



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Everyone's Smart University

Project (Spring 2021)

Student Name	Yousif Yahya Habib	اسم الطالب
Students I.D	2021200095	الرقم الجامعي

Section

Master

Date

Thursday

18 / 03 / 2021.

Course Code

(PMG510)

Project Risk Management

Instructions:

- اخر موعد للتسليم هو يوم السبت 2021-05-08 في تمام الساعة ٩ مساءً.
- الإجابة متاحة باللغة الإنجليزية أو اللغة العربية مع مراعاة أن تكون المصطلحات العلمية باللغة الانجليزية.
- يتم تسليم المشروع في صيغة ملف . pdf مع الالتزام نموذج الجامعة ولن تقبل أي مستندات أخرى.
- يجب مراعاة أقسام البحث الرئيسية (مقدمة Introduction، دراسات علمية سابقة Literature Review، طريقة البحث Methodology، النتائج والمناقشة Results and Discussion، وأخيراً المراجع References . وان كان هناك ملحقات Appendices يتم إضافتها)
- يجب الالتزام بـ Theme موحد كما يلي:
- حجم الخط 12.
- نوع الخط Arial.
- لون الخط أسود.
- المسافة بين الأسطر line spacing 1.5
- عدد صفحات البحث (لا يقل عن ثلاث صفحات ولا يزيد عن ست صفحات).

Instructor's Name: Eng. Mosaab M. Hamed

Project:

Risk Identification and Analysis (Based on the project you chose in APM)

The objective of this report is to identify project risks, prepare a risk probability matrix, and carry out an analysis of selected risks. Referring to the project you select in **Advanced projects management APM course**, your task is to prepare a risk management plan that identifies potential risks in **the selected stage of the project** and identify risk management strategies.

From the course content and readings, you know that the overall purpose of risk planning is to anticipate possible risk events and be ready to take appropriate action when risk events occur—to eliminate or reduce negative impacts on the project.

You may wish to begin this exercise with a brainstorming about potential risks to get candidate risks “on the table” for consideration. And then identify and refine that wording for risks that have some realistic chance of occurring in this stage. For example, potential weather problems present a real obstacle to completing field data collection by the planned completion date. It is also an issue that the project manager will ultimately have to plan for, as opposed to other issues such as a major disaster (e.g., your office burning down), is not a high-enough probability event that requires much time in planning. As described below, you will select several of the identified risks and carry out a risk analysis.

You will use the distilled list of risks to make a risk probability/impact matrix. The matrix will have at least three categories (high/medium/low) for probability and impact.

Remember that it is important to name risks effectively—use words that describe the risk event and point to the impact on the project (e.g., “injury of field technician disrupts data installation work”).

After completion of the risk matrix, document a risk analysis for the selected risks. This detailed documentation for that selected risk will include:

- a description of the risk and potential impacts (schedule, quality of work, cost, etc.) on the project.
- indicators or triggers that would be monitored to help identify the risk as early as possible.
- specific risk response strategies to take.

Using probability and impact matrix calculate the **Expected Monetary Value (EMV)** for all risks that have the impact in terms of cost \$\$.

Best of luck...

المشروع:

التعرف على المخاطر وتحليلها (بحث مبني على مشروعك الذي اخترته في مادة ادارة المشاريع المتقدمة)

الغرض من هذا التقرير هو التعرف على المخاطر المحيطة بالمرحلة التي تختارها المرحلة من مراحل مشروعك (نفس المرحلة التي اخترت التطرق لها في مشروعك لمادة إدارة المشاريع المتقدمة Advanced project management) حيث أن مهمتك هي تحضير خطة متكاملة لإدارة المخاطر تشمل التعريف بالمخاطر المحتملة التي تحيط بتلك المرحلة وتحضير مصفوفة احتمالية المخاطر ومن ثم القيام بالتحليل لهذه المخاطر المختارة وتحديد استراتيجيات ادارة المخاطر المناسبة لكل خطر على حدة.

من محتويات المقرر والمصادر الأخرى المتاحة أصبحت تعلم الآن أن الغرض العام لمرحلة التخطيط للمخاطر هي توقع أحداث المخاطر المحتملة والتجهز لاتخاذ ردة الفعل المناسبة عند وقوع الخطر – لمنع أو تقليل الآثار السلبية على المشروع.

قد تحبذ بداية هذا البحث بعصف ذهني عن ماهية المخاطر التي قد تحيط بتلك المرحلة من مراحل مشروعك, وذلك للحصول على قائمة بتلك المخاطر. ومن ثم تحديد وتصفية هذه القائمة للوصول إلى قائمة مختصرة بالمخاطر التي لها فرصة واقعية أكبر في الحدوث. على سبيل المثال: المشاكل الجوية المتوقعة والتي تمثل عقبة حقيقية أمام اكتمال جمع البيانات من المواقع في أو قبل الوقت المحدد، هذه تعتبر مشكلة على مدير المشاريع أن يضعها في الحسبان. من ناحية أخرى، فإن المخاطر غير الواقعية مثل الكوارث الطبيعية والأعاصير (تلك التي تسبب حريقاً بمكتبك وفقدان الأوراق المهمة) ليست لها احتمالية وقوع عالية وبالتالي لاتستدعي تضيق الكثير من الوقت في التخطيط لها. كما سيتبين لك، ستقوم باختيار عدة مخاطر من تلك التي قمت بالتعرف عليها لتحليلها.

ستقوم باستخدام هذه القائمة المختصرة لعمل مصفوفة المخاطر (الاحتمالية/الأثر). المصفوفة ستحتوي على الأقل على ثلاث تصنيفات (عالي/متوسط/منخفض) للإحتمالية والأثر.

لاتنس استخدام أسماء تصف طبيعة المخاطر بصورة فعالة – قم باستخدام كلمات تصف الحادثة الخطرة وتشير الى أثرها على المشروع (مثل: إصابة أحد الفنيين في الموقع مما يؤثر على أعمال التركيب).

بعد انتهاءك من مصفوفة المخاطر، قم بتوثيق تحليلك للمخاطر المختارة. هذا التسجيل المفصل للمخاطر يجب أن يتضمن:

- وصف للخطر واثاره المحتملة (الجدولة، جودة العمل، التكلفة، الخ)
- المؤشرات والمحفزات التي يجب مراقبتها للمساعدة في التعرف على هذا الخطر قبل وقوعه
- تفصيل للاستجابة المقترحة للتصدي لهذا الخطر

باستخدام مصفوفة الاحتمالات والتأثير ، احسب **القيمة النقدية المتوقعة (EMV)** لجميع المخاطر التي لها تأثير من حيث التكلفة \$\$.

مع تمنياتي بالتوفيق..

AN INVESTIGATION OF RISK MANAGEMENT PRACTICES IN THE HEALTH AND FITNESS FACILITIES

1.Introduction

Obesity has emerged as ever-increasing global challenges leading to alarming health problems.[1-4] Stress and concern are lifted as for the undermining increment in weight pick up and sullen corpulence advancement in more youthful people attributable to dormant ways of life and poor dietary patterns, for example, skipping breakfast and expending quick nourishments. This change has been observed in Saudi nationals subsequent to a major lifestyle change, including minimal activity, altered eating habits, and a sedentary lifestyle, during recent years.[5-7]

The high predominance of dormancy and stationary life among Saudi youth has been found to bring about real medical problems, for example, undue weight increase, grim heftiness, hypertension, and diabetes mellitus like those seen in numerous different nations in this area.[8,9] A number of factors related to lifestyle and eating habits have been found to be responsible for these changes, including an increasing trend toward spending long hours watching television; playing computer games; smoking; and eating junk food, sweets, candies, chocolates, and other dairy products, all of which contribute to and share in the increasing incidence of obesity and overweight.[10,11]

This changing range of way of life and undesirable dietary patterns is applying significant and adverse impacts on the lives of average people. Always expanding corpulence is prompting to absolutely subordinate lives and an expanded frequency of life-debilitating issues even at extremely youthful ages. Early mindfulness and regard for this issue are crucial for these patients to come back to typical lives and to make them beneficial individuals from society. The purpose of this study was to examine the activity levels, dietary habits, body mass index (BMI), and unhealthy behavioral habits as well as their impacts on risk factors with respect to the increasing obesity observed in residents living in Unaizah City in the Qassim region.

2. Literature Review

The focus of this study was on two major types of risks that health/fitness facilities can face. The first is programmatic risks. This relates to the failure of health/fitness facilities to provide reasonably safe services that do not entail physical harm and injury to their patrons. The latter includes financial risks such as high cost liability claims or out of court settlements that may arise as a result of physical harm and injuries caused to patrons. As illustrated in Figure 1, both can have serious consequences on the economic health of health/fitness service providers resulting in damage to image and reputation, loss of existing and prospective members, and loss of revenue.

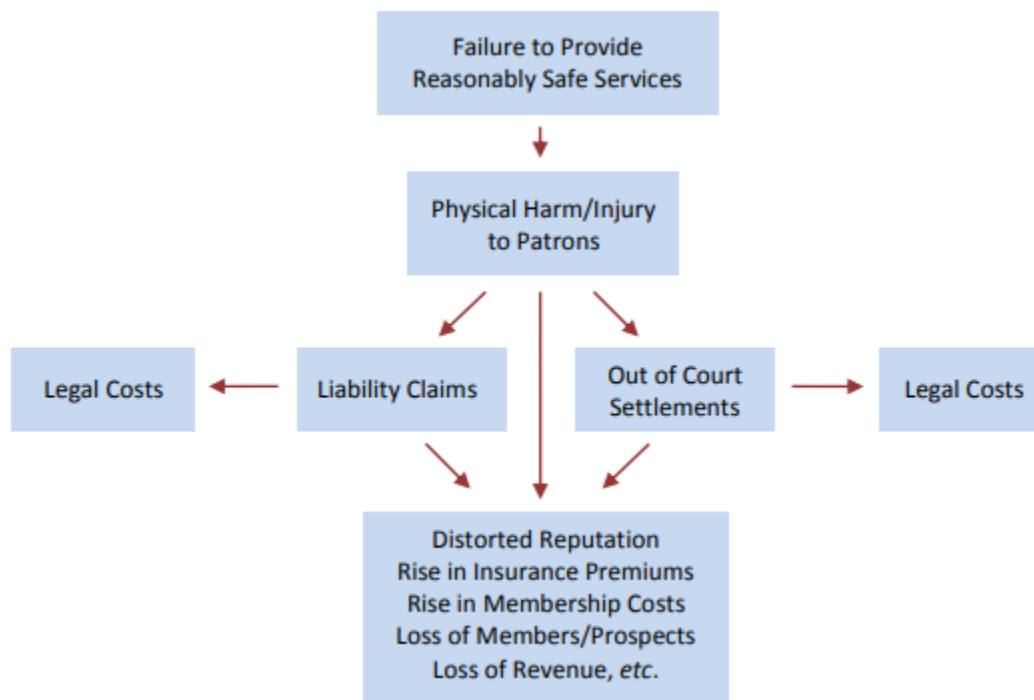


Figure 1. Risks in the health/fitness industry

According to Rochford (2007, p.183) the common law test in determining whether a risk of injury is reasonably foreseeable is based on open-ended “commonsense calculations of risk” and is contrary to the more objective calculative processes of risk management. Therefore, over the years, courts have had varying understanding and decisions in trying

to deal with the meaning of 'reasonable risk' based on the circumstances of each individual case.

Often, a reasonably foreseeable risk of injury is weighed against the cost or inconvenience of taking the precautions that are necessary to avoid it. However, a defendant must usually take precautions that involve little difficulty or expense, even if the risk of injury is small (*Romeo v Conservation Commission (NT)*, 1998). As Judge Mason pointed out in *Wyong Shire Council v Shirt* (1980), ultimately the question of fact is what a reasonable person, in the position of the defendant, would do by way of response to the risk under question. In this light, critical in the assessment whether the defendant failed to take necessary precautions against that foreseeable risk of injury is a determination of the objective and reasonable 'standard of care' that can be expected in the particular industry or profession. The obviousness of a risk is also a factor in determining the standard of care but is not in itself conclusive (*Woods v Multi-Sport Holdings Pty Ltd*, 2002).

3. Methodology

In order to ensure proper functioning of a risk management plan the Risk Management Standard AS/NZS 4360:2004 can be the skeleton of a health and fitness business. However, as Healey (2005, p.123) highlights, the Risk Management Standard '...is not intended to create uniform risk management systems – [rather] systems should be developed according to the needs, objectives and business of an organization'. In this light, the Risk Management Guidelines HB 436:2004 and Guidelines for Managing Risk in Sport and Recreation HB 246:2004 have been

developed to help different sport and recreation organizations implement the risk management process outlined in the Risk Management Standard AS/NZS 4360:2004 within their own contexts.

As illustrated in Figure 2, risk management process is the “systematic application of management policies, procedures and practices to the tasks of communicating, establishing the context, identifying, analysing, evaluating, treating, monitoring and reviewing risk (Standards Australia, 2004a, p.5). The essence of the five step risk management process is to identify emerging and unidentified risks. There are two overriding elements of the system. These are continuous communication/consulting, and monitoring/review. The former emphasizes that internal and external stakeholders are communicated with and consulted in each step of the risk-management process. The latter suggests that the risk management process must be monitored by the risk management team to provide

feedback on the process as well as to determine if or when improvements must be made.

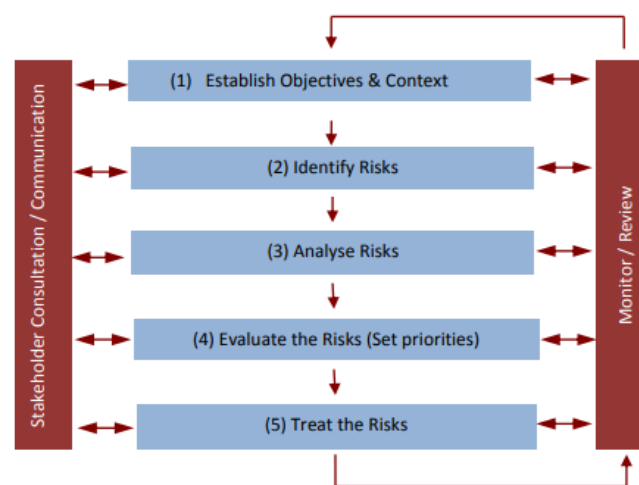


Figure 2. Risk management process

Risk communication and consultation can be defined as any two-way dialogue between stakeholders about the existence, nature, form, severity, or acceptability of risks. Knight (2006) contends that a risk management communication strategy must be mutual and focused on consultation rather than a one-way flow of information from decision-makers to stakeholders, especially those outside the organization. Therefore, it is crucial to analyse and identify stakeholders in the beginning of a risk management process. Although, the mix of stakeholders may change due to new issues, needs or concerns that may arise through the risk management process (Knight, 2006), the stakeholders would generally include:

- ☐ customers,
- ☐ individuals inside the organization, such as employees, management,
- ☐ individuals or groups who are interested in issues related to the proposal,
- ☐ individuals who are, or perceive themselves to be, directly affected by a decision or activity, non-government organizations (NGO) such as lobby or advocacy groups, whose aim is to influence government policy making and/or implementation,
- ☐ partners in the decision, such as financial institutions and insurance agencies,
- ☐ politicians at all levels of the government, who may have an electoral or portfolio interest,
- ☐ regulators and other government organizations that have authority over activities,
- ☐ senior management, contractors, and volunteers,
- ☐ suppliers and service providers, and
- ☐ the media.

3.1. Risk Identification

Risk identification can be described as the process that defines events or outcomes that may have a measurable impact on the success of an organization (Australian Sport Commission, 2002). In other words, risk identification helps determine what could have an impact on the strategies and objectives of an organization or a

company. Poor risk identification can defeat the whole purpose of a risk management plan. Any risk that is left unidentified at this stage would not be included in the risk analysis stage and therefore would be excluded from the whole risk management process. Therefore, a comprehensive risk identification using a well-structured systematic process is critical at this stage of the risk management process (Standards Australia, 2004).

Before the risk identification process, risks that are most likely to occur have to be categorized. In this regard, identification of the key elements of risks through categorization provides a structure in the risk identification step by minimizing the risk of missing important issues and fostering creativity in the risk management team. Organizations should identify key risk elements according to their own primary and secondary risk factors. Primary risk factors would include standard operating procedures (SOPs), while secondary risk factors would include factors such as weather, the type of activity, participant demographics and location of an event or facility (Ammon, Southall and Blair, 2003).

3.2. Risk Analysis

Risk analysis provides an understanding of risks by taking into consideration their sources, consequences and the possibility of the consequences occurring (Standards Australia, 2004b). Risk analysis can be conducted using quantitative and/or qualitative approaches. Quantitative analysis may determine a level of risk by means of a value that measures the risk in numerical terms. However, there are several disadvantages in trying to determine the level of risks in quantitative terms only. First, it would require great attention to the accuracy of data that measure the risk. Second, the risks that are measured would be limited to the availability of the quantitative data in hand. Third, intangible consequences of risks such as bad reputation or negative media coverage can be problematic. In this sense, it can be more practical to use a qualitative approach that uses description rather than numerical means to define a level of risk. Sources of information that can be used in a qualitative risk analysis are past history, knowledge, relevant publications, reasoning and current circumstances of the business and the environment (Knight, 2006). While neither approach is superior to the other, the best

approach is to use a combination of quantitative and qualitative risk analyses to best fit the type of detail and information required about different types of risk.

Irrespective of the variability of the available data and the methodologies that can be used to analyze a risk, conducting qualitative analysis first would often be more practical in providing a general idea of the magnitude of the consequences of the risk and the possibility that those consequences will occur. Examples of qualitative risk analysis are the 'consequence' and 'likelihood' scales. Table 1 demonstrates a simple descriptive 'consequence' table that can be used by organizations to consider risk factors related to health and safety, natural environment, reputation and legal issues (Standards Australia, 2004b, p. 52). For example, death or multiple life-threatening injuries may be considered as 'catastrophic' consequences that would threaten the survival or continued effective function of the program or activity of an organization. Whereas, injuries that require no medical treatment may be considered as 'insignificant' consequences that can be dealt with routine operations of an organization.

Rating	Description
Catastrophic	The consequences would threaten the survival of not only the program or activity, but also the organisation, causing major problems for participants.
Major	The consequences would threaten the survival or continued effective function of the program or activity, or require the intervention of top-level management.
Moderate	The consequences would not threaten the program, but would mean that the administration of the program or activity could be subject to significant review or changed by ways of operating.
Minor	The consequences would threaten the efficiency or effectiveness of some aspects of the program, but would be dealt with internally.
Insignificant	The consequences are dealt with routine operators.

Table 1. Consequences

Table 2 illustrates a sample rating of 'likelihood' scale. Accordingly, risks that are 'almost certain' would have a significant past history and considered most likely to occur at least once a year or even more frequently in the current circumstances. Risks that are 'likely' to occur would have some past history and considered quite likely to occur once every 3

years in the current circumstances. Risks that are 'unlikely' would have no past history but possibly or occasionally occur in some circumstances once every 30 years. Risks that are 'rare' would usually have no past history and considered unlikely to occur with an expectancy of once every 100 years.

Rating	Description	Frequency
Almost Certain	Significant past history, and considered most likely in these circumstances.	Once a year or more frequently
Likely	Some past history, and considered quite likely in these circumstances.	Once every 3 years
Possible	Some past history, and considered possible in these circumstances.	Once every 10 years
Unlikely	No past history, but possible in some circumstances or occasionally.	Once every 30 years
Rare	No past history, and considered unlikely to occur.	Once every 100 years

Table 2. Rating of Likelihood Scale

The needs of the study for each risk and the attention required by the management can be determined by using the 'Risk Assessment Matrix' that intersects the likelihood and consequences of each risk that may occur (Table 3). The purpose of determining the level of each risk on the matrix is to designate the level of management required and the response time required to deal with those risks. According to the 'Risk Assessment Matrix', risks that are 'extreme' must be brought to senior executive directors' attention for research and action management planning in detail immediately. Risks that are 'high' should be brought to the attention of senior management with heightened need for action management planning. Risks that are 'moderate' should be managed by specific monitoring or response procedures of the business. Risks that are 'low' should be managed through routine procedures in an organization as such risks would be unlikely to need specific allocation of resources. Table 3. Risk Assessment Matrix (Adapted from Standards Australia, 2004b, p. 55)

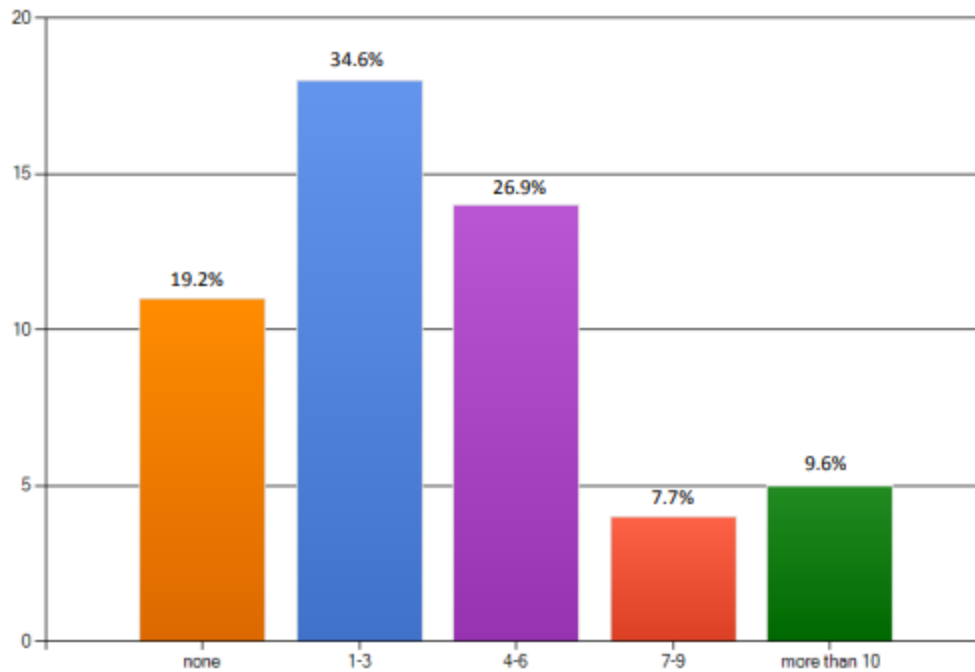
	Consequences					
		Insignificant	Minor	Moderate	Major	Catastrophic
Likelihood	Almost certain	High (H)	High (H)	Extreme (E)	Extreme (E)	Extreme (E)
	Likely	Moderate (M)	High (H)	High (H)	Extreme (E)	Extreme (E)
	Possible	Low (L)	Moderate(M)	High (H)	Extreme (E)	Extreme (E)
	Unlikely	Low (L)	Low (L)	Moderate(M)	High (H)	Extreme (E)
	Rare	Low (L)	Low (L)	Moderate(M)	High (H)	High (H)

Legend: E= (immediate action); H= (heightened action); M= (monitoring required); L=Low (routine procedures)

4. Results and discussion

In order to understand the sources of risks in health/fitness facilities, first the most popular fitness services offered by the health/fitness facilities were analysed. Then, the number of injuries in the last twelve months and the areas or activities where these injuries occurred most were analysed. Further, the type of injuries that occurred most was compared to the type of injuries that involved the lawsuits brought against the health/fitness facilities.

The results of descriptive statistics showed that the most popular three fitness services offered by health/fitness facilities were weight training with fitness machines (98.1%), cardiovascular training (i.e. treadmills, elliptical) (98.1%) and free weight training (92.3%) (Figure 12.a).



There were at least 1-3 incidents or accidents/injuries that occurred in 34.6% of health/fitness facilities in 2009-2010 (Figure 12.b).

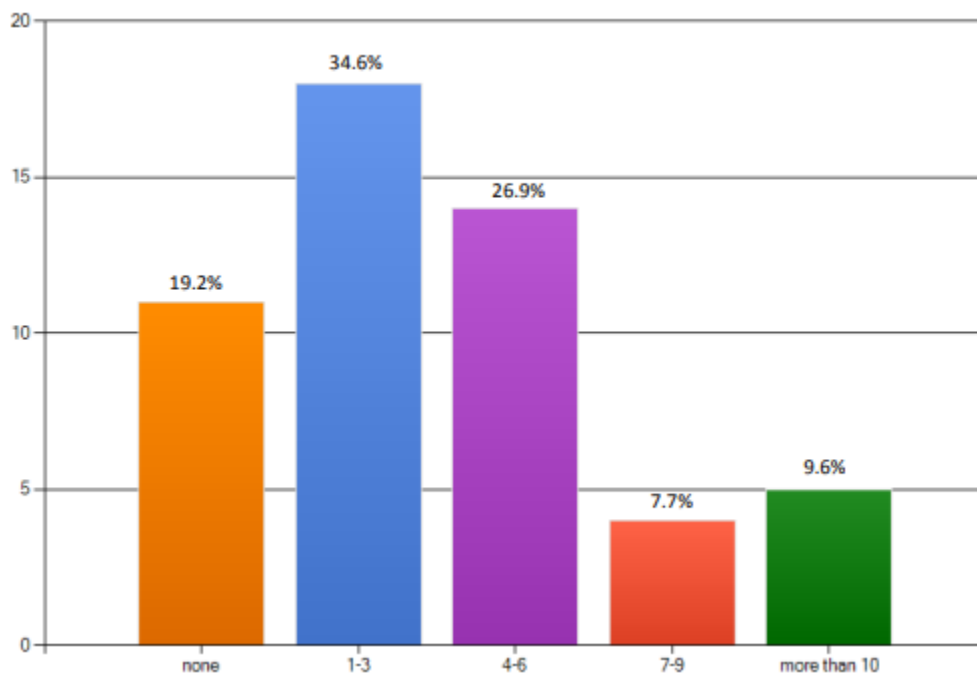


Figure 12.b. Number of incidents or accidents/injuries occurred in health/fitness facilities in 2009-2010

Discussion

Drawn from the heightened need in the literature to understand implementation of risk management practices in the health/fitness facilities in Australia, the main purpose of this study was to investigate risk management practices of the health/fitness facilities in Queensland. For this purpose, an 81-item questionnaire was developed and pilot tested by the researcher and distributed to all health/fitness facilities in Queensland whose contact information and e-mail addresses were gathered using Australia's online gym directories and yellow pages. At the end of the data collection process, a twenty per cent return rate was achieved. This Chapter first provides a summary of the major findings of this study. This is followed by the discussion of the most important results about implementation of risk management practices by health/fitness facilities to minimise the risk of legal liability and conclusions that draw practical implications for future research.

Approximately 35% of the managers that participated in the study were also owners of the health/fitness facilities.

- The gender of health/fitness facility managers was evenly distributed with females (51.9%) slightly more than males (48.1%).
- The largest percentage of the health/fitness facility managers were aged between 35-44 years old (32.7%).
- Approximately 60% of the managers had spent 1-5 years in their current position with 36.5% of the managers being in the business for at least 6-10 years.
- The longer health/fitness facility managers had experience in the fitness industry (6-10 years), the more they adhered to risk management practices related to staff/personnel.
- The health/fitness facilities that participated in this study were either public

(48.1%) or private (48.1%) institutions.

□ The size of the majority of health/fitness facilities (84.6%) ranged between

<500 m²

to 1000-3000 m

2

.

□ The daily average member population of most of the health/fitness facilities

ranged between >100 - 500 (75%) while the average member population of

most health/fitness facilities ranged between 101 - 1000 (50%).

The Kingdom of Saudi Arabia has undergone tremendous changes in lifestyles and dietary habits consequent to gross urbanization and the introduction of a wide variety of fast food chains nationwide, leading to an increase in obesity among native residents and particularly in children and adolescents. This change has exerted a very undesirable and threatening effect on the overall health status of the population. The present study found significantly low overall levels of physical activity, ranging from a totally sedentary lifestyle to occasional light exercise. This finding is in line with those of similar studies that described the deleterious effects of the low physical activity. The present study reported an increasing incidence of morbidity parallel to the weight gain caused by reduced activity and unhealthy eating habits, as evidenced by the serious systemic comorbidities present in the majority of the study subjects. This finding is consistent with the observations of Al-Nakeeb et al.,[19] who also claimed that this predisposition to the development of serious health problems remained throughout the lives of these individuals. The present study reported BMI values ranging from 25 to > 30 kg/m² in 66.88% of the comparatively younger study population, which had a strong positive relationship with the regular consumption of fast foods. The same association has been reported in many similar studies. The present study found that hypertension frequently accompanied overweight and obesity in the subjects. This association has also been reported in other similar studies, thus confirming our observation. There have been definite increases in weight

gain and obesity levels as a result of the altered lifestyle patterns, reduced physical activity, and unhealthy dietary habits, particularly among adolescents. This issue requires serious attention before it becomes an epidemic in this region.

5. References

A Current Affair (2010) 'Gym warning', television program, Channel Nine, Australia, 23 September.

Abbott, K., Klarenaar, P., Donaldson, A. and Sherker, S. (2008) 'Evaluating SafeClub: can risk management training improve the safety activities of community soccer clubs?', British Journal of Sports Medicine, Vol. 42, pp.460-465.

Albert, C. M., Mittleman, M. A., Chae, C. U., Lee, I. M., Hennekens, C. H. and Manson, J. E. (2000) 'Triggering of sudden death from cardiac causes by vigorous exertion', The New England Journal of Medicine, Vol. 343, No. 19, pp. 1355-1361.

Alem, A. P. v., Vrenken, R. H., Vos, R. d., Tijssen, J. G. and Koster, R. W. (2003) 'Use of automated external defibrillator by first responders in out of hospital cardiac arrest: Prospective controlled trial', British Medical Journal, Vol. 327, pp. 1312-1317.

1. Alnami MY. Prevention and control of obesity: An interprofessional system approach. Saudi J Obes. 2016;4:59–67. [Google Scholar]

2. Nohair SA. Obesity in gulf countries. Int J Health Sci (Qassim) 2014;8:79–83. [PMC free article] [PubMed] [Google Scholar]

Shaikh MA, Al Sharaf F, Shehzad K, Shoukat F, Naeem Z, Al Harbi S, et al. Prevalence and trends of overweight and obesity amongst Saudi school children, a study done by using three noninvasive methods. *Int J Health Sci (Qassim)* 2016;10:381–7. [PMC free article] [PubMed] [Google Scholar]

Khan ZN, Assir MZ, Shafiq M, Chaudhary AE, Jabeen A. High prevalence of preobesity and obesity among medical students of Lahore and its relation with dietary habits and physical activity. *Indian J Endocrinol Metab.* 2016;20:206–10. [PMC free article] [PubMed] [Google Scholar]

Mabry R, Koohsari MJ, Bull F, Owen N. A systematic review of physical activity and sedentary behaviour research in the oil-producing countries of the Arabian Peninsula. *BMC Public Health.* 2016;16:1003. [PMC free article] [PubMed] [Google Scholar]

Antwi F, Fazylova N, Garcon MC, Lopez L, Rubiano R, Slyer JT. The effectiveness of web-based programs on the reduction of childhood obesity in school-aged children: A systematic review. *JB I Libr Syst Rev.* 2012;10(42 Suppl):1–14. [PubMed] [Google Scholar]

Ahmed AE, Al-Jahdali F, Al-ALwan A, Abuabat F, Bin Salih SA, Al-Harbi A, et al. Prevalence of sleep duration among Saudi adults. *Saudi Med J.* 2017;38:276–83. [PMC free article] [PubMed] [Google Scholar]