Unmasking Factors Influencing Clients Enrolment in a Primary Health Care Initiative: The Bahrain "Choose your Doctor Program" Experience

Khaldoon AlRoomi* Fatema Alshehabi** Muna Altahoo** Samya Bahram***Abrar Mallala** Zainab Adel** Zahraa Baqer**

Zahraa Alawi** Mohamed Hany Shehata*,****

ABSTRACT

Background: This study investigates the "Choose Your Doctor" program, implemented in Bahrain (2018) to empower patients by granting them physician selection in primary care. The program aims to foster continuity of care and enhance client satisfaction.

Aim: the study aims at studying the factors influencing program enrolment, motivations for choosing and changing doctors, and overall program satisfaction.

Methods: A cross-sectional survey of 412 adult Bahrainis registered at Aali center which is the pilot center for applying the program.

Results: over half (53%) were actively enrolled, with men more likely to self-register than women. The primary motivators for joining were the desire for continuity of care and managing chronic conditions. Despite high program awareness (74%), knowledge about chosen doctors' qualifications was lower (40%). Social media, friends/relatives, and health center advertisements served as the main information sources. The program garnered high satisfaction, with 76% expressing satisfaction and 67% indicating no desire to change doctors. Notably, self-registered clients exhibited a stronger attachment to their chosen doctors compared to those who were auto selected. Doctor communication skills and consultation time emerged as potential reasons for switching doctors, particularly for auto-selected clients.

Conclusion: the "Choose Your Doctor" program has achieved remarkable success in boosting patient satisfaction and encouraging active enrolment. However, targeted interventions to improve doctor information accessibility, potentially extending consultation times, and leveraging social media for program promotion could enhance participant engagement. This initiative's positive outcomes highlight the effectiveness of patient-centered approaches in transforming primary healthcare delivery.

INTRODUCTION

The "Choose Your Doctor Program" in primary health care (PHC) is a relatively new initiative in the Kingdom of Bahrain which was launched in 2018. The program aims to allow clients to receive Primary care services through their same chosen family physician.

Primary Healthcare in the Kingdom of Bahrain is provided through 27 PHC centres and two clinics; served by 377 certified family physicians and general practitioners distributed all over the country. A ratio of doctor to patient of 1:2,500, in line with WHO recommendations. (1).

Along with providing continued medical care, the "Choose Your Doctor Program" is part of the Autonomy project and the national health plan (2016-2025) which aims to produce high quality integrated health services to meet with the country's economic vision 2030 (2). The program links every individual and his/her family with the same doctor and of his/her choice. Each physician is assigned a quota of patients that ranges from 1,500 to 3,000 patients. (3).

Continuous health aims to improve the quality of care over time (4), and

it is in the core of the "Choose Your Doctor Program". The American Academy of Family Physicians (AAFP) defines it as 'the process by which the patient and the physician are cooperatively involved in ongoing health care management toward the goal of high quality, cost-effective medical care (4). It is considered as the foundation of primary care, along with first contact, comprehensiveness, and coordination of care (5).

There are many advantages for continuity of care; the most obvious is for patients with chronic diseases where the frequency of care and the requirement of multiple therapeutic interventions are enhanced by an ongoing relationship with a single physician (6). In addition, there would be better outcomes and higher patient satisfaction rate (5)

Published studies indicate a positive effect of sustained continuity of care on the quality of patient care. As health care providers gain familiarity with a patient's history so that doctors more effectively manage chronic conditions or monitor long-term development. Moreover, it is associated with higher rates of patient satisfaction, decreased hospitalizations, emergency department visits, improved receipt of preventive services, and encourage communication between

- * Family and community Medicine Department College of Medicine and Medical Sciences Arabian Gulf University, Kingdom of Bahrain. Email: mohamedhks@agu.edu.bh
- ** Primary healthcare services, Kingdom of Bahrain.
- *** Ministry of Health, Kingdom of Bahrain.
- **** Family Medicine Department, Faculty of Medicine, Helwan University, Egypt.

physician and patient (7, 8).

Studies report that patient satisfaction is positively related to the opportunity to choose the family Physician. For example, in Slovenia, the vast majority of the studied population stated that they would strongly recommend their family physician to their friends. Satisfaction with the possibility to choose a personal family physician is positively associated with younger age, higher education level, and have chosen their family physician (6,9). An Estonian random sample of residents was interviewed to investigate whether having a personal physician is associated with patient satisfaction in different aspects of PHC. Results showed that patients who had registered with their personal doctor were more satisfied with different aspects of primary care compared to those who didn't including waiting time, simplicity of access to appointment, physician's punctuality and understanding and clarity of explanations (10). A cross-sectional study done in the USA revealed that the three main factors affect the patient choice of their doctor, professional skill, office management and personal characteristics (11).

Thus, continuity of health care would be expected to achieve highquality health care services. This study aims to explore the reasons for clients to choose their doctors in order to facilitate their implementation of the "Choose Your Doctor Program".

METHODOLOGY

A descriptive cross-sectional design was employed in this research project. The study population consisted of adult Bahrainis and residents who are above 20 years of age and registered at Aali health centre. This particular health centre was chosen since it was the 1st health centre where the "Choose Your Doctor Program" has been implemented.

The estimated size of the population served by Aali health centre was 13,584. Based on 95% confidence interval (critical value=1.96), and a 5% margin of error, the calculated sample size is 374. The adjusted sample size is 411 for 10% non-response.

Study participants were chosen randomly from the list of total eligible population using a simple random sampling technique. This technique was implemented using random numbers automatically generated by the software (RAND)*(1-0)+0).

Data was collected from eligible participants via a structured questionnaire through telephone interviews. The questionnaire was piloted earlier on 10 clients, and few adjustments were made to it accordingly.

Microsoft Excel as employed for data entry and analysed using Statistical Package for the Social Sciences (SPSS Version 28). Variables were presented as frequencies and percentages where applicable. Graphs were used to represent the qualitative variables. Chi-square test was used to measure the association between categorical variables. A p-value of less than 0.05 (p < 0.05) was considered statistically significant.

Ethical consideration:

All individuals included in the study provided an informed consent. They were assured of their rights to refuse or withdraw at any stage of this research without losing any benefits from the health care system. All safeguards were taken to ensure confidentiality of participants. Data was maintained anonymous. The research proposal was approved by the Ethics and Research Committee at the College of Medicine and Medical Sciences in the Arabian Gulf university, Bahrain with reference No. E19-PI-11-21.

RESULTS

Five hundred and fifty clients were invited by phone to participate in the study, of whom 412 (a response rate of 82%) accepted to participate. 118 clients had wrong phone numbers registered in the center, and 21 refused to participate in the study.

Table 1: Sociodemographic characteristics of the sample

	C 1	
Variable		n (%)
	$\begin{aligned} & Mean \pm Standard \\ & deviation \end{aligned}$	43.33 ± 13
Age (years)	Median	41
	Range (minimum- Maximum)	22 -79
Gender	Male	185 (44.9)
	Female	227 (55.1)
Education level	illiterate	30 (7.3)
	primary	19 (4.6)
	intermediate	35 (8.5)
	secondary	140 (34)
	university graduate	188 (45.6)
Respondent has	Yes	150 (36.4)
chronic illness(s)	No	262 (63.6)

Table 1 presents the sociodemographic characteristics of participants. The age ranged from 22 to 79 years with a median of 41 years. Forty-five percent of the interviewed clients were males. Almost half of the interviewed clients (45.6%) are university graduates. The majority (63.6%) of the clients had no chronic illnesses.

Almost half of the interviewed clients (53%) were registered in the program either by themselves (37%) or by relatives (16%); the remaining clients were auto selected (47%) (Figure 1). The registration process for 83.9% of them was perceived as convenient. Most of the clients (60.5%) chose the online method for registration with minimal technical difficulties.

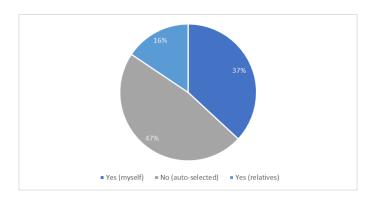


Figure 1. Registration status of study participants

Most of the clients' (73%) strongly agree or agree to receive health care from their designated health center. The main reasons for not attending the health center when they need medical services are their preference of other health facilities such as private hospitals (37%) or the expected long waiting time (23%).

Most of the interviewed clients (73.8%) knew about the "Choose Your Doctor" program at the time of the interview. However, only 40% of them stated that they are aware of their doctors' information, academic certificates, and clinical experience. When asked about their sources of information, the interviewed clients stated that they get it mainly

from advertisements in the health center (32.8%), friends and relatives (27.7%), and social media (22.3%)

Regarding the satisfaction with "Choose Your Doctor program", 76% of the registered clients are either highly satisfied or satisfied with and 67% were unwilling to change their doctor.

Table 2 presents the association between the registration status of clients and their sociodemographic characteristics. Men were more likely to be self-registered compared to women (p-value = 0.005). There is a trend noted between registration status and having a chronic illness (p-value = 0.069).

Table 3 shows the association between the client's motivation to receive care from health centre and their registration status. The self-registration rates in the program are high when the motivation is higher (p value= 0.051).

There is a statistically significant relationships observed between the registration status and client's information about "Choose Your Doctor program" in general as well as the clarity of information about doctors' qualifications and years of experience.

The majority of the registered clients were satisfied with the program despite their different registration status. When clients were asked whether they like to change their doctors if given a chance, most of them declared that they will not change their doctors (67%). However, self-registered clients tend not to change their doctors when compared to the auto-selected ones with a statistically significant difference (p < 0.001)

For the clients who eluded that they would change their doctors if given the chance, there were statistically significant associations between the registration status and doctor communication (p-value = 0.003) as well as the consultation time (p value=0.019) (Table 4)

DISCUSSION

The "Choose Your Doctor Program" is an initiative to ensure continuity of healthcare provided to users in Bahrain. This study explored the experience of 236 registered clients in Aali center which was the center to pilot this program in Primary Healthcare Bahrain. Of the interviewed clients, 53% were registered to the program either by themselves (37%) or by relatives (16%) while the rest were auto selected.

Table 2. Association between registration status of clients and their sociodemographic characteristics

		Registration status (total = 263)				
Variables		Self-registered n (%)	Registered by relative. n (%)	Auto-selected n (%)	p- value	
Gender	Male	53 (43.4%)	10 (8.2%)	59 (48.4%)	<0.05*	
	Female	44 (31.2%)	31 (22%)	66 (46.8%)		
Education level	Illiterate	2 (28.6%)	1 (14.3%)	4 (57.1%)	0.848	
	Primary	3 (25.0%)	2 (16.7%)	7 (58.3%)		
	Intermediate	8 (42.1%)	4 (21.1%)	7 (36.8%)		
	Secondary	32 (38.1%)	9 (10.7%)	43 (51.2%)		
	University graduate	52 (36.9%)	25 (17.7%)	64 (54.4%)		
Has chronic illness(s)	Yes	39 (46.4%)	13 (15.5%)	32 (38.1%)	0.069	
	No	58 (32.4%)	28 (15.6%)	93 (52.0%)		

^{*}Statistically significant

Table 3. Associations between registration status and selected study variables

		Registration status (total = 263)			
Variables		Self-registered n (%)	Registered by relative n (%)	Auto-selected n (%)	p-value
	Strongly agree	40 (40.0%)	17 (17.0%)	43 (43.0%)	0.051
Madinadian da manina bankhanna	Agree	41 (45.6%)	14 (15.6%)	35 (38.9%)	
Motivation to receive health care from center	Neutral	7 (24.1%)	4 (13.8%)	18 (62.1%)	
	Disagree	8 (22.2%)	6 (16.7%)	22 (61.1%)	
	Strongly disagree	1 (12.5%)	-	7 (87.5%)	
Clarity of information about choose your doctor program	Yes	66 (44.6%)	28 (18.9%)	54 (36.5%)	<0.05*
	No	31 (27.0%)	13 (11.3%)	71 (61.7%)	
Clarity of information about doctors' qualifications & experience	Yes	46 (43.8%)	28 (26.7%)	31 (29.5%)	<0.05*
	No	51 (32.3%)	13 (8.2%)	94 (59.5)	
Overall satisfaction with the program	Highly satisfied	36 (40.9%)	17 (19.3%)	35 (39.8%)	0.095
	satisfied	45 (40.2%)	18 (16.1%)	49 (43.8%)	
	Neutral	13 (24.5%)	5 (9.4%)	35 (66.0%)	
	Dissatisfied	3 (42.9%)	-	4 (57.1%)	
	Highly dissatisfied -		1 (33.3%)	2 (66.7%)	_
If you are given the chance to change the chosen doctor, will you change?	Yes	21 (33.9%)	5 (8.1%)	36 (58.1%)	
	No	74 (42.0%)	34 (19.3%)	68 (38.6%)	< 0.001*
	Neutral	2 (8.0%)	2 (8.0%)	21 (84.0%)	

^{*}Statistically significant

Table 4. Association between the registration status and reasons to consider changing their assigned doctors among those who are willing to change their doctors

Y		Registration status of those who would like to change their doctor (n=62)			e their doctors
Variables		Self-registered n (%)	Registered by relative n (%)	Auto-selected n (%)	p- value
Consultation time	Yes	8 (26.7%)	-	22 (73.3%)	-0.019*
Consultation time	No	13 (40.6%)	5 (15.6%)	14 (43.8%)	—0.019**
Doctor availability	Yes	10 (34.5%)	0 (0%)	19 (65.5%)	0.005
	No	11 (33.3%)	5 (15.2%)	17 (51.5%)	-0.085
Doctor Reputation	Yes	9 (27.3%)	1 (3%)	23 (69.7%)	0.002
	No	12 (41.4%)	4 (13.8%)	13(44.8%)	-0.092
Doctor Management plan	Yes	12 (30%)	3 (7.5%)	25 (62.5%)	0.62
	No	9 (40.9%)	2 (9.1%)	11 (50.0%)	-0.63
Health center location	Yes	-	-	2 (100%)	0.464
	No	21 (35.6%)	5 (8.5%)	33 (55.9%)	— 0.464
Doctor Experience	Yes	13 (38.2%)	1 (2.9%)	20 (58.8%)	0.227
	No	8 (28.6%)	4 (14.3%)	16 (57.1%)	-0.237
Doctor knows family history	Yes	8 (25.8%)	1 (3.2%)	22 (71%)	0.002
	No	13 (41.9%)	4 (12.9%)	14 (45.2%)	-0.092
Doctor's communication skills	Yes	9 (21.4)	3 (7.1%)	30 (71.4%)	0.002*
	No	12 (63.2%)	2 (10.5%)	5 (26.3%)	0.003*

^{*} Statistically significant

In their scoping review in 2012, Victoor et al., mentioned that in some studies, choice of hospitals was influenced by older patients, being a female and distance from the hospital (12). This is not in line with our findings as females were significantly less involved to be actively registered when compared to males. This can be attributed to known cultural differences. However, those with chronic diseases in our study have more tendency towards self-registration when compared to those how don't have chronic diseases. (12)

In a recent review article about the Swedish health reform that included allowing clients to choose their doctors, Fredriksson & Isaksson, 2022 concluded that the reform has led to an increase in access to primary healthcare. The review suggests that people want the possibility to choose PHC provider. In addition, it seems that having enough information is associated with the likelihood of making a choice. (13) These findings are in agreement with our results as one of the most significant factors affecting registration in the program was the client's awareness about the program. Proper knowledge about similar programs in various research findings was described as essential for achieving the target of registered clients. The participants of this study are no different, as clarity of information about the program dynamics, services provided, and available doctors were statistically associated with more self-registration.

There is an agreement in multiple studies from several countries which explored patients' preferences regarding primary care providers type that those who preferred physicians were more likely to cite physician qualifications (75%) and trust (7%) (14,15) This is in similarity to our findings as self-registered patients had more clarity about doctor's qualifications when compared to the auto selected ones with a statistically significant difference. Other European studies concluded that clients' choice of their providers is determined by the interplay between patient and provider characteristics. (12, 16)

Clients usually are in favour of modern advertising methods for such programs when compared to conventional methods (TV, radio, newspaper, and street panners). In the current study, clients knew about the program mainly from the health center advertisement as the most successful method (32.8%) as it focused on those who attend to the health center. Other sources of information about the program included friends and relatives (27.7%), and social media (22.3%). Bornstein et. al. 2000, recommended that more resources should be provided to patients to make well-informed decisions while selecting their healthcare providers. They also concluded that participants perceived professionally relevant factors such as doctors' qualifications are more important than patient characteristics when selecting their providers. Although they don't have always access to this information. Similarly, in the current study, there was a statistically significant difference in the registration status as the auto selected patients had less information about the doctors' qualifications. (17)

Although the majority of the interviewed clients in the current study (72.2%) were motivated to get healthcare from the health center when needed, most of those who were not motivated or neutral were auto selected (18%). As regarding satisfaction, most clients (76%) reported that they were satisfied with the program. This is consistent with the results of other studies from Iran and Turkey (14,18,19) as patients value similar initiatives that enhance the continuity of care. The degree of patient satisfaction with the quality of care received directly impacted their choice of physicians. (20) In another study, about three quarters of patients mentioned only distance as a reason for changing their doctors. (21) Similarly, when studied the determinants for customer satisfaction in more than one study respondents were satisfied the most because of the possibility of choosing their own family physician. (9,22)

The majority of clients in the current study were unwilling to change their doctor, even those who were auto selected, reflecting the high level of satisfaction. These findings support to the growing literature assessing patients' satisfaction with patient-chosen family physicians. A study from the USA reported that clients who attend the same health care provider every visit show higher satisfaction rates compared to those who were seen by different doctors in each visit (5).

In the current study, those who were willing to change their doctors (23,6 %) reported that doctor's communication skills would be the strongest drive to change their doctors. The percentage of patients who

changed or thought about changing their family physicians was even less in a similar study (3.5%, 2%) subsequently. (9) Multiple studies found that patients prefer a provider with a friendly and understanding communication style, who listens to the patient and with whom the patient has a good relationship or feels a personal click (10,12,14, 20).

Waiting time was also mentioned as a factor that negatively influenced on patient choices. (12) In a study from England, (35%) of the study population mentioned dissatisfaction with the personal care given by the general practitioners and a number of patients stated that the doctor was not interested in their concerns or was rude/behaved badly (21.2%). Among other reasons for dissatisfaction was long waits (13%). (21) These findings agree with ours, as communication skills of doctors and the time given to patients in consultation were the significant reasons for changing doctors. Additionally, doctors' availability and reputation were influential in changing the doctor, which resembles two studies from Slovenia in which many clients would recommend their family physician to their friends (6,9).

The findings of this study contribute to the findings of previous studies from other countries proving that enabling clients to choose their doctors contributes to satisfaction rates.

Despite that the satisfied population of such a program are unlikely to change their doctors, a considerable percentage of interviewed patients thought about changing their doctors because of their communication skills and the consultation time. This might also necessitate a comprehensive approach when applying similar programs to improve the client experience in the health system.

While one of the limitations of this study is the generalizability of its results as it was conducted only to one center and the possibility of response bias of the interviewees. However, this is unlikely to have affected the findings from this study hence the sampling was done properly across the study population and the results are consistent with other studies findings from multiple countries around the world.

CONCLUSION

In conclusion, "Choose Your Doctor Program" in the Kingdom of Bahrain is a successful program with high client satisfaction rates. The self-registration rate (53%) was found to be below target in the center where the pilot was done. In order to achieve higher self-registration rates, authorities might consider utilizing modern methods of advertising that are accessible to the target population such as social media. More information about doctors' qualifications and experience contribute positively to self-registration.

Authorship Contribution:

Dr. Khaldoon AlRoomi, MD, PhD:

- Manuscript Writing: Drafted specific sections of the manuscript, focusing on the importance of communication in choosing a doctor.
- **Bibliography Compilation:** Compiled and formatted the reference list for the paper according to the target journal's style guide.
- Data Analysis (advanced): Employed statistical software to analyze survey data and identify patterns in patient preferences.
- Journal Selection: Assisted in identifying appropriate journals for submission based on the paper's topic and target audience.

Dr. Fatema Alshehabi, MD:

- Conceptualization: Developed the core idea of the "Choose Your Doctor" paper, exploring factors patients consider when selecting a physician.
- **Survey Development:** Drafted and refined survey questions to assess patient preferences when choosing a doctor.

- Literature Review: Conducted a comprehensive review of relevant research on patient selection criteria for doctors.
- **Data Collection:** Assisted with data collection processes for the study, ensuring participant recruitment and survey completion.
- Data Analysis (preliminary): Performed initial data analysis tasks such as data cleaning and coding.

Dr. Muna Altahoo, MD:

- Conceptualization: Developed the core idea of the "Choose Your Doctor" paper, exploring factors patients consider when selecting a physician.
- Literature Review: Analyzed existing research on patientphysician communication and its impact on doctor selection.
- Methodology Development: Contributed to designing the research methodology for the study
- Ethical Considerations: Ensured the study adhered to ethical research principles, including informed consent and participant confidentiality.
- Patient Advocacy Perspective: Provided insights into patient experiences and expectations when choosing a doctor.
- Data Collection Facilitation: May have facilitated access to study participants or data collection resources.

Dr. Samya Bahram, MD:

- Results Interpretation: Contributed to interpreting the statistical findings and drawing conclusions about patient decision-making.
- Manuscript Revision: Reviewed and provided feedback on the overall structure and clarity of the manuscript.
- Patient Advocacy Perspective: Provided insights into patient experiences and expectations when choosing a doctor.
- Ethical Considerations: Ensured the study adhered to ethical research principles, including informed consent and participant confidentiality.

Dr. Abrar Mallala, MD:

- Literature Review: Conducted a comprehensive review of relevant research on patient selection criteria for doctors.
- **Data Collection:** Assisted with data collection processes for the study, ensuring participant recruitment and survey completion.
- Survey Pilot Testing: Participated in pilot testing the survey to identify potential issues with clarity or comprehension.

Dr. Zainab Adel, MD:

- Literature Review: Conducted a comprehensive review of relevant research on patient selection criteria for doctors.
- Data Collection: Assisted with data collection processes for the study, ensuring participant recruitment and survey completion.
- Survey Pilot Testing: Participated in pilot testing the survey to identify potential issues with clarity or comprehension.

Dr. Zahraa Bager, MD:

- Statistical Analysis Review: Reviewed and verified the accuracy
 of the statistical analysis conducted on the data.
- Manuscript Writing: Drafted sections of the manuscript explaining statistical methods and presenting results in a clear and concise manner.
- Figure & Table Creation: Designed figures and tables summarizing key findings from the data analysis.

Dr. Zahraa Alawi, MD:

- Literature Search Assistance: Assisted with searching for relevant academic literature to support the paper's arguments.
- Manuscript Formatting: Ensured the manuscript adheres to the target journal's formatting guidelines for submission.
- Survey Pilot Testing: Participated in pilot testing the survey to identify potential issues with clarity or comprehension.

Professor Mohamed Hany Shehata, MD, PhD:

- Project Mentor: Provided overall guidance and mentorship throughout the research project, offering expertise on patientphysician relationships.
- Methodology Development: Contributed to designing the research methodology for the study (e.g., survey design, data collection methods).
- Critical Review: Reviewed drafts of the manuscript and offered constructive feedback to improve the paper's quality and impact.
- **1- Competing Interest:** No competing interests (financial or otherwise) to be declared by any of the authors of this work.
- 2- Disclosure of Sponsorship: this work was conducted as a quality improvement project by the clinical master in family Medicine students affiliated to AGU-Bahrain. The data collection and supervision of this work was conducted in collaboration with primary healthcare centers in Bahrain.

Acknowledgment

The authors acknowledge the support of the Department of Family and Community Medicine at the Arabian Gulf University. We are immensely grateful to Professor Afif Bin Salah-Chairman of the Academic Committee of the Clinical Master Program in Family Medicine, Dr. Amer AlMarabha for his assistance in the analysis, Mr. Sadok Chlif for his comments on the study questionnaire and Mrs Raja Alrowaie for typing the manuscript.

We would also like to thank the staff and patients in Aali health center for their kind cooperation.

Finally, we acknowledge the help provided by the Primary Care directorate in the Kingdom of Bahrain

Al-Bahrani A, Alyousif H, Mustafa B, et al. A Possible Role of Chlamydia Pneumonia in Vaso-Occlusive Crisis in Sickle Cell Disease. Bahrain Med Bull 2010; 32(3): 111-4.

Potential Conflicts of Interest: None

Competing Interest: None

Acceptance Date: 17-09-2024

REFERENCES

- Alnaser F, Al-Sayyad A. (PDF) primary care research in the Kingdom of Bahrain. 2016. Accessed January 3, 2024. https:// www.researchgate.net/publication/327101573_Primary_care_ research_in_the_Kingdom_of_Bahrain. Health Information Directorate - Web Services Group. [Internet].
- Health Information Directorate Web Services Group. Choose your doctor program - ministry of health. Accessed January 3, 2024. https://www.moh.gov.bh/Services/ChooseYourDoctorProg ram?lang=en.
- Health Information Directorate Web Services Group. Online registration for Choose your family doctor service. Family Doctor - Ministry of Health. Accessed January 3, 2024. https://www.moh. gov.bh/FamilyDoctor?lang=en.
- Gulliford M, Naithani S, Morgan M. What is "continuity of care"? Journal of Health Services Research & Dicy. 2006;11(4):248-250.

- 5. Hueston WJ. Does having a personal physician improve quality of care in diabetes? The Journal of the American Board of Family Medicine. 2010;23(1):82-87.
- Kalda R, Põlluste K, Lember M. Patient satisfaction with care is associated with personal choice of physician. Health Policy. 2003;64(1):55-62.
- Cabana MD, Jee SH. Does continuity of care improve patient outcomes?. J Fam Pract. 2004;53(12):974-980.
- 8. Mainous AG 3rd, Goodwin MA, Stange KC. Patient-physician shared experiences and value patients place on continuity of care. Ann Fam Med. 2004;2(5):452-454.
- 9. Kersnik J. Determinants of customer satisfaction with the health care system, with the possibility to choose a personal physician and with a family doctor in a transition country. Health Policy. 2001;57(2):155-164.
- 10. Kersnik J. Patients' recommendation of doctor as an indicator of patient satisfaction. Hong Kong Med J. 2003;9(4):247-250.
- 11. Leach B, Gradison M, Morgan P, Everett C, Dill MJ, de Oliveira JS. Patient preference in primary care provider type. Healthc (Amst). 2018;6(1):13-16.
- 12. Victoor A, Delnoij DM, Friele RD, Rademakers JJ. Determinants of patient choice of healthcare providers: a scoping review. BMC Health Serv Res. 2012;12:272.
- 13. Fredriksson M, Isaksson D. Fifteen years with patient choice and free establishment in Swedish primary healthcare: what do we know? Scand J Public Health. 2022;50(7):852-863.
- 14. Kuruoglu E, Guldal D, Mevsim V, Gunvar T. Which family physician should I choose? The analytic hierarchy process approach for ranking of criteria in the selection of a family physician. BMC Med Inform Decis Mak. 2015;15:63.
- 15. Khatami F, Shariati M, Khedmat L, Bahmani M. Patients' preferences in selecting family physician in primary health centers: a qualitative-quantitative approach. BMC Fam Pract. 2020;21(1):107.
- Bazyar M, Yazdi-Feyzabadi V, Bahmani M, Sadeghifar J, Momeni K, Shaabani Z. Preferences of people in choosing a family physician in rural areas: a qualitative inquiry from Iran. Prim Health Care Res Dev. 2022;23:e57.
- 17. Bornstein BH, Marcus D, Cassidy W. Choosing a doctor: an exploratory study of factors influencing patients' choice of a primary care doctor. J Eval Clin Pract. 2000;6(3):255-262.
- Ghorbani A, Raeissi P, Saffari E, Reissi N. Patient Satisfaction With the Family Physician Program in Sabzevar, Iran. Glob J Health Sci. 2015;8(2):219-229.
- 19. Sparkes SP, Atun R, Bärnighausen T. The impact of the Family Medicine Model on patient satisfaction in Turkey: Panel analysis with province fixed effects. PLoS One. 2019;14(1):e0210563.
- Razzouk N, Seitz V, Webb JM. What's important in choosing a primary care physician: an analysis of consumer response. Int J Health Care Qual Assur Inc Leadersh Health Serv. 2004;17(4-5):205-211.
- Billinghurst B, Whitfield M. Why do patients change their general practitioner? A postal questionnaire study of patients in Avon. Br J Gen Pract. 1993;43(373):336-338.
- 22. Schmittdiel J, Selby JV, Grumbach K, Quesenberry CP Jr. Choice of a personal physician and patient satisfaction in a health maintenance organization [published correction appears in JAMA 1998 Mar 4;279(9):656]. JAMA. 1997;278(19):1596-1599.