

finding of periappendicitis is of clinical significance as patients need further follow up and investigations to ascertain the cause of periappendicitis. Parasitic infestation was found in 2%. Most patients had pin worms (*Enterobius vermicularis*). Two cases of *schistosomiasis* in the appendix were also reported during this study. Tumors were found in 6 cases out of 829. Carcinoid tumors were the most common type found in 5 cases. Carcinoid are the most common tumor of the appendix and are found in approximately one in 300 routine appendectomies. Carcinoid tumors of the appendix are found in the tip of appendix and are seen as incidental findings during pathological examination. Other sites of the appendix should also be examined for carcinoid involvement and tissue sections, from the base of the appendix or any wall thickening should be submitted for microscopical examination to rule out any malignancy or any other pathological abnormalities. Non carcinoid epithelial tumors, described by Carr et al,⁴ are simple mucocoele, hyperplastic polyp, adenoma, mucinous tumors of undetermined malignant potential, adenocarcinoma.

In our study, the male to female was 1:14 in normal appendices; however, others found a higher incidence of normal histology in females as compared to males. In our study, we rendered histological diagnosis of normal appendix in 3 categories; first absolutely normal appendix, secondly, presence of fibrosis without any inflammation and thirdly presence of fecalith. Some authors have suggested that normal appendix may not be normal. Wang et al⁵ showed a substantial proportion of histologically normal appendices showed clear evidence of an inflammatory response as increased cytokine expression. Presence of fibrosis alone is not indicative of chronic or recurrent acute appendicitis as some pathologists suggest. Fecalith, which is calcified lamellated fecal mass, present in the appendix, can be an incidental finding in the normal appendix.

In our study the rate of acute perforating appendicitis was 22%, which is consistent with other studies but still in the upper limit (up to 25%). A surgical doctrine suggests a decrease in perforation rate will be achieved by an increase in negative laparotomy rate in suspected acute appendicitis. Improved clinical evaluation is suggested as a remedy for a high rate of negative laparotomies, without increasing the perforation rate.

In conclusion, 829 appendectomies were reviewed, out of this 60% were diagnosed as acute appendicitis, normal appendectomy rate was 13%, perforating appendicitis 22% and 4.8% showed other histological diagnoses. Normal looking appendices may show evidence of inflammation by conventional histological examination. In our hospital, we subjected all appendix specimens to

histopathological examination. Some have suggested that gross examination alone may be sufficient, usually since unexpected microscopic findings are rare. We however, favor that microscopic examination is important to detect abnormal pathologic findings, especially cases of tumors like carcinoids or periappendicitis, which might alter the subsequent management or follow up. We recommend that a careful evaluation with improved attention to early prodromal symptoms and an astute diagnosis by an experienced surgeon can decrease the incidence of undetected appendicitis and its complications.

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Relationship between physical activity level and health related quality of life among university students

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Regular physical activity is an important determinant of healthy life style. Many epidemiologic and clinical research documented that physical activity has many positive effects on cardiorespiratory function, muscular strength, and mental health in adults.¹ It is not well known

Table 1 - Bivariate correlations of mean weekly energy expenditure based on physical activity, SF-36 subscales and BDI.

| Variables | Pearson analysis | Correlation | Partial analysis* | Correlation |
|----------------------|------------------|-------------|-------------------|-------------|
| | r | p | r | p |
| Physical functioning | 0.26 | .001 | 0.22 | .003 |
| Role physical | 0.05 | .47 | 0.03 | .06 |
| Bodily pain | 0.19 | .01 | 0.11 | .12 |
| General health | 0.19 | .01 | 0.13 | .07 |
| Vitality | 0.33 | .001 | 0.30 | .001 |
| Social functioning | 0.22 | .002 | 0.18 | .01 |
| Role emotional | 0.12 | .09 | 0.09 | .22 |
| Mental health | 0.22 | .002 | 0.19 | .01 |
| BDI score | -0.19 | .008 | -0.17 | .01 |

*Controlling for BMI (body mass index) and gender, BDI score - beck depression inventory score, r - correlation coefficient

whether recommended levels of physical activity were associated with better health related quality of life.² To our knowledge, most of the studies related to physical activity and health-related quality of life were directed to the adults and older populations. Adolescent population especially university students were neglected in the studies.

This study was planned to examine the relationship between habitual physical activity level and health related quality of life undergraduate students at the university. One hundred and eighty of 224 students attending to undergraduate program of physical therapy and rehabilitation (n=86), nutrition and dietetics (n=74), nursing and health services (n=20) at Baskent University Faculty of Health Sciences between 17 and 25 years participated to the study. There were 142 females and 38 males in this study. Our study population had similar socioeconomic profiles. Written informed consents were obtained from all the participants.

Health related quality of life of the students was assessed by the Turkish version of the medical outcomes 36-Item Short Form Health Survey (SF-36). The SF-36 includes 8 multi-item scales containing 2-10 items each plus a single item to assess health transition. The scales cover the dimensions of physical functioning (PF), role physical (RP), bodily pain (P), general health (GH), vitality (V), social functioning (SF), role emotional (RE), and mental health (MH). Turkish version of the beck depression inventory (BDI) was used to describe the depression level of participants.

Beck depression inventory is a 21 item test presented in multiple choice format, which measure the presence and intensity of depression in clinical and normal patients. Paffenbarger physical activity questionnaire (PPAQ) was performed to measure

physical activity. The PPAQ developed to estimate the relationship between physical activity and coronary heart disease in Harvard Alumni. During the past month how many flights of stairs climbed in each day, how many city blocks walked in each day and the number of hours engaged in sports per week were asked to participants. By the original kilocalories scores of the questions, students' expended energy per week were calculated.

All statistical analyses were carried out with software from the Statistical Package for the Social Sciences (SPSS) for Windows (version 10). Correlation between weekly caloric expenditure and the students' health-related quality of life scores was tested by calculating Pearson's correlation coefficient. The distribution for gender is not homogeneous thus, partial correlation analyze were performed after controlling confounding variables [such as gender and body mass index (BMI)]. The significant difference between the groups was tested using t-tests. Data were presented as mean with standard deviation, and percentage. Percentage values <0.05 were considered as significant. For male students, the mean age was 22.10±1.67 years and the mean BMI was 22.86±2.64 kg/m². For female students, the mean age was 21±1.83 years and the mean BMI was 20.83±2.95 kg/m². The difference was statistically significant (p=0.001). The weekly energy expenditure of the male student's was also significantly higher than of the female's (3282.21±2310.71 kcal/week for male students, 1764.62±1644.97 kcal/week for female students) (p=0.001).

The analysis of the bivariate correlations of mean weekly energy expenditure based on physical activity, SF-36 subscales and BDI scores are presented in **Table 1**. The results showed that the energy expenditure was positively associated with PF, P, GH, V, SF, MH subscales of the SF-36 and scores of the BDI (p<0.05). We thought that gender and body mass index were confounding factors. After these variables were controlled, partial correlation analysis was performed. The analysis revealed that the energy expenditure was positively associated with PF, V, SF, MH subscales of the SF-36 and scores of the BDI (p<0.05) (**Table 1**). To show this relationship more clearly, students' were assigned to more active group whose energy expenditure were high (1500 kilocal/week) or less active group whose energy expenditure were low (<1500 kilocal/week). One thousand and five hundred kilocal/week determined as a criterion for the grouping. On the basis of observational studies, 1500 kilocal/week of physical activity was recommended for health benefits. The t-tests were performed between 2 groups. The more active group had significantly better scores of all dimensions of SF-36 except the RP (p<0.05) and scores of the BDI.

According to Surgeon general's report, regular physical activity in adolescents is as beneficial as in adults. It helps in the development of healthy musculoskeletal structure, prevents obesity and hypertension, promotes social well-being, physical and mental health in young people.¹

Cardiovascular morbidity and mortality are high in Turkey and physical inactivity is a common problem in both genders. However, the data on physical inactivity and Turkish adolescents were limited. To explain the relationship between physical activity and health related quality of life in the university students is very important. It helps develop the strategies for promoting lifelong physical activity in our country. Findings from this trial shown positive association between habitual physical activity level and health related quality of life. There were also significant differences observed between the activity groups determined by their weekly energy expenditure. The students who were more active (1500 kilocal/week) had higher scores in most of the 8 subscales of the SF-36. Lee and Russell¹ observed that women who had been active had better scores on all dimensions of SF-36. Findings from the behavioral risk factor surveillance system survey shown that persons who were physically inactive have significantly lower healthy days (physical or mental) than persons who were physically active during the previous 30-day period.² The findings of the present study was supported by these results.

Our data also demonstrated that statistically significant negative correlations between habitual physical activity and scores of BDI. This finding was consistent with the literature. It was demonstrated that physical activity plays important role in improving psychological well-being and mental health.¹

Depression, negatively affected daily living functioning in some domains, including social functioning, productivity, physical functioning and self care. Similar to chronic medical conditions (diabetes, hypertension, coronary problems and so forth) depression associated with decrements to quality of life.⁴ When considered the relationship, our result which demonstrated that negative association between physical activity and depression was valuable. It has clearly shown that more physical activity accompanied both decreased depression and better quality of life. Physical activity may be an alternative on preventing depression and promoting quality of life in Turkish adolescents. This opinion and the result reported above suggested by a recent study. The study found that exercising longer than 2-3 hours a week was a protective factor related to feeling healthy among Turkish adolescents.⁵

This study demonstrated that increased habitual physical activity level associated with better quality

of life and mental health among university students. To reduce risk for development of many chronic disease and promote health during lifespan, young people should be encouraged to engage regular physical activity. There is a need for comprehensive research which will be examined the importance of physical activity in schools and universities. This will be an important research for effective strategies and instruction programs to enhance active lifestyle among young people.

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Assessment and care of children with low vision disability in Oman. Situation analysis

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The staff of the Eye Health Care Program in Oman has performed vision screening of nearly 160,000 students of 1st primary, 4th primary, 1st preparatory and 1st secondary levels annually since 1992. The students with defective vision are refracted and prescribed spectacles by qualified refractionists. The students with >5 D myopia,