

@ 2014 NSP
Natural Sciences Publishing Cor.

<http://dx.doi.org/10.12785/ijlms/020102>

A Necessity in Today's Time: Physical Education in Oman

Yousra AL-Sinani

College of Education, Sultan Qaboos University, Oman

Email: yousra@squ.edu.om

Received: 10 Apr. 2013; Revised: 8 May 2013; Accepted: 2 June 2013

Published online: 1 Jan. 2014

Abstract: Until the early 1990s, the physical education practice in Oman was preserved by gender and class. With the initiation of the Teacher Training Program in 1993, physical education practices in Oman started to spread and moved from a content-based course to an outcome-based course. This curriculum, however, is still undergoing changes to merge the old physical practices with the modern practices as to provide students with a wider perspective on physical education and its utilization in better life care. Scientific studies have shown physical education practices to be one of the critical reasons for preventing and treating various health issues such as diabetes, obesity, blood pressure, cancer and metabolic syndromes. This article critically reviews the history and progress of physical education programs in Oman along with providing unique curricula models which focus on the importance of fitness, sport education, teaching programs and increased physical activity opportunities for children. Last but not the least, major initiatives and future directives by the Oman Physical Education Curriculum are discussed. The aim of the paper thus is not just to reflect on the path of physical education in Oman but also to draw a map for its future.

Keywords: Oman, Health, Gender, Physical Education, Obesity, Teacher Training Program.

Introduction

Health benefits of regular physical activity have been scientifically well documented and widely accepted. Physical Education (PE) is the primary source of physical activity and fitness instruction. It highlights the relevance of physical activity as a physical component of a healthy life style. A well-designed physical education program can motivate students to maintain healthy habits and regular physical activity (Oman Physical Education Curriculum, 2008; Al-Shamli, 2010). It also aids in enhancing students' physical activity-related knowledge, approach, behaviors, and physical fitness (Al-Shamli, 2010).

However, in Oman the prevalent trends show an increase in insufficient physical activity in children as well as adults. In terms of health profile, Oman has moved from a country being dominated by infectious diseases to non-communicable diseases (NCDs) which include diabetes (12%), overweight (30%), obesity (20%), high cholesterol (41%), and metabolic syndrome (21%) (Mehena & Kilani, 2010). In 2005, NCDs accounted for 75% of the diseases, with cardiovascular

diseases being the leading cause of death. People living in urban areas were more obese than those living in rural areas (Mehena & Kilani, 2010).

This article aims to fill a current gap in the area of physical education research in Oman. It does so by conducting the first overview of the history and status of health and physical education in Oman. The paper additionally aims to map a new strategic plan for propelling forward the cause of physical education in Oman. Specifically, the author recommends a systematic planning of integrating physical education in the curriculum starting with basic education, and the provision of effective teacher preparation programs and awareness programs targeting families and communities. The goal of this plan is to aid in establishing a life style that would decrease the percentage of health diseases.

Aims of Study

The aim of this study is to provide a critical review of the history and progress of physical education programs in Oman along with the provision of unique curriculum models which focus on the importance of fitness, sport education, teaching programs and increased physical activity opportunities for children. Last but not least, major initiatives and future directives by the Oman Physical Education Curriculum were sought to be presented and discussed. The aim of the paper thus is to address the problem of lack of information about the status of physical education in Oman and lack of information on how it should move forward as to benefit Omani society.

Methods of Study

In order to provide a general historical review of the status of physical education programs in Oman along with providing unique curriculum models which will focus on the importance of fitness, sport education, teaching programs and increased physical activity opportunities for children, a literature review was conducted. This review is the result of extensive literature surveys that cover various research articles, including government-released information and various other sources of scientific information.

History of Physical Education in Oman

Throughout Oman's history, Oman has had a non-formal educational system. That is why the history of a modern educational system in Oman is not long, since its beginning was only in 1970 under the wise guidance of His Majesty Sultan Qaboos bin Said (Al-Belushi, Al-Dawi, & Al-Ketani, 1999). From 1969 to 1970 there were only three schools in Oman with a total of 909 male students. From 1980–1981, another three shift schools were added that also provided adult education and saw the presence of female students. However, none of the schools was housed in appropriate buildings since the widespread development of educational services during the 1970s was so rapid that it was impractical to construct required buildings with the necessary specifications; hence, physical education facility did not exist. In the late 1980s and early 1990s, the quality of education, justifiably, became a concern. This has led to all educational system components being reviewed, including teacher education, teaching materials and methods, and curricula, with the help of competent education experts. However, at this period, physical education practices did not develop well since emphasis lay more on subjective education than physical education.

There was yet another concern: Countries like Oman and Yemen started emerging in the field in terms of awareness and first level provision for sport, especially for women. Interestingly, however, both these countries experienced none of the Greek / Roman influences in the pre-Islamic era that some Arab countries experienced. In Oman, therefore, community sport provision for women has had to be sex-segregated to meet the Sharia law; hence, the very structure of the system has had to provide the necessary facilities and resources for women, albeit on a lesser level than for men at present.

To lay the basis of a physical education specialization was a very important step in the Sultanate, as the program was the first and remains the only such provision (Al-Sinani & Benn, 2010). As a result, the gradual shifting of the traditional attitude towards change, satisfying the local market needs and accepting the idea of Omanization have all happened since the onset in 1991, paving the way for the respectability of physical education teacher training programs, degrees and teachers. Meeting Islamic needs and responding sensitively to the needs of students from different Omani regions and backgrounds have moved the subject, and its reputation, in a positive direction.

Current State of the Wellbeing of Children and Youth

As aforementioned, obesity, diabetes and overweight are common health problems amongst the Omani youth and children. Obesity and overweight combined were more prevalent in the Southern part of Oman. While in 1991 more women than men were obese and overweight, an opposite trend was observed in 2000 with a decrease in the prevalence of overweight and obesity among women and an increase among men (Al-Lawati & Jousilahti, 2004).

With regards to the health status of Omani children, three studies were conducted. The first study (Osman, Muscati, Ganguly, Khan & Al-Sharji, 2004) examined the body weight; the second one (Mehena & Kilani, 2010) examined heights, weights, maximal oxygen uptake (VO₂max), and activities during leisure time; and the third study (Mehena & Kilani, 2010) involved Grade 3 and 4 boys participating in a summer camp. The researchers found that obesity (BMI 30 or above) and overweight (BMI between 25 and 30) combined increased from 7.3% to 16% and to 23.3% at 6-7, 12-13, and 15-16 years of age respectively. Obese and overweight children at 6-7 years had a higher risk of maintaining their body weight status at 15-16 years. The longer children retained a normal body weight, the less likely they would be overweight or obese at 15-16 years old (Osman et al., 2004; Mehena & Kilani, 2010).

Furthermore, it was observed that the heights, weights, and maximal analyses showed that boys spent more hours on leisure activities than girls. They spent more time engaging in leisure physical activity and on TV viewing, computer games and internet than girls. They also had higher VO₂max and lower BMI than girls. It is plausible that the reason for the lesser hours spent by girls in leisure time is that they spend more hours on household chores than boys (Al Barwani et al., 2001). The study also reported that children watched TV or played computer/video games for an average of 3.2 hours per day. As for the data on the parents, 32.5% of the fathers and 8% of the mothers exercised at least twice weekly. A high father's exercise score was correlated with better child performance and leanness while a mother's obesity had a negative correlation (Hassan & Al Kharusy, 2000).

Children's attitudes towards physical education and actual involvement in activities have also been studied. The findings showed that children display a positive attitude toward physical activity as an avenue to promote health, socialization, and competitiveness engaging in regular weekly physical activity varying from less than two hours to more than 6 hours. Students had highly positive attitudes toward the health sub-domain, positive attitudes toward the social, catharsis, aesthetic, and competing sub-domains, and slightly unfavorable attitudes toward the ascetic sub-domain. However, studies also found that participants had negative attitudes to the ascetic sub-domain of physical activity. They were not comfortable with physical activity as an avenue for adventure. They did not want to take risks that could lead to injuries or involve dangers (Mehena & Kilani, 2010).

It has been additionally observed that the Omani children have had a rough profile with the common activities being walking, running, and playing soccer, with girls mostly walking and running. Girls tend to play at home and at schools while boys play less at home and more at schools, open playgrounds and fields. Moreover, it has been observed that more than a third of the students are not involved in physical activity at a level that would be enough to prevent a growth of the risk factors at an older age.

Finally, physical activity in Oman is generally influenced by social, behavioral, cultural and physiological factors. In adulthood, physical inactivity was about 70% in females and 50% in males. People tend to be inactive for many reasons, namely, lack of awareness of the benefits of physical activity, social values that could restrict women's participation in activities in open spaces, shortage to non-availability of public places for physical activities, and the use of modern life accessories such as cars, TVs, computers, sedentary life styles (AL-Sinani 2012)

Current Practices

With the shortage of public places for physical education for boys and girls and the scarcity of extra-curricular programs, it was agreed to use schools as centers for implementing a solid plan to address risk factors. In Oman, the schooling system spans over 12 years; hence, the concepts of a healthy lifestyle throughout the school years could be delivered in a systematic manner. The ideal is to start at the basic education level. This is the main suggestion of this paper to increase the effectiveness of physical education in Oman.

An examination of the Omani educational system demonstrates that the initial stage of basic education includes Grades 1 to 4. The subjects include Islamic Education, Arabic, English, Mathematics, Sciences, Social Studies, Physical Education, Artistic Education, Music Education, Environmental Life Skills and Technology. The total is about 40 periods per week. The subjects are delivered using a variety of teaching methods to meet the needs of diverse learners. There is also integration among certain subjects but physical education is not one of them. It occupies only 2 periods per week at each grade level (Ministry of Education, 2012).

The PE curriculum of Omani schools consists of various individual and team sports activities including football, volleyball, handball, gymnastics, basketball and track and field. These sports are divided into events over two semesters of the school year. The events vary from one grade to another. For instance, students in Grade 8 have long jump and shot putt events in track and field, whereas their Grade 11 counterparts have javelin throw and 4×400 relay. The events are disseminated over the 15-week semesters at a rate of 1 session per week. Each PE session runs for 40 minutes.

The school time allocated to physical education is perceptibly severely restricted. What is even worse, it is grim to utilize the entire 40 minutes effectively, especially since the PE sessions are generally scheduled within the timetable rather than being placed at the end of the school day. PE teachers often have to cut their sessions short so as to allow the students time to clean up and change back to their school uniforms for the remaining sessions. It is from this perspective that the present study intends to improve the students' physical fitness by increasing students' activity levels during physical education sessions. The suggested design, which I will introduce shortly, stipulates modifying the current curricula and policies to improve the physical fitness components while in PE classes.

This can be achieved by different means including adding additional physical education classes, lengthening existing physical education classes, or increasing the intensity from moderate to vigorous physical activity for students during physical education classes without necessarily increasing the duration of the class (Bates, 2006). Examples of the last approach include altering a few of the activities such as substituting softball for football or modifying the rules of the game in a way that entails the students to do more physical activity such as to make the entire team run the bases together if the batter makes a hitting softball. Studies have shown that adding additional physical education sessions during the week works as much as increasing physical activity sessions from moderate to vigorous (Bates, 2006). The increase from moderate to vigorous physical activity included a programme that aimed at improving the physical fitness components.

The Grade 10 PE curriculum in Oman includes different sport activities and each activity is divided into events. The students are expected to undergo these activities during two semesters of the school year (Oman Physical Education Curriculum, 2008).

Unique Circular Models and Community Programs

One of the Omani PE curriculum objectives is to address the students' fundamental need for regular physical activity to remain healthy and promote physical education to help reduce health risks and to develop an appreciation of appropriate nutrition and exercise (Oman Physical Education Curriculum, 2008). Research proposes that physical education should provide opportunities for competitive sports as well as expose children to various physical activities and sports that can help engage children in habitual physical activity during the course of life (Trudeau & Shephard, 2008).

This paper suggests that measures need to be carried out to address the risk factors associated with NCDs such as inactivity, rising levels in smoking, overweight, and obesity. The focus should be on student knowledge and the development of physical activity and fitness where students learn about health-related fitness concepts while participating in a wide variety of activities, including non-traditional physical activities like rock climbing and cycling as well as traditional, small-sided sports and games. The primary goal for students as they participate in these activities is to target their heart zone and not competing and winning alone.

With regard to Oman, it is well known that Physical Education and sports are not new, but rather what is new is its adaption to the Western model. The practice of Physical Education and sports in Oman is deeply rooted in the cultural fabric of its diverse ethnic communities; physical culture forms an integral part of traditional activities associated with hunting, pastoral way of life, food gathering, inter-tribal conflicts, survival and maintenance of good health which are depicted in numerous indigenous games and dances (AL-Sinani, 2013). The models commonly being introduced in Oman are generally Western models with a slight traditional touch.

The epitome is to start at the basic education level. That is, to develop the physical education component in Oman, the author suggests it has to be incorporated at the basic education level. According to the National Association for Sport and Physical Education (NASPE), children should practice at least 60 minutes of physical activity on all, if not most, of the days. Periods of activity lasting at least 15 minutes should be divided throughout the day and should consist of diverse types of moderate and vigorous activities. The children should be active every couple hours if not prior. One of the ways to do so is to combine physical concepts and activities in all subjects (Mehena & Kilani, 2010). While the primary focus of physical education programs in Oman is on sport instructions that utilize a multi-activity curricular model, the time allocated is short. The students, therefore, never acquire the knowledge or skill level that will enable them to proficiently perform the sport activity after the unit has ended. The goal is to develop competent, literate, and enthusiastic sportspersons where students go beyond the role of "beginner" by assuming additional roles and responsibilities such as coach, referee, statistician and trainer that enable them to acquire skills while also learning about the many other aspects of a sport. There are obligatory curricula for gymnasium, high school and higher education issued by the Ministry of Education, Oman.

The Omani Government has taken an initiative and is collecting statistics and providing services to people in all regions. The Ministry of Health is sponsoring many programs whose objective is to raise awareness regarding NCDs. One such initiative is a community-based intervention entitled, The Nizwa Healthy Lifestyle Project NHLP, which began in Nizwa, Oman in 2004. It aims to address the risk factors of NCDs through three subcommittees consisting of tobacco control and accident prevention, promotion of physical activity, and promotion of healthy nutrition. The interventions include identification of NHLP Friendly Schools, implementation of the Gulf program Alharaka Baraka (Move for Health) to raise activity in primary schools, lifestyle clinic, obesity screening and management, tobacco intervention, health education in schools and tobacco cessation clinic, and health professionals education and involvement (Mehena & Kilani, 2010).

It has been recommended to implement the program "Move for Health" for children less than 12 years old in 10 primary schools and to further use schools as an aid to impart information on health and physical fitness, to increase opportunities at schools for children to engage in sports. It has also been observed that parents have become more involved in their children's lives at the formative years. Thus, getting to them and enlisting their cooperation at home to instill healthy habits in children would be an effective measure to increase physical education awareness.

Moreover, the Ministry of Education is executing an experimental integrative approach in a limited number of schools with a potential for expansion to more schools. Physical Education occupies 3 periods per week (2 hours and 15 minutes) in grades 1 and 2 but decreases to 2 periods (1 hour and 30 minutes) in grades 3 and 4. The subject remains non-integrated with other subjects (Ministry of Education, 2012). It would be necessary to review a conception on physical education, of examinations and control norms needed to evaluate students in the non-track physical education and to implement sports games less known, but having a higher degree of attractiveness, without higher effort demand. By introducing the physical education lesson organized by sports branches, students succeed in improving both the somatic profile, and the bio motion potential. The allocated time is less than the recommended NASPE guidelines. One justification could be that physical activity is viewed as achieved at the expense of academic performance.

Physical activity is not only essential for normal individuals, but has been found to be one of the intervention programs that could be used as a successful inclusion for children with special needs, including those with attention deficit hyperactivity disorder, reading disabilities, emotional and behavioral disorders (Trudeau & Shephard, 2008). Further, physical activities enable students to move from lower levels of responsibility to higher levels such as respecting the rights and feelings of others, participation and effort, self-direction, helping others and leadership.

Finally, the information on the current health status of Omani children needs to be imparted to university students graduating in physical education and to health professionals in the field through in-service training. Teacher Preparation Programs should be developed and should include content knowledge about physical education, planning developmentally appropriate units, using teaching methods that involve diverse learners, and assessing physical education and its contributions to the physical, social, cognitive, and emotional domains (Mehena & Kilani, 2010).

Future Visions

The level of physical activity of an Omani child is dependent on the availability of opportunities to engage in such activities. The focus upon the role of PE to substitute physical literacy has

resulted in educators having to reveal on how they would deliver PE programs. Given growing concerns around the health and well-being of children and youth, many new policies including PE curriculum, sport guidelines have identified physical literacy as a prospect to reverse these trends.

Recent research has recommended that PE programs place heavy importance on games at the outlay of other movement forms including dance, gymnastics, fitness, and outdoor activities (Hardman & Marshall, 2005; Mandigo et al., 2004). Oman has changed and progressed as a developing country since the 1970s and followed the new integrated European structures, the suggested change of school curricula falls within the scope of education reform.

It is currently vital for the reconsideration of the content of Omani Physical Education and sport lessons to have both interdisciplinary and multidisciplinary character and to address the problem of necessity of an active lifestyle, which is essential for maintaining a proper health status. The Oman Physical Education curriculum should focus on the curricula and the different ways to link knowledge, skills and dispositions with outcomes, such as physical competency (skills and fitness), health literacy and leisure planning. Given the shortage in facilities, schools present the most appropriate medium to reach the maximum percentage of the new generation and their families.

Recommendations

Starting with basic education is ideal. Steps are recommended as follows: first, there is a need to investigate the effectiveness and efficiency of the available physical education lessons in basic education; second, to include physical education in an integrative manner in the curriculum wherever possible; third, to combine nutrition, health, and physical information in a meaningful manner; and fourth, to conduct studies on the effectiveness of adding sports components to the curriculum.

Implementing physical education in Omani basic education is by no means a luxury. It is a necessity if the new generation is to adopt a physically active lifestyle. Shaping lifestyle in a society is made by promoting cultural traditions and habits adapted to the social, economic and religious contexts. The health of people is perceived as physical health that impacts the stages and processes related to the growth and development of the young generation, with physical exercise having a pivotal role in setting and promoting the wellness standards and the quality of life.

In addition, with the development of technology, the children and youth can use them as tools for active gaming or “exergaming” as known to provide new avenues to engage themselves in physical activity and, thus, promote improvements in physical fitness. The use of technology in Oman in the new Physical Education curriculum could stimulate the co-operation of participants in the community in advocating, promoting, educating and developing learners to incorporate physical activities into their daily life since exergaming can provide an access toward sensational students to new and supplemental types of lifetime physical activities. It can also foster enjoyable physical activity experiences. Various electronic devices such as Smartphones, iPods, GPS tracking systems, heart rate monitors, and pedometers can help to

track the physical activity levels and patterns of children both in and outside of class. Physical Education teacher educators in Oman have yet to acquire such technology classes in the teacher education curriculum to acquaint future teachers with recent innovations and help them incorporate it into their classes in a pedagogical appropriate manner. There remain, thus, challenges which are primarily related to the financial expense of acquiring costly technological devices that quickly become outdated and effectively using technology to advance skill development in the same way that it has promoted higher levels of physical activity.

The current curricula need to be modified to improve the physical fitness components while in PE classes. This can be achieved by different means such as adding additional physical education classes, lengthening existing physical education classes, or increasing from moderate to vigorous physical activity for students during physical education classes without necessarily lengthening class time. Developing literacy for physical education has become significant for the Ministry of Education in Oman. In schools, records of the physical skills are being maintained by conducting standardized tests throughout primary and secondary schools. By developing a definition of physical literacy that is consistent with current notions of literacy, physical educators get an opportunity to become an important part of the overall development of literacy amongst students rather than being excluded from these discussions.

Physical educators now have opportunities to connect what students have learned in other curriculum subjects to what they are learning in PE. Further, schools should include a complete school physical activity program before and after school. It has been suggested that the best person to organize such a physical activity program is the physical education teacher. In Oman, Sultan Qaboos University (SQU) is the only institution that provides the Initial Teacher Training Program for Women, which can help train teachers in physical education. It is also highly recommended to establish a fully-fledged Directorate of Physical Education that oversees the promotion, education, development and monitoring of Physical Education teachers in Oman. The Physical Education teachers in Oman should be trained to create a positive learner-centered environment reflecting the best practices to encourage students to become active participants in the learning process.

However, with changing trends in the future, teacher education standards and programs will need to be revised to help beginning physical education teachers acquire the knowledge, skills, and dispositions necessary to direct a comprehensive school physical activity program. With the known benefits of PE specialists on the development of physical literacy, particularly at the primary grades, more districts in Oman will need to critically examine the level of expertise and training of teachers who teach PE in both primary and secondary schools in order to effectively meet the goals of fostering physical literacy amongst their students. In the capital city, where there are a large number of students to assist the physical education teacher, the presence of school personnel can help the teacher and can play a role in integrating nutrition, health, skill development, and physical education. In the interiors, where the strength of the school is less, classroom teachers can become involved in promoting comprehensive school health by engaging students in physical activity breaks outside of the classroom.

Worldwide, physical education programs, as well as physical education teacher preparation programs, need to be reconsidered. University of Northern Iowa (USA) and the Grundy Center, Iowa (USA) Community Schools, hosted and organized a program which was sponsored by HOP

Sports, the Global Forum for Physical Education Pedagogy 2010 (GoFPEP, 2010) to examine a new training program for preparing physical education teachers, consumption of technology to help teach physical education; and to develop the building of school, university, community and corporate partnerships (GoFPEP, 2010). According to the GoFPEP (2010), physical education training program should focus on the content and methodologies so as to enable development of healthy active lifestyles for both, children and youth. The physical education curriculum should be redesigned to promote active student centered learning to aid in the development of life skills that lead to self-directed engagement in physical activity. To achieve these goals in Omani schools, the educational infrastructure of the school has to be changed, where physical education is emphasized equally to other subjects taught in school.

These programs together can aid to promote policies and a broad range of programs including healthy nutrition, weight management, physical activity and leisure planning. Partnerships with parents, schools and community organizations to surround based program elements which enhance physical education teacher preparation should be developed.

Conclusion

This article has reviewed the history and status of Physical Education in Oman by exploring some aspects of Islam, gender, education and physical education in schools, community and initial teacher training programs. Important environmental, historical and socio-cultural factors have been examined. Significant recommendations have been proposed too as to make the Physical Education sector in Oman more effective in achieving its intended goals. Despite the diversity and complexity of Islamic feminism, the principles of such a framework and approach are invaluable in underpinning the confidence of the researcher and research focus. Thus, the author suggests it is important to understand this complexity in terms of the Omani, Arabic, Islamic context. Today Omani culture is a product of diverse and, sometimes, conflicting influences and is moving differentially in terms of modernization, while being largely dependent on geographical diversity and accessibility. The diversity of geographical terrain and the Omani culture present a particular set of challenges to disseminating and monitoring any national government efforts, policies and practices to improve education. However, with proper guidance and implementation, and a newly revised curricula and a novice approach to physical education, the government of Oman can, and will, achieve a more modern, cultural and effective Physical Education program.

Acknowledgement

I would like to thank Sultan Qaboos University (Oman) for funded this paper from Internal Grant from Sultan Qaboos University, Oman (IG/EDU/13/02).

References

- Al Barwani S., Al Abri M., Al Hashmi K., Al Shukeiry M, Tahlilkar K., Al Zubeidi T., Al Rawas O., & Hassan M.O (2001). Assessment of aerobic fitness and its correlates in Omani adolescents using the 20-Meter Shuttle Run Test: A pilot study. *Medical Sciences*; 3(2), 77-80.
- Al-Belushi, S., Al-Adawi, S. & Al-Ketani, S. (1999). *Education reform in the Sultanate of Oman*.
- Al-Lawati, J.A. & Jousilahti, P.J. (2004). Prevalence and 10- year secular trend of obesity in Oman. *Saudi Medical Journal*, 25 (3), 346-51.
- Al-Shamli, A. (2010). The impact of the Omani physical education curriculum on physical fitness. *Current Research Journal of Social Sciences*, 2(4): 220-225.
- AL Sinani, Y. J (2013). Content Evaluation of Physical Education Teacher Preparation Programs for Women at Sultan Qaboos University in Oman. *Scottish Journal of Arts, Social Sciences and Scientific Studies*, 10(1), 42-51.
- Al Sinani, Y.J. (2012). The Establishment and development of the initial physical education teacher's training programme for women in Oman. *International Journal of the History of Sport*, 29, 2184-2199.
- Al-Sinani, Y. J., & Benn, T. (2010). The Sultanate of Oman and the position of girls and women in physical education and sport. In T. Benn, G. Pfister, & H. Jawad (Eds). *Muslim Women in Sport*, pp. 125-136. London: Routledge,
- Bates, H. (2006). Daily physical activity for children and youth: A review and synthesis of the literature. *Alberta Education Cataloguing in Publication Data*, Alberta Education, Alberta, Canada, pp. 76.
- Global Forum for Physical Education Pedagogy 2010 (GoFPEP 2010), Iowa, USA: *Health and Physical Education Pedagogy in the 21st Century: A Statement of Consensus*.
- Hardman, K., & Marshall, J. (2005). Update on the state and status of physical education worldwide. Keynote address at the 2nd World Summit on Physical Education (December 2, 2005). Magglingen, Switzerland.
- Hassan, M.O., & Al-Kharusy W. (2000). Physical fitness and fatness among Omani school boys: A pilot study. *Medical Sciences*, 2, 37-41.
- Mehena, M., & Kilani, H. (2010). Enhancing physical education in Omani basic education curriculum: Rationale and implications. *IJCDSE*, 1(2): 99-104.
- Ministry of Education, Sultanate of Oman. (2012). *"Basic Education: Educational and Administrative Support"*, *Oman Educational Portal*, Oman. Retrieved August 10, 2012 from the World Wide Web: <http://www.moe.gov.om/portal/sitebuilder/sites/EPS/English/MOE/BasicEducation.aspx>. Accessed.

- Mandigo, J. L., Thompson, L., Spence, J., Melnychuk, N., Schwartz, M., Marshall, D., & Causgrove D. J. (2004). A descriptive profile of physical education teachers and related program characteristics in Alberta. *Alberta Journal of Educational Research*; 50:87 – 102.
- Oman Physical Education Curriculum, .(2008). Oman Physical Education Curriculum. Mascot, Oman: Ministry of Education
- Osman, Y. F., Muscati, S. K., Ganguly, S. S., Khan, M., & Al-Sharji, B. (2004). Progression of Obesity among Seeb Children in Oman. A Preliminary Study. *Saudi Medical Journal*; 25(12), 2038-40.
- Trudeau, F., & Shephard, R.J. (2008). Physical education and school physical activity and school sports and academic performance. *International Journal of Behavioral Nutrition and Physical Activity*, 50 (10), 1-12