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RESEARCH ARTICLE

PHC DOCTORS HEALTHY BEHAVIOURS AND ASSOCIATED FACTORS IN BAGHDAD, ALKARKH, 2016

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ABSTRACT

Background: Physicians who practice healthy habits play a key role by helping their patients to adopt healthy lifestyles for primary prevention of chronic diseases. GPs health is important because serve as health role models. **Objectives:** To find prevalence of practicing healthy behaviors among PHCs doctors. - To find the factors affect these practice. **Methods:** A cross-sectional study, for all doctors available at visiting time and willing to, We collected 356 structured questionnaire sheets from alkarkh PHCs doctors, from 9/2014-3/2015; pilot done & expert's opinion taken. **Result:** Thirty percent of PHC doctors are 30-39 years of age, 213(59.8) female, 81% married, 69.66% Gp, 10% family physician, 6.46% postgraduate doctors, ninety had chronic disease mainly hypertension, DM, heart diseases. All the parent doctors follow the EPI for their children. Doctors checked blood pressure were 328(92.1%), blood sugar 269(75.6%). Smoking was the main unhealthy behaviour by married male aged 30-39 yrs, but most of them practicing home exercises. Lipid profile has significant relationship with age, gender, marital state and specialty. Female doctors usually practice pregnancy TT vac. 80%, breast self-examination 74.65%, & less practice Pap smear 10%. Healthy behaviour Barriers mostly lack of time 59.83%. **Conclusion:** High prevalence of PHCs doctors have good healthy behaviour; mostly check BP, BS, breast SE; while smoking is most bad one and lack of time is most barriers.

Key words: Healthy lifestyles, Family doctors, PHC doctors, Hypertension, DM, heart diseases, Breast self-examination, Baghdad, Al Karkh, Iraq.

INTRODUCTION

Physicians have traditionally neglected their own health in favor of their many professional and personal obligations. The culture of medicine promotes the belief that physicians are never ill; doctors are typically very independent, competitive, and high achieving and they often view attention to their own needs as a sign of weakness (Katie Tyzuk, 2012). They also face the burden of incorporating healthy life style behaviors into their busy lives (Sunny Consolvo et al., 2012). Increasing the focus on health promotion and healthy life style among physicians can help prevent the progression to serious outcomes; its importance also lies in that doctors serve as role models for their patients (Katie Tyzuk, 2012). At present, the vast majority of researches in the area of physician health have focused on three areas: work related stress and burnout; mental health disorders such as depression and suicide; and substance abuse. In contrast, there has been less research to date into lifestyle behaviors and preventive health care among physicians (Katie Tyzuk, 2012). General practitioners should set an example to their patients by adopting a healthy lifestyle to reinforce their advice re prevention and health promotion (Mario Sammut, 2006). Health professionals may be assumed to make healthier lifestyle choices and have better health outcomes than others due to greater health literacy, education, and experience with patients (Elias Dayoub Anupam, 2015). Little is known about the burden of disease in the medical community in general and in the Iraqi in particular. This study has focused on several aspects of physicians' health such as smoking, exercise, self care in regards to regular medical and dental checkups and vaccination.

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Objectives

- To find prevalence of practicing healthy behaviors among PHCs doctors.
- To find the factors affect these practice

METHODS

A cross-sectional study with analytic element, taking doctors of different specialty available at the time and willing to take part in this study, based on convenience. Three- hundred and fifty six doctors from 24 years – above 60 years of age in all major Primary Health Care Centers (Alkarkh, al-adil, al-Kadhmia, al amil, Al Elam, al Dora, al mahmodia, al tajy, Abu graib, al tarmia) in alkarkh district involved in this study. The time period for the study was from September 2015 till March 2016. The questionnaire collected data on smoking, exercise, body mass index, and check up for blood pressure, blood sugar, lipid profile, and dental checkups in addition to vaccination. Data were coded, validated, and analyzed by using SPSS ver. 23 software package.

RESULTS AND DISCUSSION

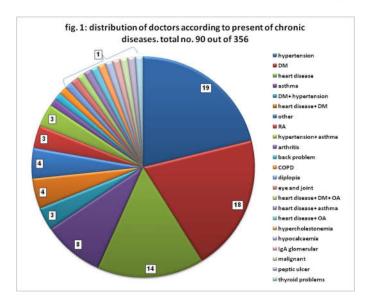
The study revealed Most of doctors involve are aged 30-39 years old 108(30%) follow by aged 40-49 years old 91 (25%), females 213(59.8%), married 291(81.7), this is expected as most of the doctors work in PHCs after at least four years working (two years in hospitals and two years in periphery) and in Iraq most of these age group are married, and most of male doctors prefer work in hospitals base branches, while PHCs doctors are female. This is similar to MOH annular reports. As shown in Table (2) the majority of the PHCs doctors are general practitioner 248 (69.66%). In Iraq, term general practitioner (GP) refers to post-rotation practitioner

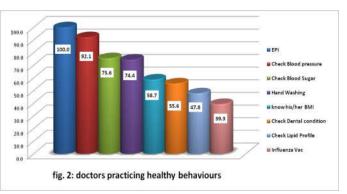
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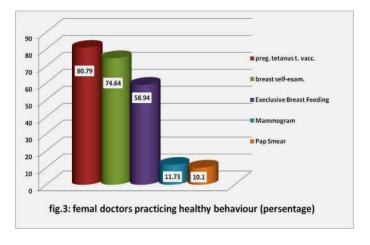
whom working in PHCs. Others specialty (like community medicine, pediatrics, Gynecologist and obstetrics, orthopedic practitioner, and to less extend Medicine, Society medicine, society medicine, public health, DCM, pediatrics diploma, ENT practitioner, cardio vascular, dermatology practitioner, and ophthalmology) some time are working in the PHCs under their well. Ninety doctors (25.28%) out of 356 doctors were having chronic disease; both hypertension & DM 19%, follow by heart disease 14%, because of the personality A of the doctors make them more liable to these diseases (Kathleen Schroeder, 2000). Same as study done in Iraq show that the prevalence of diabetes in Iraq increased from 5% in 1978 to 19.7% in 2012 (Abbas Mansour). And other study 2016 finds prevalence of hypertension 44%, and 12 % for heart disease (Thamer Kadum Al Hilfi, 2013; USAID, 2011).

All the parents doctors follow the EPI for their children & Near all the doctors check their blood pressure 328 (92.13%), and to less extended for check blood sugar, hand washing, measure and calculate their BMI, and lesser for practicing dental checking, lipid profile, and take influenza vaccine shut. Eighty percent of parent female doctors practicing tetanus vaccine shut during their pregnancy, similar to The national vaccine coverage for vaccine is 78%, which is similar to the WHO and UNICEF estimates of Iraq immunization coverage: 2016. Followed by three-quarters were doing breast selfexamination and near the 60 % had exclusive breast feeding to their children, while very limited of them do mammogram and pap smear 11.73%, 10.10% respectively. This is similar to study done in al Mosel nurse collage only 7% had do Pap smear (Wafaa Atoof et al., 2014). And other studies done in USA, for medical students (Haritha et al., 2017). Other intervention of health promotion to physicians in occupied palastine, revealed same baseline information about practicing healthy behavior (Danit et al., 2009). Most of the doctors 213 (59.83%) mention the lack of time as excuse to not practice healthy behaviour, while 19(5.66%) only mention the uncertainty about effectiveness of these healthy behaviours, fairing from the side effects 17 (4.77%), feeling no need for doing these healthy behaviours 4(1.11%). In systemic reviewed done in many countries including seven from the UK, six from the US, five from Australia, two from Ireland, and one each from Canada, New Zealand, occupied palastine, Finland, Norway, and Switzerland. show same results (Margaret Kay et al., 2008). Only 96 (26.97%) has no any reason to not-follow the healthy behaviours.

The smoking is most bad habit known in the world medically, fortunately only 38 (10.67%) are smokers, 53.34% of them aged 30-39 years old, 89.47% married male, with significant relation with gender., this is similar to study done in UK, show premature death of British doctor prolonged cigarette smoking from early adult life tripled age-specific mortality (Sanjiv Kumar and Preetha, 2012; Doll et al., 2004). other systemic reviewed done for smoker doctors fined the lowest smokers in Asia (Bass and McGeeney, 2012) similar significant results with the gender in Saudia study done in 2013 (Hassanein et al., 2013) and many other studies (Perrin et al., 2006; Zinonos et al., 2016; Abdullah et al., 2014). In Iraq the smoking among females is very limit and more limits in doctors (Iraq Family Health Survey IFHS, 2006). Physicians, like the rest of the population, are not consistently meeting the recommended guidelines for physical activity (Katie Tyzuk, 2012). Iraqi doctors as other physicians in that world; as shown in the Table 4.







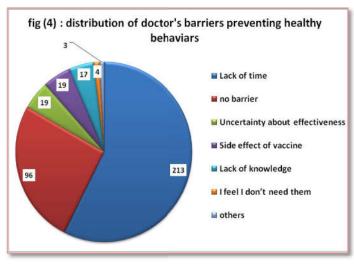


Table 1. Doctor's distribution according to age, gender and marital state

		Frequency	Percent
Age (yr.)	20-29	71	19.9
	30-39	108	30.3
	40-49	91	25.6
	50-59	77	21.6
	60 & above	9	2.5
Gender	Female	213	59.8
	Male	143	40.2
Marital state	Divorced	1	.3
	Married	291	81.7
	Single	59	16.6
	Widow	5	1.4
Total		356	100.0

Table 2. doctor's distribution according to their specialty

N = 356	Frequency	%
GP	248	69.66
Family physician	37	10.39
Postgraduate	23	6.46
Dentist	16	4.49
Other *	16	4.49
Community medicine	4	1.13
Pediatrics	4	1.13
Gyn. and obst.	4	1.13
medical education	2	0.56
orthopedic practitioner	2	0.56

^{*}Medicine, Society medicine, society medicine, public health, DCM, pediatrics diploma, ENT practitioner, cardio vascular, dermatology practitioner, and ophthalmology.

Table 3. Relation between the doctors' smoking status and their demographic feature

	_	Smoke		- Total		
	•	No (N=318)	Yes (N=38)	N = 356	P value	
	20-29	65	6	71		
	30-39	92	16	108		
A	40-49	83	8	91	0.502	
Age	50-59	70	7	77	0.583	
	60 & above	8	1	9		
Gender	Female	211	2	213	0.000	
Gender	Male	107	36	143		
	Divorced	1	0	1		
Marital	Married	257	34	291	0.570	
state	Single	55	4	59	0.579	
	Widow	5	0	5		

Table 4. Relationship between the practice exercises and their demographic feature

		Practice exercises		Total	P value	
		No	Yes			
Age	20-29	32	39	71	0.459	
· ·	30-39	60	48	108		
	40-49	45	46	91		
	50-59	45	32	77		
	60 & above	4	5	9		
Gender	Female	127	86	213	0.001	
	Male	59	84	143		
Marital state	divorced	0	1	1	0.371	
	Married	157	134	291		
	Single	26	33	59		
	Widow	3	2	5		
Total		186	170	356		

One hundred (47.75%) practicing regularly exercises. Males more than females doctors with highly significant relation, and singles more than others doctors. Same as in study done in USA (Bazargan *et al.*, 2009) Checking blood sugar are doing by 269 (75.56%) with significant relation with age (p value

0.002) which is suspected because DM increase with the age (Davidson's Principles and Practice of medicine, 2018). Male doctors 113(79%) checking their blood more than female doctors 156 (73.23%) with no significant relation. Also its have no significant relation to marital status. Less than half of doctors checked their lipid profile, with significant relation with the age, gender, marital status, and specialty (0.000, 0.036, 0.005 and 0.004 respectively). The increase in the proportion of lipid in the body is a major cause of heart and blood vessels diseases and is the most common, where it causes deaths (Mula-Abed and Chilmeran, 2007; Dash et al., 2013). Fact known by doctors, so most of them especially after 45 years need to check their lipid profile; but here it's not done. Also a study done in Sulaymaniyah City concludes dyslipidemia is common in the Iraqi population (Fatma Mustafa Mohammad et al., 2017). In spite that only 47% of doctors checking their lipids levels.

Table 5: Relationship between doctors check their blood sugar and their demographic features

		Check BS		Total	P value	
		No (N=87)	Yes (N=269)	N = 356	r value	
	20-29	25	46	71		
	30-39	32	76	108		
	40-49	22	69	91	0.002	
Age	50-59	8	69	77	0.002	
	60 &	0	0	0		
	above	0	9	9		
C 1	Female	57	156	213	0.213	
Gender	Male	30	113	143		
	Divorced	0	1	1		
Marital	Married	64	227	291	0.007	
state	Single	22	37	59	0.086	
	Widow	1	4	5		

Table 6. Relationship between doctors check their blood lipid profile and their demographic features

		Check Lipid Profile			
	•	No	Yes		value
	20-29	52	19	71	
	30-39	68	40	108	0.000
Age	40-49	40	51	91	
Ü	50-59	24	53	77	
	60 & above	2	7	9	
Gender	Female	121	92	213	0.026
Gender	Male	65	78	143	0.036
	Divorced	0	1	1	
Marital	Married	143	148	291	0.005
state	Single	42	17	59	0.003
	Widow	1	4	5	
	GP	121	127	248	
	Family physician	26	11	37	
	Postgraduate	21	2	23	
	Dentist	8	8	16	
	Others	2	14	16	
Specialty	Community medicine	3	1	4	0.004
	Pediatrics	1	3	4	
	Gyn. and obst.	2	2	4	
	Medical education	0	2	2	
	Orthopedic practitioner	2	0	2	
Total	practitioner	186	170	356	

Conclusion

- 1. PHC doctors are mostly general practicional physician, female aged 30-39 yrs, married.
- 2. Quarter of the study sample have chronic disease mainly hypertension, diabetes mellitus, heart diseases.

- 3. All parent-doctors follow EPI vaccine for their children. And three quarter of doctors have practicing healthy behaviour (check blood pressure, blood sugar, hand washing)
- 4. Female doctors usually practice breast self examination, TT vac. During pregnancy, and less practice mammogram, Pap smear.
- 5. Healthy behaviour Barriers mostly lack of time, uncertainty of effectiveness, vaccine complication respectively.
- 6. Smoking the main unhealthy behaviour by married male aged 30-39 yrs, but most of them practicing home exercises.
- 7. Lipid profile has statistical significant relationship with age, gender, marital state and specialty.

Recommendation

- 1. Initiated worker health program, include regular programmed investigation and follow up.
- 2. Increase the attitude changing toward healthy behaviour program to all health workers, by training courses.
- 3. Initiate exercise corner either in PHCs or exercise places through Iraqi family physician association or Iraqi doctor association

REFERENCES

- Abbas Mansour, Fadhil Al Douri. Diabetes in Iraq: Facing the Epidemic. A systematic Review. Wulfenia 22(3):258. https://www.researchgate.net/publication/280084146_Diabetes_in_Iraq_Facing_the_Epidemic_A_systematic_Review/citations
- Abdullah AS, Stillman FA, Yang L, Luo H, Zhang Z, Samet JM. Tobacco Use and Smoking Cessation Practices among Physicians in Developing Countries: A Literature Review (1987–2010). *International Journal of Environmental Research and Public Health*, 2014; 11(1):429-455. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3924453/
- Bass K. and McGeeney K. U.S. Physicians Set Good Health Example. OCTOBER 3, 2012. http://news.gallup.com/poll/157859/physicians-set-good-health-example.aspx?version=print#main
- Bazargan M, Makar M, Bazargan-Hejazi S, Ani C, Wolf KE, Preventive, lifestyle, and personal health behaviors among physicians. *Acad. Psychiatry*, 2009 Jul-Aug; 33(4):289-95. https://www.ncbi.nlm.nih.gov/pubmed/19690108
- Danit R. Shahar, Yaakov Henkin, Geila S. Rozen, Dorit Adler, Orna Levy, Carmit Safra, Baruch Itzhak, Rachel Golan, Iris Shai, A controlled intervention study of changing health-providers' attitudes toward personal lifestyle habits and health-promotion skills. *Nutrition*. 2009 May; 25(5): 532–539. Published online 2009 Feb 20. doi: 10.1016/j.nut. 2008.11.020. https://www.nutritionjrnl.com/article/S0899-9007(08)00494-2/pdf
- Dash S C, Jayanti Mishra, Shubhransu Patro, Dash D. D, Prevalence of Diabetes, Hypertension, Renal Dysfunction and Hyperlipidmia among Doctors of a Medical College in Odisha. *International Journal of Physiology*, July 2013. Volume 01 Number 02. Page 130-135. DOI: 10.18203/2320-6012.ijrms20182305
- Davidson's Principles and Practice of medicine. 2018. Elsevier Ltd. 23rd Edition, chapter 20, page: 722 and 735.. Online 2018. https://www.elsevier.com/books/davidsons-

- principles-and-practice-of-medicine/ralston/978-0-7020-7028-0
- Doll R, Peto R, Boreham J, & Sutherland I. Mortality in relation to smoking: 50 years' observations on male British doctors. BMJ. 2004; 328:1519. [PMCID: PMC437139] [PubMed: 15213107]. https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC437139/
- Elias Dayoub, and Anupam B. Jena, Chronic Disease Prevalence and Healthy Lifestyle Behaviors Among U.S. Health Care Professionals. *Mayo Clin Proc.*, 2015 December; 90(12): 1659–1662. doi:10.1016/j.mayocp. 2015.08.002. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4679588/pdf/nihms-715888.pdf
- Fatma Mustafa Mohammad, Nihad Abdul Jabbar Jalal and Chateen Ali Pambuk, A Comparative Study to Evaluate the Serum Lipid Profile in Pre and Postmenopausal Woman in Sulaymaniyah City, Iraq. *Biomed J Sci. & Tech Res.*, Volume 1- Issue 3: 2017. http://biomedres.us/submitmanuscript.php
- Haritha S, Kumar S, Lakshminarayanan S, Dasari P (2017)
 Human Papilloma Virus vaccine –awareness and acceptability amongst medical students in a tertiary teaching hospital in South India. *J Gynecol Res Obstet.*, 3(2): 025-028. https://www.peertechz.com/articles/human-papilloma-virus-vaccine-awareness-and-acceptability-amongst-medical-students-in-a-tertiary-teaching-hospital-in-south-india.pdf
- Hassanein, Shamsun Nahar, Aesha Farheen, Inasse I. Gaballah, AmaniMohamed, and Faten M. Rabie, Tobacco Use among Health Care Workers in Southwestern Saudi Arabia. *BioMed Research International*, Volume 2013, Article ID 960292, 5 pages. https://www.hindawi.com/journals/bmri/2013/960292/
- Iraq celebrates World Health Day amid calls to prevent and control high blood pressure, WHO. 10 April 2013 11:50. http://www.uniraq.org/index.php?option=com_k2&view=it em&id=512:iraq-celebrates-world-health-day-amid-calls-to-prevent-and-control-high-blood-pressure&Itemid=605 &lang=en
- Iraq Family Health Survey IFHS, 2006/7. http://www.who.int/mediacentre/news/releases/2008/pr02/2008_iraq_family health survey report.pdf
- Kathleen E. Schroeder, Krzysztof Narkiewicz, Masahiko Kato, Catherine Pesek, Bradley Phillips, Diane Davison, Virend K. Somers, Personality Type and Neural Circulatory Control. Hypertension November 2000; 36:830-833. http://www.hypertensionaha.org
- Katie Tyzuk, 2012. Physician health: A review of lifestyle behaviors and preventive health care among physicians. *BC Medical Journal*, Vol. 54 No. 8. https://www.bcmj.org/sites/default/files/public/BCMJ_54_Vol8_bcmd2 b.pdf
- Margaret Kay, Geoffrey Mitchell, Alexandra Clavarino and Jenny Doust. Doctors as patients: a systematic review of doctors' health access and the barriers they experience. *British Journal of General Practice*, 2008; 58: 501–508. DOI: 10.3399/bjgp08X319486. https://www.ncbi.nlm.nih.gov/pubmed/18611318
- Mario R Sammut, Family doctors and health promotion: Do we practice what we preach?. *Malta Medical Journal*, Volume 18 Issue 01 March 2006. https://www.scribd.com/document/355840721/family-doctors-and-health-promotion-do-we-practice-what-we-preach-malta-medical-journal-2006

- Mula-Abed WA, Chilmeran SK., Prevalence of dyslipidemia in the Iraqi adult population. *Saudi Med J.*, 2007 Dec; 28(12):1868-74. https://www.ncbi.nlm.nih.gov/pubmed/18060219
- Perrin PC, Merrill RM, Lindsay GB. Patterns of smoking behavior among physicians in Yerevan, Armenia. *BMC Public Health*, 2006;6:139. https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-6-139
- Sanjiv Kumar and GS Preetha, Health Promotion: An Effective Tool for Global Health. Indian J Community Med. 2012 Jan-Mar; 37(1): 5–12. doi: 10.4103/0970-0218.94009. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3326808/
- Sunny Consolvo, Predrag Klasnja, David W. McDonald and James A. Landay, Designing for Healthy Lifestyles: Design considerations for Mobile Technologies to Encourage Consumer Health and Wellness. *Human–Computer Interaction*, Vol. 6, Nos. 3–4 (2012) 167–315. https://static.googleusercontent.com/media/research.google.com/en//pubs/archive/42488.pdf
- Thamer Kadum Al Hilfi, Riyadh Lafta, Gilbert Burnham, Health services in Iraq. www.thelancet.com Vol 381 March

- 16, 2013. https://www.ed.ac.uk/files/imports/file Manager/Lancet%20paper%20Thamer.pdf
- USAID 2011 Primary Health Care Project in Iraq, Baseline Assessment Report 2011. http://www.urc-chs.com/sites/default/files/BaselineAssessmentReport112.pdf
- Wafaa M. Atoof, Nuha Alwandawi, Hana Algomele, Knowledge, Attitude and Practice of Workers about the Cervical Cancer and Pap smear in The College of Nursing. *kufa Journal for Nursing sciences*, 2014 Volume: 4 Issue: 3 Pages: 141-147. https://www.iasj.net/iasj?func=fulltext&aId=95356
- WHO and UNICEF estimates of Iraq immunization coverage: 2016 published in July 4, 2017. https://data.unicef.org/wp-content/uploads/country_profiles/Iraq/immunization_country_profiles/immunization_irq.pdf
- Zinonos S, Zachariadou T, Zannetos S, Panayiotou AG, Georgiou A. Smoking prevalence and associated risk factors among healthcare professionals in Nicosia general hospital, Cyprus: a cross-sectional study. *Tobacco Induced Diseases*. 2016;14:14. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4823851/
