

# PRACTISING OF HEALTHY BEHAVIOURS AMONG MOTHERS ATTENDING PRIMARY HEALTHCARE CENTRES IN AL-KARKH SECTOR

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## Abstract

**Background:** Healthy behaviours are the most significant proximal factors affecting health. It improves one's health, well-being, and general quality of life. Diet, physical activity, vaccination, and preventive healthy behaviour are very important aspects affecting mothers' health. **Aims:** The aims of this study are to determine the prevalence of mothers conducting healthy behaviour and to assess what factors affect healthy behaviour in mothers. **Methodology:** A cross sectional study was carried out during the period (March to Jun)-2023. A sample of 300 mothers, non-pregnant, not having chronic diseases, and attending primary health care centre at al Karkh district. Data collected by direct interview using a self-structured questionnaire. **Results:** The total participants are 300 mothers, the study shows that mean age for participants is 30.7, and 66% of them between 28-35 years. 62% are governmental employees. Of the studied sample 12.7% are smokers. After calculating the score for healthy behaviour, the study showed that 28% of the studied mothers are practicing healthy behaviour and the remaining 72% are practicing unhealthy behaviour. **Conclusion:** The prevalence of mothers practicing healthy behaviour is only 28% which is low, the education and occupation of mothers are significantly associated with practicing healthy behaviour. Fruits and vegetables intake among mothers is low significant.

**Keywords:** Healthy Behaviours; Iraqi Mothers; Primary Healthcare centres; Al-Karkh Sector

## INTRODUCTION

Healthy behaviours are the most significant proximal factors affecting health<sup>(1)</sup>. It improves one's health, well-being, and general quality of life, which is defined as "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns"<sup>(2)</sup>.

The health behaviours of social groups are a multifactorial set of responses to treatment and therapeutic agents prompted by the need to preserve health and life and prevent disease. Numerous individual and environmental factors influence the formulation of healthy behaviours<sup>(3)</sup>.

The World Health Organization (WHO) defines healthy behaviour as "actions that promote and preserve physical and mental health and prevent illness or injury." Healthy behaviours encompass a wide range of actions and choices, including maintaining a balanced diet, engaging in regular physical activity, getting adequate sleep, managing stress, avoiding tobacco and excessive alcohol use, and seeking timely medical care when needed. These behaviours contribute to overall well-being and reduce the risk of chronic diseases, thereby promoting a higher quality of life<sup>(4)</sup>.

Health behaviours exhibit significant social patterns, with risky behaviours concentrating in lower socioeconomic status (SES) groups that are more widespread<sup>(5)</sup>. It's also exhibit strong social patterns. Since both health protective and health risk behaviours are associated with all-cause mortality, this has serious health consequences<sup>(6)</sup>. Noncommunicable illnesses, which claim the lives of 41 million people a year and are responsible for 71% of all deaths worldwide, are made more likely by modifiable behaviours, including smoking, drinking alcohol excessively, eating poorly, and not exercising<sup>(7)</sup>. Unhealthy habits have been reported to have a particularly strong impact on cardiovascular disease (CVD), which is thought to raise the risk of premature death from CVD by a factor of five<sup>(8)</sup>. However, there is proof that healthcare centres can give effective treatments to support early identification and prompt, cheap treatment<sup>(9)</sup>. The most successful primary care treatments for changing lifestyle habits seem to focus on dietary behaviours<sup>(10)</sup>.

Differences in health outcomes by socioeconomic status have been acknowledged as a persistent trend in public health in recent years<sup>(11)</sup>. According to a widely accepted theory in the literature, the higher mortality risk linked to low income and educational levels is caused by a rise in the

incidence of dangerous health behaviours, including smoking, drinking, and inactivity. However, a substantial body of research and theory demonstrates that these behaviours result from a complex interplay of variables, including social support, income, education, gender, age, and cultural background, which produce a variety of life contexts in which a person's ability to adopt healthy behaviours is either facilitated or restricted<sup>(12)</sup>.therefore the aim of current study : to determine the prevalence of mothers practicing healthy behaviour in Al-Karkh sector. As well as determine what factors, affect healthy behaviour in mothers.

**Study settings:** A cross-sectional descriptive study was conducted at Al-Karkh primary health care sector, it contains 11 primary healthcare centres 4 had been selected by simple random sampling (Al-Yarmouk, Al-Dakhilia, Al-Mansoor, Al-Qadisia). during the period (March to June) 2023, three days a week data was collected, using a self-structured questionnaire.

**Inclusion criteria:** Any mother visiting healthcare centres and accept to participate in the study.**Exclusion criteria:** Any mother who refuses to participate for any reason, Pregnant mother and Mother having chronic diseases.

**Statistical Analysis:** The data was analyzed in version 25 of the Statistical Package for Social Sciences (SPSS). The statistics are displayed as mean, standard deviation, and ranges for quantitative data. With percentages and frequencies used to represent qualitative data. The association between basic characteristics and healthy behaviour group was evaluated using the Chi-square test (fisher's exact and likelihood ratio had been used when needed). A p-value of 0.05 or less was regarded as significant.

**Results:** The total number of mothers who accept to participate in the study was 300, whom eligible according to the inclusion criteria.

The mean age for participants was 30.7 and standard deviation was 5.5, the youngest mother was 17 years old and the oldest was 52. Table (1) below show the distribution of study sample according to their basic characteristics. The majority of participants, 66%, were within 28-35 years age. And 62% were governmental employees, forty percent having 4 members in their families. And 49% had only two rooms in their houses.so nearly 80% had a car within the family. And 72% were living in their own homes. Regarding education, most of the study sample (75%) had college degrees or higher. Also 89% of them were married.

Table (1): The distribution of study sample according to basic characteristics

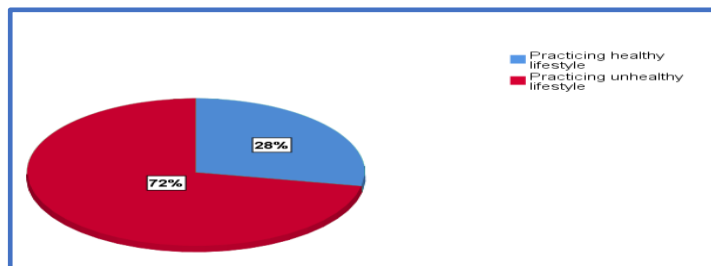
Variable	Sub-category	Number	Percentage (%)
Age group (In years)	≤ 27	84	28
	28-35	197	66
	36-44	12	4
	>45	7	2
Occupation	Governmental employee	186	62
	Private sector worker	11	4
	Student	20	7
	Housewife	83	27
Number of family members	(≤ 3 members)	90	30
	(4 members)	121	40
	(5 members)	67	22
	(≥ 6 members)	22	8
Number of rooms in the house	(≤ 3 rooms)	146	49
	(4 rooms)	79	26
	(5 rooms)	44	15
	(≥ 6 rooms)	31	10
Family having a car	Yes	236	79
	No	64	21
Family lives in their own house	Yes	217	72
	No	83	28
Education	Illiterate	4	1
	Primary school	18	6
	Intermediate or secondary school	53	18
	College degree or higher	225	75
Marital status	Married	269	89
	Divorced	18	6
	Widowed	13	4

**Table (2): Statistics regarding healthy behaviour score**

Statistic	Value
Mean	32.3
Standard deviation	2.9
Range	14
Minimum	25
Maximum	39

After calculating the total scores, the mean  $\pm$  SD was  $32.3 \pm 2.9$ , the statistics regarding the score of practicing healthy behaviour are shown in table (2)

According to the score, study sample were divided into two groups, the mothers who were practicing healthy behaviour was 84 (28%), and the mothers practicing unhealthy behaviour were 216 (72%). This is illustrated in figure (2).

**Figure (2): Percentage of mothers practicing healthy and unhealthy behaviour.****Table (3): Association between basic characteristics and practicing healthy behaviours. (Chi-square test) ( $\alpha = 0.05$ ,  $n = 300$ )**

Variable	Sub-category	Healthy behaviour	Unhealthy behaviour	P-Value
Age group (In years)	$\leq 27$	17 (20) *	67 (80)	0.23**
	28-35	61 (31)	136 (69)	
	36-44	3 (25)	9 (75)	
	$>45$	3 (43)	4 (57)	
Occupation	Governmental employee	65 (35)	121 (65)	<b>0.001**</b>
	Private sector worker	0 (0)	11 (100)	
	Student	4 (20)	16 (80)	
	Housewife	15 (18)	68 (82)	
Number of family members	( $\leq 3$ members)	20 (22)	70 (78)	0.29
	(4 members)	33 (27)	88 (73)	
	(5 members)	24 (36)	43 (64)	
	( $\geq 6$ members)	7 (32)	15 (68)	
Number of rooms in the house	( $\leq 3$ rooms)	39 (27)	107 (73)	0.61**
	(4 rooms)	24 (30)	55 (70)	
	(5 rooms)	10 (23)	34 (77)	
	( $\geq 6$ rooms)	11 (36)	20 (64)	
Family having a car	Yes	73 (31)	163 (69)	<b>0.03</b>
	No	11 (17)	53 (83)	
Family lives in their own house	Yes	64 (30)	153 (70)	0.35
	No	20 (24)	63 (76)	
Education	Illiterate	0 (0)	4 (100)	<b>0.01</b>
	Primary school	3 (17)	15 (83)	
	Intermediate or secondary school	8 (15)	45 (85)	

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	College degree or higher	73 (32)	152 (68)	
Marital status	Married	76 (28)	193 (72)	0.09**
	Divorced	2 (11)	16 (89)	
	Widowed	6 (50)	6 (50)	

\*Count (Percentage)    \*\*Likelihood ratio

The association between healthy behaviour group and basic characteristics was done by using chi-square test, the results are shown in table (3). A significant association was noted between occupation, education and having a car with healthy behaviour (p-value ≤ 0.05).

DISCUSSION:

Healthy behaviour and practices play a crucial role in promoting overall well-being and preventing various diseases among mothers. Adopting healthy habits can enhance physical, mental, and emotional health, leading to a better quality of life. Socioeconomic factors play a significant role in shaping health behaviours among mothers. Research has shown that mothers from lower socioeconomic backgrounds may face unique challenges that impact their ability to adopt and maintain healthy behaviours. Limited financial resources, lack of access to healthcare services, education disparities, and neighbourhood characteristics can all influence health behaviours in this population. Studies have highlighted that socioeconomic factor, such as income, education, and employment status, are strongly associated with dietary patterns, physical activity levels, tobacco use, and overall health outcomes in mothers<sup>(13)</sup>.

Numerous scholars have extensively explored the interrelationships among education, occupation, family income, and the practice of healthy behaviours in women. Research consistently suggests that these factors are interconnected and play a significant role in shaping women's health behaviours. Higher levels of education have been linked to a greater awareness and understanding of health-related information, enabling women to make informed decisions about their well-being<sup>(14)</sup> which was similar to our results. Similarly, occupation and income can influence access to healthcare resources, including preventive services, which in turn impact health

behaviours<sup>(15)</sup> Which is consistent with our results when the occupation and “having a car” was significantly associated with health practice. Studies have indicated that women with higher family income are more likely to engage in healthy behaviours, such as regular physical activity, balanced diets, and preventive screenings <sup>(16)</sup>.

Research studies have examined the prevalence of smoking among mothers, shedding light on the percentage of women engaged in this behaviour. In our study, the prevalence of smoking among mothers of the study sample was 12.7% which was close to the result of a study conducted in the United States found that approximately 10% of female college students were smokers<sup>(17)</sup>. In another study conducted in Turkey, the prevalence of smoking among female university students was reported to be around 24% <sup>(18)</sup> , But it was different from the study of Ibrahim et al.,2018 <sup>(19)</sup> which had conducted in Iraq and stated that the prevalence of smoking among Iraqi women is 3-4%<sup>(19)</sup>, This may be attributed to the limited sample taken in our study.

In this study the marital status was not significantly associated with practicing healthy behaviour, this is unlike the result of (Grove et al., 2013) <sup>(20)</sup>, that been conducted in the United States, which states that married women tend to exhibit healthier behaviours compared to unmarried or divorced women. For instance, a study conducted in the United States found that married women were more likely to engage in regular physical activity and consume a healthier diet compared to unmarried women<sup>(20)</sup>.

The prevalence of women practicing a healthy diet and its association with adopting a healthy behaviour has been a subject of research among scholars. Studies have indicated that a substantial proportion of women strive to maintain a healthy diet. For instance, a national survey conducted in the United States found that about 58% of women reported consuming a healthy diet, characterized by

the consumption of fruits, vegetables, whole grains, lean proteins, and limited intake of added sugars and saturated fats (Krebs-Smith *et al.*, 2010) <sup>(21)</sup>. Moreover, research has consistently shown that women who adhere to a healthy diet are more likely to engage in other health-promoting behaviours. These include regular physical activity, avoidance of tobacco and excessive alcohol consumption, and adherence to preventive screenings <sup>(22&23)</sup>. These results were consistent with our result in which diet was significantly associated with having healthy behaviour.

### CONCLUSIONS:

- 1) The prevalence of mother's practicing healthy behaviour is 28%, which considered low percentage.
- 2) Occupation, Education and having a car (accessibility issue) are factors significantly affecting the practicing of healthy behaviour among mothers.
- 3) Only small percentage of the mothers are taking sufficient servings of fruits and vegetables.
- 4) Health education and promotion play a crucial role in increasing awareness and participation in screening programs.
- 5) In a long run, mothers' empowerment through education and income generating activities as well as involvement of husbands during information education and communication are recommended.

### ETHICAL CONSIDERATIONS:

1. The research protocol was discussed and approved by the scientific and ethical committee and the Arab board for health specialization for family medicine.
2. Essential official permission was obtained from the Arab board for health specialization for all sectors of health care centres in Baghdad Al-Karkh health directorate.

### REFERENCES:

Dahlgren G, Whitehead M. *The Dahlgren-Whitehead model of health determinants: 30 years on and still chasing rainbows*. *Public health*. 2021;199:20-4.

Perou CM, Sørbye T, Eisen MB, van de Rijn M, Jeffrey SS, Rees CA, *et al.* *Molecular portraits of human breast tumours*. *Nature*. 2000;406(6797):747-52.

Stephens A, Gardner B, Wardle J. *The role of behaviour in health*. In: French D, Kaptein A, Vedhara K, Weinman J, editors. *Health Psychology*. Chichester: Blackwell; 2010. p. 13-32.

World Health Organization. (2003). *Health promotion glossary*.

<https://www.who.int/healthpromotion/about/HPR%20Glossary%201998.pdf>.

Spring B, Moller AC, Coons MJ. *Multiple health behaviours: overview and implications*. *Journal of public health (Oxford, England)*. 2012;34 Suppl 1(Suppl 1):i3-10.

McCullough ML, Patel AV, Kushi LH, Patel R, Willett WC, Doyle C, *et al.* *Following cancer prevention guidelines reduces risk of cancer, cardiovascular disease, and all-cause mortality*. *Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology*. 2011;20(6):1089-97.

Noncommunicable Diseases. <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases> (accessed on 26 April 2023).

Khaw KT, Wareham N, Bingham S, Welch A, Luben R, Day N. *Combined impact of health behaviours and mortality in men and women: the EPIC-Norfolk prospective population study*. *PLoS medicine*. 2008;5(1):e12.

Klatsky AL. *Alcohol and cardiovascular diseases: where do we stand today?* *Journal of internal medicine*. 2015;278(3):238-50.

Fernald DH, Dickinson LM, Froshaug DB, Balasubramanian BA, Holtrop JS, Krist AH, *et al.* *Improving multiple health risk behaviors in primary care: lessons from the Prescription for Health Common Measures, Better Outcomes (COMBO) study*. *Journal of the American Board of Family Medicine : JABFM*. 2012;25(5):701-11.

Lantz PM, House JS, Lepkowski JM, Williams DR, Mero RP, Chen J. *Socioeconomic factors, health behaviors, and mortality: results from a nationally representative prospective study of US adults*. *Jama*. 1998;279(21):1703-8.

Maclean H, Glynn K, Cao Z, Ansara D. *Personal Health Practices. BMC Women's Health.* 2004;4(1):S4.

McLaren L. *Socioeconomic status and obesity. Epidemiologic reviews.* 2007;29:29-48.

Cutler DM, Lleras-Muney A. *Understanding differences in health behaviors by education. Journal of health economics.* 2010;29(1):1-28.

Adler NE, Newman K. *Socioeconomic disparities in health: pathways and policies. Health affairs (Project Hope).* 2002;21(2):60-76.

Roos E, Lahelma E, Virtanen M, Prättälä R, Pietinen P. *Gender, socioeconomic status and family status as determinants of food behaviour. Social science & medicine (1982).* 1998;46(12):1519-29.

Dutra LM, Glantz SA. *E-cigarettes and National Adolescent Cigarette Use: 2004-2014. Pediatrics.* 2017;139(2).

Celikel FC, Celikel S, Erkorkmaz U. *Smoking determinants in Turkish university students. International journal of environmental research and public health.* 2009;6(8):2248-57.

Ibrahim BA, Al-Humaish S, Al-Obaide MAI. *Tobacco Smoking, Lung Cancer, and Therapy in Iraq: Current Perspective. Frontiers in public health.* 2018;6:311.

Grove, S. J., Mundfrom, D. J., Talbot, D. M., & Krohn, M. M. (2013). The relationship between marital status and health behaviors: A research synthesis of the literature. *Journal of Marriage and Family*, 75(2), 343-362.

Krebs-Smith SM, Guenther PM, Subar AF, Kirkpatrick SI, Dodd KW. *Americans do not meet federal dietary recommendations. The Journal of nutrition.* 2010;140(10):1832-8.

Wendel-Vos GC, Schuit AJ, Saris WH, Kromhout D. *Reproducibility and relative validity of the short questionnaire to assess health-enhancing physical activity. Journal of clinical epidemiology.* 2003;56(12):1163-9.

McElroy, J. A., Tanski, S. E., Kingsley, B. S., Kollath-Cattano, C. L., & Paskett, E. D. (2019). Longitudinal associations between an overall diet quality index and subsequent smoking status among young adults. *Preventive Medicine*, 120, 121-126.