The study of the relationship between the concept of health and status of health promoting behaviours in girls who were studying in high schools of Sistan and Balouchestan province

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Abstract: Background and purpose: health promoting behaviours is one of the ways by which people can maintain their health. Regarding that adolescents are a considerable part of the country population and the importance of their health for society health promotion, the study was designed to determine the status of health promoting behaviour and its effect on understanding the concept of health. This study was cross sectional descriptive. 400 students of Sistan & Balouchestan province were selected by stratified sampling method. Collection tool of the data was health promoting lifestyle (HPLP-II) which was composed of standard questionnaire of health promoting lifestyle and the concept of health questionnaire, both of them had subscales. The data were analysed by Pearson statistical correlation test using SPSS 15. The mean of age was 15.8. Mean of (HPLP II) was 134.9±18.5 out of total score of 208. The highest score was 26.7 for spiritual growth subscale and the lowest was 16.9 in physical activity subscale. A significant statistical correlation was observed among mean of (HPLP II), variables of the concept of health understanding, and its subscales (P<0.001). Health promoting behaviours are something beyond an individual phenomenon and various factors like understanding health concept, vocational status, adaptation and etc affect it. Thus it is recommended to design plans by which we can improve health promoting behaviours with the increase of understanding the concept of health. [Kiani, Fateme, Khazaeeian, Somaie. The study of the relationship between the concept of health and status of health promoting behaviours in girls who were studying in high schools of Balouchestan province. J2013:10(7s):148-1511 Life Sci (ISSN:1097-8135). http://www.lifesciencesite.com, 24

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Introduction:

Health promoting behaviors are one of the best ways by which people can maintain and control their health (1). Adolescents usually have a good level of health while they benefit only from the least health care than the other age groups (2). Some of lifestyle habits which can endanger health in future are formed in adolescence. Attitudes and behaviors which are formed in adolescence often determine the healthy life style habits of adulthood and this is how a permanent health is formed. Improving adolescents' health to improve society health is a necessary task. They seldom think of social and living skills of them did not do exercise or physical activity and 17.5% of them had a bad nutritional to manage their health and emotions. They may become sad due to their responsibility of self care or when they encounter problems they are depressed (3). In the survey of Abassi on high school girl students' 79.9% diet (4). WHO in 2000 emphasized healthy lifestyle and maintaining and improving the healthy lifestyle behaviors had been objectives of the year 2000. Pender considers health promoting as a dynamic and positive process. In fact improving the health is a science and art which helps people to alter their lifestyle to achieve desired health. The purpose of

improving health is that people can control their health to enjoy the maximum level of health (5).

Health is a main concept in medical science and it is one of the primary responsibilities of medical team (6). Various studies have indicated that girls health as future mothers affects their children and family. Thus, it is the first necessity to be familiar with health concept from their attitude, and then determine the status of performing health promoting behaviors.

Materials and methods:

This was a descriptive analytical study (cross-sectional) which was done in Sistan and Balouchestan province cities (Zahedan, Zabol, Iranshahr, and Chabahar). Under examining population were high school girl students who were selected by two-stage stratified sampling method. Sample was estimated 384 persons according to formula and Morgan table but to achieve more assurance 400 persons were examined as samples out of 41626 persons. Persons who entered the research were generally studying in high school in the second semester of 2011-2012 academic years. Each city and a high school in it were considered as a category, and then samples were selected based on the proportion of number of students in each high school. Tool for data collection was standard questionnaire of health

promoting lifestyle (HPLP II) and the concept of health. HPLP II was presented to determine to what extent persons perform health promoting behaviors based on Pender health promoting model. HPLP II questionnaire measures multidimensional a assessment of health promoting behaviors in six domains (responsibility for health, physical activity, nutrition, spiritual growth, stress management and interpersonal relationships). It includes 52 questions and there are 4 answers for every question which are marked by four options (1) never (2) sometimes (3) usually and (4) always. The range of total score of health promoting behaviors is 52 - 208 and a separate score can be calculated for every domain. Cronbach's alpha index has been calculated for total scale and its subscales (74 94%). Concept of health questionnaire includes 28 questions and 4 subscales which contain domains of (biological concept, role, adaptation, and the maximum level of health) which were adjusted based on six-point Likert scale and the score 7 - 42 was given for every subscale. To collect data researchers referred to persons face to face and after introducing themselves and stating the purpose of research they gave the questionnaire to persons to fill it out. Finally 400 questionnaires were entered to SPSS software to be analyzed by descriptive statistics and Pearson correlation. To determine the reliability of tools comments of venerable professors of Zahedan University of medical sciences were used to assess its adaptation with cultural norms and research purposes. After collected the comments of experts, necessary modifying changes were performed.

To achieve reliability, this questionnaire was distributed to ten girl students with an interval of 15 days and answers were examined, Cronbach's alpha index was calculated 0.85.

Findings

The mean of students' age was 15.8. The mean of health concept understanding was 138±13.1 out of 168

The highest score was 38.1 ± 13.1 in the subscale of role and the lowest was the mean score of 32.9 ± 4.4 in the subscale of adaptation and then 33.9 ± 4.8 in biologic domain(table 1).

Table 1: Mean and standard deviation of the perception of the concept of health in four domains

variable	possible range	$MEAN \pm SD$
Health concept	28-168	138 ± 13.1
Biologic	7 - 42	33.9 ± 4.8
Role	7 - 42	38.1 ± 13.1
Health utmost	7 - 42	36.1 ± 4.5
Adaptation	7 - 42	32.9 ± 4.1

Results of the concept of health from students viewpoints in four domains of health indicated that the most percent of students is related to the phrase (not to have physical and mental disabilities 57.3%, I have no illness signs 54.3% which means that from the viewpoints of students the concept of health in biological domain refer to the lack of physical and mental disabilities and illness signs. Lowest percent of students is related to the phrase (I do not need any drug 25%).

Health concept indicated in the domain of role that answer to option (when I can perform my daily responsibility and tasks) got the highest score 56% and answer to the phrase (I have the ability to do task in a expected extent with 28.8% got the lowest score. Health concept in adaptation domain indicated that answer to the phrase (trivial pressures do not fag me) with 57.3% got the most score, the phrase (to be able to adapt myself to environment changes) with 32% got the lowest score. The concept of health indicated in health utmost domain that the phrase (to realize my upmost and best wishes) with 63% got the highest score and the phrase (I feel I am an important person and I am in ultimate health) with 20.5% got the lowest score. Totally the mean score of the concept of health was 138±13.1 out of 168.

Table 2 Mean and standard deviation of health promoting behaviors calculated in six domains

In analysis of health promoting behaviors only those students that had selected the always or often option in every question were put in the groups of persons who did that behavior. Less than 25% of students only check their bodies for physical changes or risk factors once in month (24.6%) and they talked about their stresses and anxieties to health employees (18%). 44% of girls reported abnormal symptoms in their bodies to physician or other health employees. Only 8.5% of girls did a heavy exercise three times a week for 20 minutes. 70.3% of students ate breakfast. 80% of them read the signs on packaged foods. Almost half of students (48.6%) commented that there are enough amounts of fiber, cereal, fruit and vegetables in their nutritional diet.

More than half of students had a kind of feeling that are growing and changing positively. They believed that they had relationship with more powerful forces than themselves. Their life had an objective. They are hopeful to future and more aware of what is important for them in life. More than half of students had an appropriate interpersonal relationship and continued their significant and complete correlation with others. 60% of girls stated that they talked about their problems and anxieties to their relatives. 42% of them allocated a time for relieve of nerves and 50% of them used special method for controlling stress.

Correlation test showed that there is a direct relationship between physical activity and responsibility of health and another one among nutritional habits, spiritual growth, interpersonal relationships and stress management.

To relate two variables of health and behavior Pearson correlation was used. Statistical results showed that there is a significant correlation between two variables of understanding total concept of health with health promoting behaviors which is positive and direct (P=0.001) and (R=0.199) it also exists in every subscale of four domains of health.

Discussion:

Generally the mean score of understanding the concept of health in students of study was 138 out of 168 and acceptable.

Having referred to table 1 we understand that the lowest mean score was related to compatibility and biological model of health among four domains which is parable with the result of Shababs research report in term of acquiring the least score in clinical mode(7).

The results of Hanks study in 2011 showed that there is a relationship among body changes, immature puberty, incompatibility and adolescents' depressions (8). Adaptation to body changes is an important and complex problem for adolescents, probably such a result is related to adolescent. In other words understanding human health is something beyond a personal phenomenon which is emanated from vocational and living conditions, social support systems, genetics effects and personal habits.

Generally the mean of health promoting behaviors of students in the study was 134.5 out of 198 which is indicative of acceptability of performing health promoting behaviors. In Motlaghs and Jalilis study which were done respectively in cities of Tehran and Kerman. The mean of scores was 130 and 134.6 which approves the results of study. Results of the study indicated that only 70.3% of students ate breakfast (9, 10).

A study which was done on students indicated that average times of eating breakfast in girls was 3 times a week (11). It is stated in other studies that 16.85% of girl students in Ardabil go to school without having eaten breakfast. The important point is that eating breakfast in girl students is more and low social and economical conditions and increase of age lessen its use (12). The reason for difference in the rate of breakfast omission in this study and other ones is that in other studies both sexes and all academic grades were examined. But in this study only in high school girls the results were not so unexpected. The results of chengs Study which was done in Hong Kong showed that parents' emphasis on eating

breakfast was a predictive and significant factor for reducing the omission of breakfast between children and adolescents (13). Studies have indicated that the rate of breakfast omission is different in various populations and it is reported between 1.7 and 30% (14, 15). Moreover few students (20% of them) always participated in physical exercises which indicate that sport is not included in daily life of students. Results of the studies which were done on students indicated that 51% of them achieved the least score of sport background (16). The main reasons of not doing exercise may be schools environments, students' homework, and etc Only girls are examined in this study and its results are not expandable to boys. it is proved in other studies that boys do more exercise than girls (9). Results of this study showed that the concept of health in its all domains is related to performing the health promoting behaviors and its subsets.

Study shows that there is a positive correlation between two variables of health and behavior which means that if understanding health concept gets more score the score of behavior is also improved. Regarding the results researcher believes that probably the role of family and educational system in understanding health promoting behaviors is important. Students can obtain correct patterns by the means of family health patterns and teaching. Hanneke considers teaching, religious, mental and social domains as effective factors on performing health promoting behaviors (17). People are not able to develop their health without relationship and help of others. Pender considers social support as an important factor on people's health performance and believes that it is required in family. Relationship and reaction of family, crisis, stress and attitude of family toward health are some of teaching and family health patterns (5). According to the study assumption there is a relationship between understanding health concept and health promoting behaviors in students by Pearson statistical test. These results have similarity with those of Mohamadian research hypothesis test in which more complex understanding of health concept had been along with health promoting behaviors (18).it is necessary to cite that personal perceptions affect the extent of health behaviors directly while the education affects the happening of the action indirectly. Pender believes that individual perceptions are an important motivation for preparation and presentation of health behaviors (5). Phipps believes that motivation for participation in health promoting behaviors is affected by person's perceptions of health (19).

Results of the research showed that the definition of health as perception and cognition factors affects the extent of health behaviors along moderating factors. It can have the ability to predict the health promoting behaviors.

Results of the study showed that health promoting behaviors are emanated from students' personal perceptions of health concept. Since now day's adolescents of society will manage the world for future decades so attending adolescents' health is an investment for future. Head of education and training can perform actions by planning appropriate educational plans with the emphasis on health concept in its complex domains. Changing to appropriate behavior due to priority of promoting health over treatment, school health officials can provide a wide understanding of health concept for clients by performing their training role and to reach their professional role which is promoting health.

Regarding study results the following recommendations are presented:

- 1. Teachers and schools health officials should teach the students about health promoting behaviors
- 2. To begin and continue teaching health promoting behaviors like eating breakfast, doing exercise, and along with child entrance to school.

Reference

- 1. Morovati-sharifabad MA, Ghofranipor F, Heidarnia A and et al. Perceived religious support of the health promoting behaviour and performance of behaviours in the elderly 65 years and older [Persian] .J Med Sci Yazd. 2003; 1(45):27-36.
- Stern R. Treating and preventing Adolescent Mental Health Disorders: What We Know and What We Don,t Know ,A Research Agenda for Improving the Mental Health of Our Youth . American journal of Psychiatry. 2007; (164):177.
- **3.** Lee RL, Loke AJ. Health promoting behaviours and psychosocial well-being of university students in Hong Kong. J Public Health Nursing. 2005; 22(3): 209-20.
- **4.** Abasi Z . Study of health risk behaviours of female students in Tehran public high schools [Persian]. Tehran University of Medical sciences. 2003.
- 5. Predicting health promotion life styl in the work place. Nursing research .1990; 39(6):326-332.
- **6.** Taylor and et al. nursing principles and techniques translated by translators of shahid Beheshti medical science university. 1st ed. Tehran: Boshra publications2000: 28.
- 7. Shabab M,Meheran A,Taghlili F. Relationship between perception off health promoting behaviours

- A comparative study among Thehran university medical and non-medical students . Persian Hayat 2007; 13(3):27-36.
- **8.** Hanneke A, Teunissen-caroline B, Adelman and et al. The Interaction Between Pubertal Timing and Peer Popularity for Boys and Girla:An Integration of Biological and Interpersonal Perspectives on Adolescent Depression .Carolina .J Abnormal Child psycho. 2011; 39: 413-423.
- **9.** Motlagh Z, Mazloomi S and et al. Health promoting behaviours of students [Persian]. Journal of medical science university of Zahedan1390; 13(4): 29-34.
- 10. jalili Z, Nakhaee N, Haghdust A and et al. Health promoting behaviour and psychosocial health of kerman University of Medical Science [Persian]. Hamadan Univ Med Sci. 2008:60.
- 11. Rahimi T,Dehdari T,Ariaeian N, Gohari MR. Survey of breakfast consumption status and its prediactors a mong Qom students based on the penders health promotion model constructs.iranian jornal of nursing science [Persian] 2012;7(2):75-83.
- **12.** Nematee A and et al. Assessment situation breakfast use in student girls [Persian].reaserch and science jornal of Ardebil University. 2003; 2(7):39-46.
- **13.** cheng TS , Tse LA , Tu IT , Griffiths S .Childrens perception of parental attitude affecting breakfast skipping in primary sixth-grade students . J Sch Health 2008;78(4): 8-203.
- **14.** Mahoney CR, Taylor HA, Kanarek RB, Aamuel P. Effect of breakfast omission on cognitive processes in elementary school children.physiol behave 2005;85(5):635-45.
- **15.** Murata M. Secular trends in growth and changes in eating patterns of Japanese children. AM J ClinNutr 2000;72(5): 83-1379.
- **16.** karimi B , Sadat hashemi M , habibian H .The study of breakfast habits and its relationship with some factors [Persian] .J Semnan Univ of Med Sci. 2008;9(4): 92-285.
- 17. Hanneke Aand et al, The interaction between pubertal timing and peer popularity for boys and girls: an integration of biological and interpersonal perspectives on adolescent depression. 2011; 39: 413-423.
- **18.** Mohamadian H. Evaluation of Pender's health promoting model which predicts the quality of life of adolescent girls [Persian]. Journal of health college and health research institution. 2011; 8(40): 1-13.
- **19.** Phipps and et al. Medical surgical nursing. Translation group of Tehran University. 3rd ed .Tehran. Chehr publication. 1384: 22.

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