



The Effects of Peer Pressure on Nutrition Attitudes and Food Selection

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ABSTRACT

Objectives: Considerable time is spent at work and unhealthy eating behaviors may be acquired through frequent pressure from co-workers. The consequences of such an attitude can be devastating to individuals' health (via obesity) and to the workplace (via the costs of absenteeism). The aim of this study is to assess the impact (peer pressure) of co-workers on eating behaviors and food choices among Saudi employees. **Methods:** A cross-sectional study was conducted among employees working at multiple organizations in the Northern Regions of Saudi Arabia. A self-administered questionnaire was submitted to a representative sample with different Body mass index (BMIs). The demographic data of the participants, the variables regarding meal consumption patterns at work, and data about the influence of peers on food choices were collected. **Results:** A total of 937 employees responded (60.7% females, 74% overweight or obese). Most respondents would take meals with co-workers (84.3%) and were influenced by co-workers in their food choices (61.2%); these influences were negative (unhealthy food) for 29.9%. Interestingly, co-workers hindered plans for healthy diets frequently or occasionally in 75.4% of participants. Unlike those with low BMIs, a significant proportion of obese employees were influenced in their food choices by co-workers ($p=0.004$) in a negative way ($p=0.012$) and had their healthy diets disrupted by co-workers as well ($p=0.004$). **Conclusion:** Saudi employees are strongly influenced by peer pressure regarding food choices. Targeted intervention programs should be tailored to increase employees' knowledge regarding healthy food choices, resisting the pressure of co-workers, and supporting self-efficacy in eating.

Keywords: Nutrition, Food selection, Obesity, Overweight, Peer pressure

INTRODUCTION

Consistent with the increasing global prevalence of obesity and the condition of being overweight [1], eating disorders are becoming more common as are the individuals who advocate dietary modifications to lose weight. Disruption of the normal eating behavior, which is defined as the behavioral habits surrounding the eating of food, food choices, cooking preparations, and the amounts of ingested food [2], will ultimately affect long-term health outcomes, such as cardiovascular and metabolic health. In particular, increased consumption of animal fat, salt and alcohol can contribute to the development of atherosclerosis, hypertension, and liver cirrhosis, respectively [3].

An estimation of the global burden of diseases and mortalities attributable to disrupted nutritional aspects clearly underscores their importance. Approximately 45% of cardiometabolic deaths in the US were associated with abnormal patterns of consumption of the main dietary elements, including vegetables, fruits, processed meats, whole grains, polyunsaturated fats, and sweetened beverages [4]. Further, a recent meta-analysis indicated a trend towards an increased risk of cancer arising from unhealthy dietary patterns [5]. In Saudi Arabia, rapid economic growth has promoted luxurious lifestyles, associated with unhealthy dietary patterns and reduced physical activities, which have culminated in a tenfold increase in the incidence of diabetes mellitus over the past three decades [6].

In general, the determinants of dietary intake are predominantly correlated with intrapersonal, interpersonal, and sociodemographic factors. For example, food choices are dependent on the extent to which an individual can afford them (i.e., related to income) [7]. Individuals compliant with dietary guidelines tend to be involved in food purchasing, preparation, and cooking, and they have high levels of confidence in their ability to prepare healthy meals [8]. Notably, social context plays a significant role, and the types of food consumed and the total caloric intake can be influenced by

food consumption with family and friends, or alone. More concisely, greater peer encouragement of unhealthy eating coupled with low self-efficacy for dietary management are major contributors to unhealthy food intakes [9].

In the workplace, the consequences of inadequate eating patterns are devastating to employers, and obesity is considered one of the most commonly encountered and one of the most economically damaging health problems at work [10]. Additionally, multiple conditions related to diet and obesity, such as stress, back pain, diabetes, and coronary heart disease, are causally linked to unhealthy eating. Social interaction is also evident at work, where personal dietary styles are influenced by the impact of peers. For instance, support from work colleagues was an important factor promoting the engagement of nurses with healthy eating and physical activities [11]. This way, targeted health promotion interventions in the workplace may reduce the burden, focusing on its social correlates. In this context, and in line with the rising trends of obesity-related morbidities in Saudi Arabia, we sought to investigate the effects of peers on eating behaviors and Body mass indices (BMIs) in a sample of Saudi employees, representative of the general population.

MATERIALS AND METHODS

A cross-sectional study was conducted among the employees working at different organizations in the Northern Region of Saudi Arabia during the period from February 1 to April 30, 2019. Ethical approval for the study was acquired from the Research Ethical Committee of the Northern Border University. Participants' data confidentiality was maintained, and informed consent was obtained from each employee after the rationale and objectives of the study had been explained.

Data collection was performed using a predesigned, self-administered questionnaire comprising four domains: 1) demographic characteristics: gender, age, monthly income, and BMI; 2) work-related data: work field, work nature, number of working days, and work times; 3) variables regarding meals consumed at work: number of meals consumed at work, habits of meal consumption with coworkers, influence of peers on food choices, group preferences while eating, diet type outside the workplace (healthy or unhealthy), and impact of peers on hindering plans for healthy diets. The participants were classified into underweight, normal, overweight, and obese according to their BMIs (<18.5, 18.5-25, 25-29.9, or ≥ 30 kg/m²) [12].

A representative sample of the employees was included via a convenient sampling method. The employees were contacted and those willing to participate received a paper version of the study questionnaire. Ultimately, a total of 937 employees completed and submitted their questionnaires.

The Statistical Package for Social Sciences (SPSS) version 16 was used for statistical analysis. Categorical variables were presented as frequencies and percentages. A Chi-square test and an independent sample T test were used to test the associations between different variables. Statistical significance was deemed at $p < 0.05$.

RESULTS

Demographic and Work-related Characteristics

A total of 937 questionnaires were received and analyzed. More than half of the participants were females (60.7%) aged 30-40 (50.9%), with a monthly income of $\geq 10,000$ SR (51.1%), who worked in the education field (57.1%). Notably, more than one-third of the employees were either overweight (36.2%) or obese (37.8%). The majority of them worked in the morning (93%) for ≤ 8 hours per day (83.3%, Table 1).

Eating Patterns and Group Preferences while Eating in the Workplace

A high proportion of employees had one meal at work (78.9%), mostly breakfast (60%), and the meal was restaurant made (54.5%; Table 2). While 87.4% of the participants wanted to have a healthy diet, the majority of them did not avoid coworkers while choosing food (73.1%) and would eat meals with them (84.3%). Moreover, while at work, a high proportion preferred to eat in a group (74.8%). Notably, the effect of coworkers on food choices was apparent for 61.2% of respondents, and the negative effect of this (unhealthy eating) was apparent for 29.9% of employees. In the latter instance, only 16.8% were able to remain impervious to coworkers' influences. In addition, coworkers hindered plans for a healthy diet frequently or occasionally in 75.4% of cases (Table 2).

Associations between BMIs and Different Demographics, Work-related Routines, and Eating Habits

Female employees were more likely to be obese (68.4%) or overweight (61.1%) than to have low or normal BMIs

(50% and 49.1%, respectively; $p=0.001$; Table 3). A significantly higher proportion of obese and overweight employees were influenced by coworkers in their food choices (65.8% and 63.1%, respectively) than those with normal or low BMI values (51.3% and 60%, respectively; $p=0.004$). Such influences were predominantly “bad”, indicating unhealthy food choices, in 33.9% and 30.97% of obese and overweight individuals, respectively, and the difference was more statistically significant than for those with normal (23.5%) or low BMIs (0%; $p=0.012$). Further, obese and overweight respondents were mostly influenced by colleagues regarding their food decisions (51.1% and 46.3%, respectively) rather than themselves being “influential,” as opposed to other BMI groups (36.3% and 30.0% for those with normal and low BMIs, respectively; $p=0.004$). Notably, coworkers hindered the plans of healthy diets in 38.4% and 33.9% of obese and overweight employees, respectively, and these rates were significantly higher than among those with a normal (22.7%) or low BMI (10.0%; $p=0.001$; Table 4).

Table 1 Demographic and work-related characteristics of the participants (n=937)

Parameter	Category	Frequency	Percentage (%)
Sex	Female	569	60.7%
	Male	368	39.3%
Age group (in years)	20-30	193	20.6%
	30-40	477	50.9%
	40-50	230	24.5%
	50-60	37	3.9%
Monthly income (in SR)	10,000 and above	479	51.1%
	5,000-1,000	331	35.3%
	<5,000	127	13.6%
BMI	Underweight	10	1.1%
	Normal	234	25%
	Overweight	339	36.2%
	Obese	354	37.8%
Work field	Free business	2	0.2%
	Education	535	57.1%
	Other governmental	111	11.8%
	Private	125	13.3%
	Health	95	10.1%
	Military	69	7.4%
Work nature	Official	508	54.2%
	Field	429	45.8%
Number of working hours per day	<8 hours	417	44.5%
	8	364	38.8%
	8-10	98	10.5%
	10-12	33	3.5%
	>12 hours	25	2.7%
Work time	Morning	871	93%
	Evening	66	7%

Table 2 Eating patterns and group-eating preferences at work

Parameter	Category	Frequency	Percentage (%)
Number of meals during work	One meal	739	78.9%
	Two meals	160	17.1%
	3 meals or more	38	4%
Usual meal at work	Breakfast	562	60%
	Snacks	160	17.1%
	Breakfast, snacks	80	8.5%
	Breakfast, lunch	50	5.3%
	Lunch	42	4.5%
	Dinner	30	3.2%
	Other	13	1.4%

Coworkers somehow influence the choice of food	No	364	38.8%
	Yes	573	61.2%
The effect is good or bad	Good	290	30.9%
	Bad	280	29.9%
	I do not know	367	39.2%
Preference for eating in a group or solo	In a group	701	74.8%
	Solo	236	25.2%
The meal is home or restaurant made	Restaurant	511	54.5%
	Household	426	45.5%
The choice if coworkers ask for an unhealthy meal	Choose own meal	456	48.7%
	Choose coworkers' meal	324	34.6%
	Do not choose	157	16.8%
Most common light meal at work	Coffee	301	32.1%
	Coffee, sweets	252	26.9%
	Pastry	144	15.4%
	Candy	73	7.8%
	Fruit, coffee	44	4.7%
	Tea, coffee, nuts	64	5.8%
Out of work, the diet (healthy or unhealthy)	Healthy	540	57.6%
	Unhealthy	397	42.4%
The studied person (influential or influenced by colleagues)	Influential	511	54.5%
	Influenced	426	45.5%
The physical image of the influencing person	Obese	339	36.2%
	Thin	394	42%
	Overweight	204	21.8%
Coworkers hinder plans for a healthy diet	Sometimes	401	42.8%
	No	231	24.7%
	Yes	305	32.6%

Table 3 Relationships between personal and work-related factors and the body mass indices of the participants

Parameter	Response	Body Mass Index				p-value
		Underweight (n=10)	Normal (n=234)	Overweight (n=339)	Obese (n=354)	
Gender	Female	5 (50)	115 (49.15)	207 (61.06)	242 (68.36)	0.001*
	Male	5 (50)	119 (50.85)	132 (38.94)	112 (31.64)	
No. of sleeping hours	7-8	8 (80)	176 (75.21)	279 (82.3)	301 (85.03)	0.056
	8-10	2 (20)	55 (23.5)	52 (15.34)	49 (13.84)	
	>10	0 (0)	3 (1.28)	8 (2.36)	4 (1.13)	
Nature of the work	Official	6 (60)	120 (51.28)	188 (55.46)	194 (54.8)	0.752
	Field	4 (40)	114 (48.72)	151 (44.54)	160 (45.2)	
Work time	Morning	8 (80)	218 (93.16)	316 (93.22)	329 (92.94)	0.455
	Evening	2 (20)	16 (6.84)	23 (6.78)	25 (7.06)	
Out of work, the preferred diet (healthy or unhealthy)	Healthy	6 (60)	150 (64.1)	193 (56.93)	191 (53.95)	0.109
	Unhealthy	4 (40)	84 (35.9)	146 (43.07)	163 (46.05)	
Preference for eating in a group or solo	In a group	8 (80)	179 (76.5)	248 (73.16)	266 (75.14)	0.799
	Solo	2 (20)	55 (23.5)	91 (26.84)	88 (24.86)	

*Significant difference at $p < 0.05$. Results are presented as frequencies (percentages)

Table 4 Relationships between group-eating preferences and the body mass indices of participants

Parameter	Response	Body Mass Index				p-value
		Underweight (n=10)	Normal (n=234)	Overweight (n=339)	Obese (n=354)	
Usually eating with coworkers	No	3 (30)	47 (20.09)	52 (15.34)	45 (12.71)	0.061
	Yes	7 (70)	187 (79.91)	287 (84.66)	309 (87.29)	
No. of meals eaten during working hours	One	8 (80)	180 (76.92)	267 (78.76)	284 (80.23)	0.222
	Two	1 (10)	38 (16.24)	60 (17.7)	61 (17.23)	
	Three or more	1 (10)	16 (6.84)	12 (3.54)	9 (2.54)	
Coworkers somehow influence the choice of food	No	4 (40)	114 (48.72)	125 (36.87)	121 (34.18)	0.004*
	Yes	6 (60)	120 (51.28)	214 (63.13)	233 (65.82)	
The effect is good or bad	Good	4 (40)	71 (30.34)	99 (29.2)	116 (32.77)	0.012*
	Bad	0 (0)	55 (23.5)	105 (30.97)	120 (33.9)	
	I don't know	6 (60)	108 (46.15)	135 (39.82)	118 (33.33)	
Coworkers hinder plans for a healthy diet	Sometimes	4 (40)	102 (43.59)	149 (43.95)	146 (41.24)	0.001*
	No	5 (50)	79 (33.76)	75 (22.12)	72 (20.34)	
	Yes	1 (10)	53 (22.65)	115 (33.92)	136 (38.42)	
Avoiding colleagues while choosing food	No	8 (80)	182 (77.78)	246 (72.57)	249 (70.34)	0.234
	Yes	2 (20)	52 (22.22)	93 (27.43)	105 (29.66)	
The choice if coworkers ask for an unhealthy meal	Choose own meal	5 (50)	129 (55.13)	166 (48.97)	156 (44.07)	0.088
	Choose coworkers' meal	4 (40)	63 (26.92)	116 (34.22)	141 (39.83)	
	Do not choose	1 (10)	42 (17.95)	57 (16.81)	57 (16.1)	
The participant (influential or influenced by the colleagues)	Influential	7 (70)	149 (63.68)	182 (53.69)	173 (48.87)	0.004*
	Influenced	3 (30)	85 (36.32)	157 (46.31)	181 (51.13)	
The meal, home or restaurant made	Restaurant	7 (70)	129 (55.13)	185 (54.57)	190 (53.67)	0.799
	Home	3 (30)	105 (44.87)	154 (45.43)	164 (46.33)	

*Significant difference at $p < 0.05$. Results are presented as frequency (percentage)

DISCUSSION

BMI was found to be a significant factor affecting absenteeism, sick leave, and workers' compensation costs related to injuries and illnesses [13]. Intriguingly, obesity-attributable absenteeism represents 6.5-12.6% of the total absenteeism costs in the workplace [14], a statistic almost identical to the economic impact of obesity on healthcare expenditure. It is therefore important to address the determinants of such a burden in the workplace to enable the relevant actions to be taken accordingly. In the present study, the majority of participants ate meals with their coworkers during work hours and were influenced by peers in their unsuitable food choices. In addition, while more than two-thirds of the participants were either overweight or obese, the effect of coworkers on those groups was evident in poor food choices, causing the disruption of healthy eating plans. Besides, a significantly higher proportion of obese respondents tended to be influenced by peers rather than being influential on others' eating habits, unlike normal or underweight respondents.

Other studies in the literature showed findings consistent with these. A retrospective analysis of the human resources records of 899 employees in Massachusetts, US, revealed that increased personal perceptions of coworkers' normative eating behaviors were positively correlated with the increased consumption of healthy food, vegetables, and fruits, and a decrease in fat consumption [15]. Interestingly, the authors reported that women were more likely to be involved in group eating, with higher chances of being influenced by peers' eating behaviors than men. This might explain the higher proportion of obese female employees in our study. In the same country, a telephone-interview-based study in Missouri showed that seeing coworkers consuming vegetables and fruits was associated with increased odds of eating

at least one vegetable daily [16]. Additionally, the greater the worksite size, the higher the frequency of healthy-eating-behavior reports among coworkers. Such an observation may be attributable to the offering of more resources and to the increased diversity of coworkers, allowing frequent observation of diverse eating habits by employees.

In a sample of overweight and obese individuals referred for a behavioral weight-reducing treatment study, Leung, et al. [17], found that coworker influence was the most significant barrier to healthy eating. Seemingly, the influence of coworkers was affected by social norms, where food availability governed the behavior of sharing, exerting pressure on others, and a reduction in self-efficacy in eating [17]. Unfortunately, we were unable to assess the self-efficacy of eating in our sample. In Scotland, the determinants of unhealthy eating were explored via qualitative interviews among nurses working in a large teaching hospital, where social influences of families and coworkers were discussed [11]. The nurses indicated that work peers bringing unhealthy food into work usually exerted pressure on others to partake of it and that other nurses ultimately ceded to such pressure. Collectively, peer pressure is clearly evident in modulating behavior in the workplace.

The presented findings are of great relevance for employers who have pursued several strategies to reduce healthcare costs for their employees. Rather than by less effective insurance-related techniques, lifestyle risks could be targeted efficiently. In particular, reducing obesity via promoting healthy eating is an acceptable target for decreasing the incidence of chronic illness and the requirement for health services. Notwithstanding the well-established role of the workplace as a barrier to healthy eating, most workers acknowledge the importance of health promotion via suggestions and wellness approaches [18]. Since previous studies emphasized the importance of self-efficacy in the face of social stresses by peers, governors and legislators should consider future intervention based on promoting their employees' psychological responses to eating to encourage healthier food choices at work.

Additionally, innovative techniques could be useful for supporting program reach, sustainability, and effectiveness. Recently, a Web-and app-based software was used to promote employees' health, and the personal and social features of participation in such an intervention were assessed [19]. The socially driving factor for participation was peer pressure from colleagues, even though the participants may not originally have displayed unhealthy eating behaviors. However, despite these social features, the motivation of engagement and the typical change in eating lifestyle was not affected by the social features of peer pressure. POWERPLAY is another workplace health promotion program that targets men through their masculine values, workplace locale, and virtues [20]. High exposure to such a program significantly increased healthy eating knowledge even outside the workplace. Moreover, a recent, peer-led weight management program relying on promoting physical activity and healthy eating behaviors in Northern Ireland was cost-effective with a high engagement rate (94%) resulting from its social interactive aspects [21]. These programs show great promise as workplace health promotion strategies.

Our study provided an invaluable insight into the role of peer pressure as a determinant of unhealthy eating among Saudi employees. To the best of our knowledge, the objectives of the present study were explored for the first time on the local level and the outcomes should be reliable owing to the large sample size. Further, the results can be generalized to other regions of Saudi Arabia. We presented multiple considerations for policymakers and employers striving for the best ways of improving employee health and reducing disease costs. However, we experienced several limitations. The causal relationships may have been influenced by the cross-sectional design of the study. Additionally, self-reported answers may have been subject to bias. Finally, we could not investigate the psychological determinants of peer influence, such as the low efficacy of eating behavior.

CONCLUSION

The Saudi employees in this study were predominantly overweight or obese and the majority of them ate meals during work hours. Food choices at work were more likely influenced by coworkers, who negatively affected healthy eating behaviors and disrupted healthy diets. Interestingly, such attitudes were significantly higher among obese employees than their counterparts with lower BMIs.

Recommendations

Future suggestions include conducting studies based on more demographically diverse populations in Saudi Arabia to promote generalizability, the assurance of eating behaviors via validation studies, the estimation of caloric consumption, and food frequency questionnaires. Targeted interventions seem to produce significant effects, and their implementation should be considered by policymakers to promote health benefits and reduce health-related expenditure in the workplace.

DECLARATIONS

Conflicts of Interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

REFERENCES

- [1] Inoue, Yosuke, et al. "Epidemiology of obesity in adults: Latest trends." *Current Obesity Reports*, Vol. 7, No. 4, 2018, pp. 276-88.
- [2] Kabir, Ashraful, Shahgahan Miah, and Asraful Islam. "Factors influencing eating behavior and dietary intake among resident students in a public university in Bangladesh: A qualitative study." *PloS One*, Vol. 13, No. 6, 2018, p. e0198801.
- [3] Ogden, Jane. *The Psychology of Eating: From Healthy to Disordered Behavior*. John Wiley and Sons, 2011.
- [4] Micha, Renata, et al. "Association between dietary factors and mortality from heart disease, stroke, and type 2 diabetes in the United States." *JAMA*, Vol. 317, No. 9, 2017, pp. 912-24.
- [5] Grosso, Giuseppe, et al. "Possible role of diet in cancer: Systematic review and multiple meta-analyses of dietary patterns, lifestyle factors, and cancer risk." *Nutrition Reviews*, Vol. 75, No. 6, 2017, pp. 405-19.
- [6] Abdulaziz Al Dawish, Mohamed, et al. "Diabetes mellitus in Saudi Arabia: A review of the recent literature." *Current Diabetes Reviews*, Vol. 12, No. 4, 2016, pp. 359-68.
- [7] Darmon, Nicole, and Adam Drewnowski. "Contribution of food prices and diet cost to socioeconomic disparities in diet quality and health: A systematic review and analysis." *Nutrition Reviews*, Vol. 73, No. 10, 2015, pp. 643-60.
- [8] Bernardo, Greyce Luci, et al. "Nutrition and Culinary in the Kitchen Program: A randomized controlled intervention to promote cooking skills and healthy eating in university students-study protocol." *Nutrition Journal*, Vol. 16, No. 1, 2017, p. 83.
- [9] Fitzgerald, Amanda, et al. "Self-efficacy for healthy eating and peer support for unhealthy eating are associated with adolescents' food intake patterns." *Appetite*, Vol. 63, 2013, pp. 48-58.
- [10] Shrestha, Nipun, et al. "The impact of obesity in the workplace: A review of contributing factors, consequences and potential solutions." *Current Obesity Reports*, Vol. 5, No. 3, 2016, pp. 344-60.
- [11] Power, Brian T., et al. "Understanding perceived determinants of nurses' eating and physical activity behaviour: A theory-informed qualitative interview study." *BMC Obesity*, Vol. 4, No. 1, 2017, p. 18.
- [12] World Health Organization. Obesity and overweight. Geneva: WHO. <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>
- [13] Brethauer, S., et al. "Obesity in the workplace: Impact, outcomes, and recommendations." *Journal of Occupational and Environmental Medicine*, Vol. 60, No. 1, 2018, pp. 97-107.
- [14] Andreyeva, Tatiana, Joerg Luedicke, and Y. Claire Wang. "State-level estimates of obesity-attributable costs of absenteeism." *Journal of Occupational and Environmental Medicine/American College of Occupational and Environmental Medicine*, Vol. 56, No. 11, 2014, p. 1120.
- [15] Lemon, Stephenie C., et al. "Perceptions of worksite support and employee obesity, activity, and diet." *American Journal of Health Behaviour*, Vol. 33, No. 3, 2009, pp. 299-308.
- [16] Tabak, Rachel G., et al. "Workplace social and organizational environments and healthy-weight behaviors." *PloS One*, Vol. 10, No. 4, 2015, p. e0125424.
- [17] Leung, S. L., et al. "Factors associated with healthy and unhealthy workplace eating behaviours in individuals

with overweight/obesity with and without binge eating disorder.” *Obesity Science and Practice*, Vol. 4, No. 2, 2018, pp. 109-18.

- [18] Strickland, Jaime R., et al. “Peer reviewed: Worksite influences on obesogenic behaviors in low-wage workers in St Louis, Missouri, 2013-2014.” *Preventing Chronic Disease*, Vol. 12, 2015, p. E67.
- [19] Balk-Møller, Nina Charlotte, Thomas Meinert Larsen, and Lotte Holm. “Experiences from a web-and app-based workplace health promotion intervention among employees in the social and health care sector based on use-data and qualitative interviews.” *Journal of Medical Internet Research*, Vol. 19, No. 10, 2017, p. e350.
- [20] Caperchione, Cristina M., et al. “Changes in men’s physical activity and healthy eating knowledge and behavior as a result of program exposure: Findings from the workplace POWERPLAY program.” *Journal of Physical Activity and Health*, Vol. 13, No. 12, 2016, pp. 1364-71.
- [21] Bennett, Damien, Tracy Owen, and D. T. Bradley. “The£ for lb. Challenge. Evaluation of a novel, workplace-based peer-led weight management programme, 2014-2016.” *Public Health*, Vol. 150, 2017, pp. 93-100.