on obtained information from statistics and information center at Organization of Education at the Sistan and Balouchestan province. Total number of students in the community had been 311308. The number of samples was determined 750 based on Morgan table

from which 269 rural students and 481 urban ones were selected. Sampling method was two-stage random. Some of the regions were selected as clusters from all regions of Sistan and Balouchestan province. Sampling was done regarding the proportion of number of students in cities and regions. Data collection tool was a four part observation checklist which included 33 cases. Checklist contents have been provided based on important criterions of personal health with emphasis on students' health. Each case got a score of 0 or 1 regarding the conditions. Five domains of the checklist are 1. Hair health 2. Oral and dental health 3. Ear and eye health 4. Skin and nail health 5. Sleeping, clothing and stature structure health.

Then data classification was done. The score was (less than 8) indicated very low health, (8-16) low health, (17-24) medium health and (25-33) was considered good health status. To achieve justifiability used content validity and for reliability, test-retest was used then Cronbach's alpha was determined 0.85. Results of the study were analyzed by descriptive,  $\chi^2$ , T test using SPSS software 15.

#### Results:

Results showed that 84.6 % of urban girls had a desired health status while only 0.8 % had an adverse health status. Totally 9.6 % of rural students had a very low and low health status. 89.6 % of urban male students and 79.9 % of rural male students had a desired health status. There is a significant statistical difference between the mean score of good personal health of rural and urban male students ( $P < 0.005$ ).

68.1 % of urban female students and only 31.9 % of rural female students had a desired health status. The mean score of urban girls personal health had been 27.4 (SD=2.8) and for the rural girls 25 (SD=5.2). T statistical test also showed a significant difference for the health of these two groups of students. Personal health mean score of students who had school health official was 27.4 (SD=2.6) and for those who did not have health official it was 27 (SD=3.97) and the T test did not show a significant statistical difference. Statistical test did not show a significant difference separately for girls and boys. Considerable points in every domain of health are the following:

In the case of boys hair health totally 12.8 % of them have lice eggs and 10.1 % had pediculosis. 29.9 % of girls had lice eggs and 18.9% had pediculosis. Results of oral and dental health domain showed that 39.9% of boys and 57.6% of girls had tooth decay. Gingivitis had been 11.7% in boys and 18.9 % in girls. Also 19.2 % of boys and 27.2% of girls had bleeding gums. Results of the skin and hair health showed that 24 % of boys and 19.5% of girls did not

have appropriate health. They also showed that 42.4% of boys and 29.9 % of girls did not hear properly. Appearance and clothing of 13.1% of boys and 10.9% of girls did not have the desired health level.

#### Discussion and conclusion:

It was recognized in the study that rural students' health status is lower than urban ones which is impressive in some cases. 68.1 % of girls of urban girls community have a desired health status while only 31.9 % of rural girls have this status. Results also showed that totally 25.9% of total urban girls community and 18.9% of total rural girls community suffer from lice eggs and pediculosis. 3.2% of boys have mycosis while it is 6.7% in girls. Pediculosis prevalence had been 7.6% in the study of Saghafi et al. It is also reported 47% in the study of Doroodgar et al.(6). In the Moradi's study which was done regarding pediculosis incidence in the students of Bahar city in Hamedan province, 6.7% of students had pediculosis and their residence had been city unlike our study (5). It was observed in the cities of Sari and Rasht that pediculosis contamination rate was 11% and 29.4% respectively (7, 8). Pediculosis contamination is much higher in our study than others. A difference in statistical community is considered as a possible reason for this difference in prevalence rate. Statistical community had been only urban areas in many studies. Pediculosis contamination in social classes which had low economic and cultural status and low access to health facilities, was more common (9). Adverse economic and social conditions, population density, low living standards, lack of health and sex affects the contamination. However pediculosis does not have any role in transforming infectious diseases but it causes considerable social and mental disorders like embarrassment, ridicule, anger, and disbelief which subsequently leads to academic failure (10,11).

It seems that specific clothing of girls and society culture have a basic role in this case. Girls had tendency to lengthen their hair, they also used appropriate clothing for their hair which both are a factor for the growth and cloning of lice eggs. One of the ways for prevention of pediculosis and mycoses is teaching personal health to girls especially head health. Study results on the case of dental health showed that 39.3% of boys and 57% of girls had tooth decay. 18.9% of girls and 27.1 % of boys had bleeding gums. Results of Bahmanpurs study showed that there is a significant statistical correlation between health promoting behaviors and oral and dental health. There was a significant difference between two sexes in the case of oral and dental health behavior so that the girls had a better status

than boys ( $p < 0.001$ ) (12). It was recognized in the study of Basir et al. that girls had a better gum health than the boys ( $p = 0.001$ ) (13). A study has shown that there is a relationship among parents' education, residence, job and social and economical status with oral and dental health (14). However these factors have not been attended in our study but it seems that low education of parents especially in villages and lack of awareness are effective factors for low health status of children oral and dental health. Results of the nail health showed that 24% of boys and 19.5% of girls had a low nail health, students personal health is generally weak in this case. Another important point is related to the students' postures. The results cleared that in 20% of boys lumbar lordosis was less than normal and 17.9% of girls also had this problem. 24.4% of boys and 29.7% of girls sat with a hump position. A research showed that only 17% of boys and 22% of girls in secondary schools had a normal status in the case of stature structure, even these ratios had relative decline in high schools so that 13.65% of boys and 17.24% of girls had a normal stature structure (15).

To prevent physical abnormalities in students it is recommended to teach the students necessary training especially physically correct positions which include sitting, standing, walking, sleeping in physical education course moreover they should be told about using appropriate clothes and shoes.

All teachers should be taught these training regarding the continuous relationship of teachers with students and for better conveying of the trainings. These abnormalities can be corrected by doing appropriate exercises along with physical education specialists' comments and the help of physical education course hours. In general, results of the study showed that 66.6% of urban boy students were in a good level of health while only 33.4% of rural boy students were in this level. Results showed in the case of girl students that urban girls 69.1% had a more favorable health status than the rural ones 30.9%. It seems that many factors have role in this case. The first and the most important factor is the rural students' family status. They usually lived in a populated family with low educated parents who generally had less awareness than the urban community so for this reason; it seems that one of the important factors of low health status of rural students is this point. Results of a study showed that the relation between personal health attendance and number of family members was significant and reverse (16). There was also a significant and direct statistical relation between awareness of personal health contents and personal health attendance.

Another considerable point in the study is that the existence or absence of school health officials

does not affect students health status but it is stated in other studies that existence of school health officials promotes students health level for instance in the study of Saghafipur 67% of students who had pediculosis were in schools which did not have health officials and it is congruent with the study of Motalebi and Rafinejad (14, 17, 18,). Numerous factors are presented in the interpretation which probably debilitates the role of school health officials in promoting students health level. These health officials are employed in education organization with specific motivation majority of persons who are reluctant to nursing have tendency to be employed in education organization to be free from adverse conditions of nursing so it is recommended to consider some criteria for their employment.

The following strategies are presented to promote health level:

1. Travatana believes that one of the effective ways for promoting health level is involving religious leaders and influential people (19).
2. Religious leaders (Moulavi) have a pivotal role in the culture of Sistan & Balouchestan province, in other words they have a special popularity. They determine policy, viewpoints, political, religious, economical and social line of their followers in fact. A highly efficient strategy is involving these religious leaders in health affairs and informing them to advise their followers to attend personal health.
3. Creating a mutual cooperation between health centers and schools in villages. It is recommended that they should have a closer monitoring, in other words a mutual cooperation between stationed health's centers in villages which consist of physician, family health technician, midwife and technician of fighting diseases with schools. The purpose of this cooperation is teaching personal health and controlling its requirements. Health programmers and managers are asked to consider a position for society health nurse in medical staff especially in villages. In addition to cooperation for society health promotion and finding vulnerable individuals more effective actions can be done to promote students personal health. Finally in addition to the accomplishment of health official duties, health programs are also promoted.
4. Emphasizing teachers' roles in teaching health. They are also expected to do their teaching role in other domains in this case and they should be like a sample. Teachers' ideas and comments have astonishing effects on children especially in elementary schools thus teachers should teach

the students how to take care of their bodies so the children are forced to understand some things about themselves. Teachers should encourage children to be proud of having a healthy and clean body which is an important part of teaching health. We can help children in elementary schools to develop correct health habits and attitudes especially because most of the children reach puberty with all of its problems at the end of elementary school.

5. Apart from teachers roles, broadcast organization and other media can affect the cultural and health level of students. This action can be conveyed by producing short, attractive and various health programs among different TV programs.
6. Informing the families about personal health and the dangers of its ignorance can be considered effective for promoting the problems of personal health. Creating beautiful and attractive boards of teaching personal health points for attachment in schools.

#### References:

1. Singh M .The art , science and philosophy of child care . Indian j pediatr. 2009;76(2):6-171.
2. Eeldar abady E . Textbook of Community Health Nursing. Tehran: Publication Salemi. 1384:103.
3. Phalahy nejad M,mirshekar Z,razavy SH . Survey of Knowledge and attitudes of students towards oral health in Zahedan[Persian] .shahid beheshty medical university[Persian].2007;24(4):392-498.
4. Saghafipour A, Akbary A ,Noruzi M, KHajat P, jafari t , Tabaraie Y AND ET ALL. The epidemiology of pediculus is humanus capitis infestation and effective factors in elementary school of Qom province girls[Persian] . Qom university of medical sciences journal .2012;6(3):46-51.
5. Morady AR and et al. Outbreak of pediculosis capitis in students of bahar in hamedan province [Persian].2012;3(1):26-32.
6. Doroudgar A and et al. Prevalence and risk factors of head lice infestation in primary schools students [Persian] . kashan medical university . 2011;10 (4):439-447.
7. Kasiri H and et al. Epidemiology of pediculus humanus capitis infestation and effective factors in elementary schools of girls ahvaz city[Persian] . Iranian j infect diseases. 2009; 14(2):41-45.
8. Abbaszade M and et al. Survey of prevalence of pediculus humanus capitis infestation in elementary schools of girls zabol city [Persian]. J Zabol University. 2003; 3(1):10-15.
9. Bauer E , Jahnke C,Feldmeier H, Seasonal fluctuations of head lice infestation in germany . parasitol res . 2008; 18.
10. Jahnke C, Bauer E, Feldmeier H. pediculosis capita in childhood : epidemiological and sociomedical results from screening of school beginners . gesundheitswesen. 2008;70:73-667.
11. Rios SM, Fernandes JA , Rivas F ane et al. pediculosis prevalence and associated risk factors in anursery school , Colombia , bogota . Biomedica . 2008; 28 : 51-245.
12. Bahman poor K and et al. Pender's Health Promotion Model structures on oral health in high school students in Marivan [Persian]. Health and research journal. 2012 ; 9(2) : 93-106.
13. Basir L and et al. Effect of repeated oral health education on health indicators 9 and 10 year old students in Ahwaz [Persian].medical science journal . 2010;8(2):219-229.
14. Mazloomy mahmoodabad SS, Roohani Tanekaboni N. Survey of some related factors to oral health in high school female students in yazd , on the basis of health behavior model (HBM) [Persian]. Birjand medical science university. 2010; 15(3):40-48.
15. Sarabandy M. Assessment Of the stature of high school students in Sistan and Baluchestan [Persian].1386.
16. Booye MR. Personal hygiene status and its association with health knowledge among female students in Urmia city schools [Persian]. Master's thesis, Tehran University of Medical Sciences.1375.
17. Matlabi M ,Minooeian haghghi MH . Epidemiology of pediculus humanus capitis infestation and effective factors in elementary schools of girls gonabad city[Persian]. J Gonabad university.1989; 1(6):87.
18. Rafinejad and et al. epidemiology of pediculus humanus capitis infestation and effective factors in elementary schools of children, amalesh district, gilan province [Persian].j iran epidemiology. 2005; 2(3,4):51-63.
19. Tarvatana kul,j,.Amado,s. Management of communication channels for health information in the community. Health education journal. 2001; 66 (2) :173-178.