

Knowledge and awareness of patient bill of right Among patient attend in primary healthcare at Armed forces hospital Dhahran in Eastern Province

Fahad Dhifullah A. Al-mari¹, Yosef Soltan Alrawaili², Abdullah Ibrahim Alenezi³, Ahmad abdullah Alghamdi⁴, Mohammed Nasser Makeen⁵, Abdulmajeed Al-Nejaim⁶, Rawan Mohammed Aseeri⁷, Mohammed saleh algethami⁸, Nasser Hassan Alkhaldi⁹, Mohammed Albarqi¹⁰, Abdullah Almaqhawi¹¹, Abdullah Almulhim¹²

1: Family Medicine Registrar Saudi Commission For Health Specialties Dhahran, Saudi Arabia

2: Family medicine Senior Registrar Saudi Commission For Health Specialties Arar, Saudi Arabia

3: Family medicine consultant Armed Forces Hospital, Dhahran, Saudi Arabia

4: Family medicine Resident Ministry of Health second cluster Riyadh, Saudi Arabia

5: Family medicine Resident, Armed Forces Hospital, Jizan, Saudi Arabia

6: Consultant family medicine, KFMMC, Dhahran, Saudi Arabia.

7: Family medicine consultant, Armed Forces Hospital, Dhahran, Saudi Arabia

8: Registered nurse, minister of defense, Saudi Arabia.

9: Consultant Family Medicine, Director of primary health care center National Guard hospital in Dammam, Saudi Arabia

10: Department of Family and Community Medicine, College Of Medicine - King Faisal University - Al Ahsa, Kingdom of Saudi Arabia

11: Department of Family and Community Medicine, College Of Medicine - King Faisal University - Al Ahsa, Kingdom of Saudi Arabia

12: Department of Family and Community Medicine, College Of Medicine - King Faisal University – Al Ahsa, Kingdom of Saudi Arabia

Abstract

Background

Patients' Bill of Rights (PBR) is an essential aspect of good medical practice. There is a paucity of data available about the knowledge and awareness of patients' bill of rights in Saudi Arabia. The objective of to assess the knowledge and awareness about PB among the patients attending outpatient clinics at armed forces hospital in the Eastern province of Saudi Arabia in terms of different factors, namely age, gender and education level.

Method

A cross-sectional questionnaire was administered to patients visiting OPD clinics at armed forces hospital. The 15 questions related to PBR were presented on a five-point Likert scale according to agreement.

Results

Participation rate was 72.6% and average age of patient was 40.6(±11.3). There were higher number of male participants 401(78.9%) compare to females 107(21.1%). Over 71% of the participants were belonged to public sector and 64.4% of the study participants did not have any education about PBR. Those who had education about PBR were significantly different average age 38.9(±11.5) compare to those who did not have any education 41.5(±11.1) (p-value 0.012). furthermore, average score for some questions related to PBR knowledge were significantly different when compared to patients' education level.

Conclusion

Study findings provided that majority of the patients visiting armed forces hospital were not having any education about PBR. Age of the patients had significant association with having knowledge about PBR. Outcome of the study suggests that efforts to increase the information about PBR are required health care institutions, policy makers and media can work collectively in this regard.

Keywords: patient bill of right, PBR, Knowledge, Awareness, PHC

1 INTRODUCTION

According to the World Health Organization (WHO), health is a fundamental right for all human being (1). This means that every individual is entitled to the highest standard of healthcare quality. Indeed, several declarations have recognized the importance of patients'

rights in providing quality health care (2). Although "patient rights" is globally accepted terminology, it is still not fully understood among patients.

It is crucial to mention that patients' rights vary across countries; due to cultural differences, religion, and other

social factors. Despite this, some fundamental patients' rights are almost the same across the world (3-5). Such includes, patients' right to access the information recorded in his/her medical record, right of care and treatment, right to make a free decision, right of having privacy and confidentiality about his/her social information (6). It is worth noting that cultural differences play a significant role in the wide variations of individual attitudes and perceptions, not only in patients' rights but also in human rights in general. Therefore, the declarations of patients' right can help unify the definitions of patients' rights; and consequently, protect them. Meanwhile, patients have to acknowledge their responsibilities and be aware of their duties (7).

There has been growing interest in the field of patients' rights, particularly patients' awareness. If patients are fully aware of their rights, they are more likely to establish a strong relationship with other healthcare providers, ultimately leading to better healthcare quality. Many researchers have investigated this issue in both low and high-income class countries. However, there have been wide disparities in reports regarding patients' awareness of their rights across studies. Again, this is attributed to socio-economical differences as well as differences in study designs. Nevertheless, it is still important to raise awareness of the importance of patients' rights, as it is an essential step towards improving the quality of care, and ensuring that patients are involved in making important decisions.

In 2006, the Saudi Ministry of Health published the patients' bill of right (PBR), aiming to improve patients' and healthcare providers' experience with healthcare delivery (8). Besides, it also aims to improve the overall quality provided to the broader population. In its written document, the ministry of health emphasized that patients should receive quality health care services within the ministry's facilities without any discrimination. In a similar vein, healthcare workers should also be committed to patients' rights and guide their patients to patient relations directorate to file their complaints or suggestions.

The Saudi PBR are available on the ministry website and have also been provided to all organizations. However, there is still lack of information dissemination, in which many patients are still not fully aware of their rights granted by the Government of Saudi Arabia. A previous study conducted in a primary care centre in Riyadh's city revealed that patients have insufficient knowledge about their rights. Whether these findings could be generalized to all Saudi patients are to be ascertained. Thus, more research is needed better to understand this issue in the Saudi context.

It is widely acknowledged that the successful implementation of the PBR is of significant importance. It helps improve the quality of services provided to the community and protect patients' rights (9). However, it mainly depends on how much patients know about PBR. In other words, understanding whether patients are aware of this bill is a critical factor for successful implementation. Hence, this study was designed to assess the knowledge and awareness about PBR among the patients attending OPD clinics at armed forces hospital at Dhahran, Eastern province of Saudi Arabia, in terms of age, gender, and educational level.

2 METHODS

a. Study design

A cross-sectional study was conducted to assess the knowledge and awareness of patients at one of the Armed Forces Hospitals in Saudi Arabia. The study took place in the city of Dhahran in the Eastern Province of the country over three months (1 February 2021 until 30 April 2021).

b. Ethical approval

The study was approved by the Armed forces hospital, Saudi Arabia, reference number – (IRB-FORM-002A).

c. Sampling technique

The population of this study was included using a simple random sampling technique; wherein each member of the define population (see subsection e) has an equal chance to be recruited to the study. The purpose of using sampling techniques, such as simple random sampling, is to reduce the source of selection bias and ensure high internal validity (also known as generalizability).

d. Sample size calculation

A minimum of 378 participants was needed to conduct this study based on our sample size calculation. However, to maximize the number of participants, all people visiting the OPD clinics were invited to participate in the study.

e. Inclusion criteria

Inclusion criteria are as follows: 1) patients (male or female) aged ≥ 18 years, 2) Saudi citizens, and 3) OPD clinics visitors.

f. Settings and Instrumentation

Data collection was done during OPD clinics visit using a valid questionnaire (see below). All eligible participants were invited to participate. A member of the research team thoroughly explained the purpose of the study. The amount of time expected to complete the questionnaire was explicitly stated as a maximum of 30 minutes.

It was made clear that participating in the study is entirely voluntary and that participants' responses would be kept confidential. It was also made sure that participants could stop filling the questionnaire at any time during the study without penalty or loss of benefits.

A modified version of a previously published questionnaire was adopted for this study. Content validity, which refers to the extent to which a tool/instrument measures what is supposed to measure, was applied by a panel consisting of an expert of medical research and two medical doctors. The panel carefully reviewed the tool used for this study and made suggestions regarding wording, format, and content. The committee members met, reviewed, and discussed all items/questions included in the questionnaire.

The questionnaire consisted of 19 questions: three questions were related to demographics (age (years), gender (M/F), and an education level (primary/secondary/graduation/post-graduation)); one question asked whether patients are aware of patients' right (YES/NO), and the remaining fifteen questions related to PBR. The 15 questions related to PBR were closed-ended based on 5-point Likert scale ranging from "1=strongly disagree, 2= disagree, 3=neutral, 4=agree, 5=strongly agree." Each question can only be ranked once.

g. Pilot study

A pilot study was conducted to ensure the validity of the used questionnaire has been fulfilled. The pilot study took place at Alaziziah Primary health care Armed forces hospital Dhahran in Eastern province. There were 34 patients included. Those recruited at the pilot study were excluded from the main study.

h. Statistics

Data management and analyses were conducted using the Statistical Package of Social Sciences (SPSS version 23). The results were presented as number (%) or mean (SD) for categorical and continues variables, respectively.

The primary analyses assessed the knowledge and awareness of PBR in terms of gender and educational level. To report the ranking of the PBR questions, the means (SD) was calculated for every question, in which a mean of below 3 indicated disagreement, a mean of 3 meant neutral, and a mean of more than 3 indicated agreement. Comparisons of the mean (SD) score of each of the PBR questions were made between gender (Male vs Female) and education level, using independent sample t-test. For the analysis based on patients' educational level, patents were divided into 2 groups: 1) up to secondary, including primary and secondary education, and 2) graduation and above, which includes graduation and post-graduation level. A P-value of less than 0.05 was considered statistically significant.

3 Results

Out of 700 primary health care patients invited to participate in the study, 508 were volunteered and filled the questionnaire, with a response rate of 72.6% (Figure 1). The average age of all patients was 40.6 (± 11.3) years. The average age of male patients was 41.7 (± 11.4) years, and the average age of female patients was 36.4 (± 9.8) years. There were more male patients compared to female, (n= 400 (78.7%) vs 107 (21.3%), respectively.

Majority of the study participants had an education up to graduation level (n=356, 70.1%). The proportion of patients with post-graduation level accounted for 18.1 % (n=92) and rest had up to secondary level (n=60, 11.8%). The proportion of public sector employees was highest in the study 71.1% (n=361), private sector employees were 35 (6.9%), students were 35 (6.9%), housewives 14 (2.8%) and others 63 (12.4%).

Out of 508 patients recruited, almost two-thirds (n=327, (64.4%)) did not have any education or information about patients' bill of right (PBR) while 181 (36.5%) had education or awareness about PBR. Characteristics of the study population are presented in Table 1.

Figure 1. Patients recruitment to the study

Eligibility:

- Patients aged ≥ 17 years
- Saudi citizens
- OPD clinics visitors

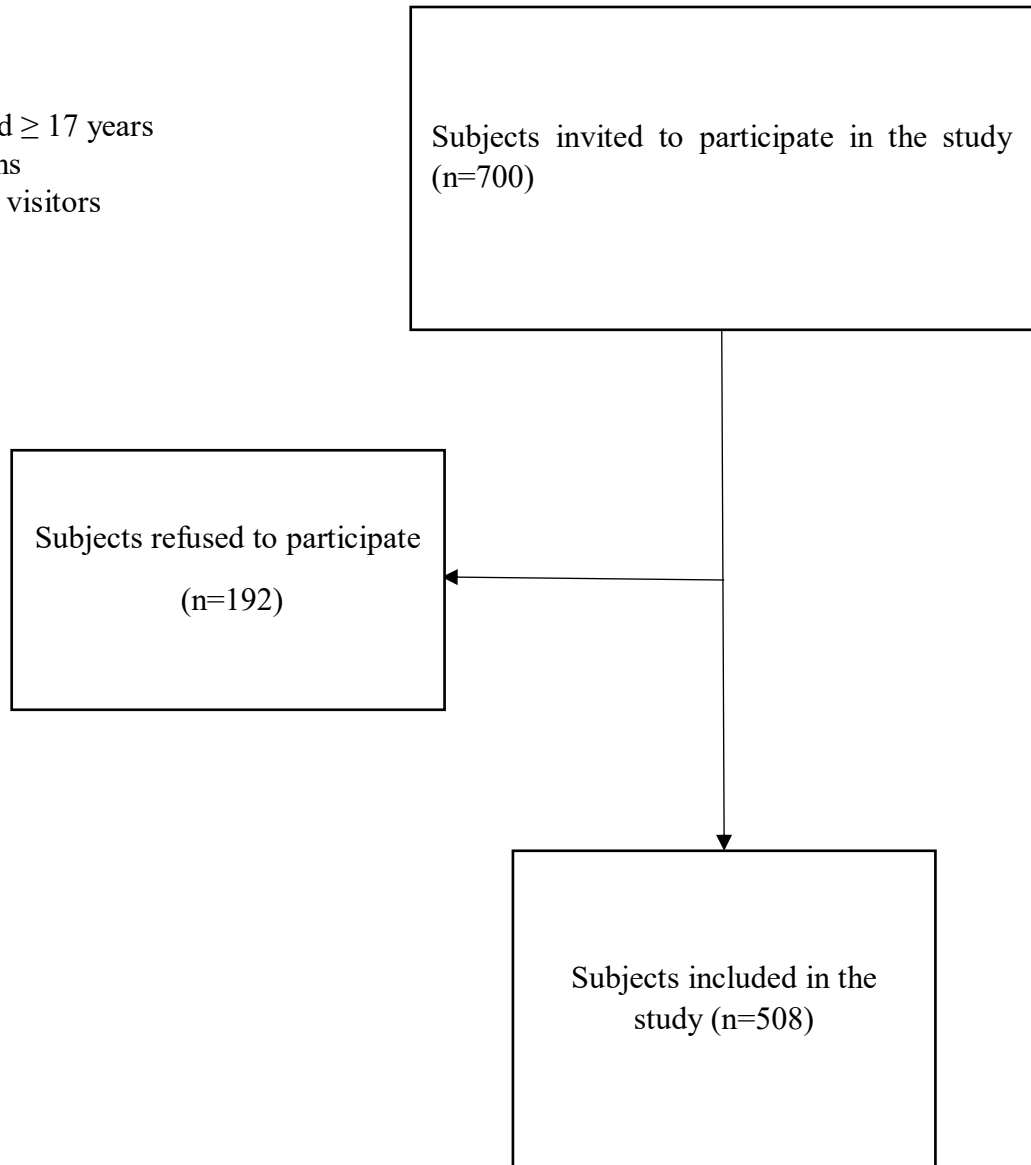


Table 1. Characteristics for subjects included in the study (n = 508)

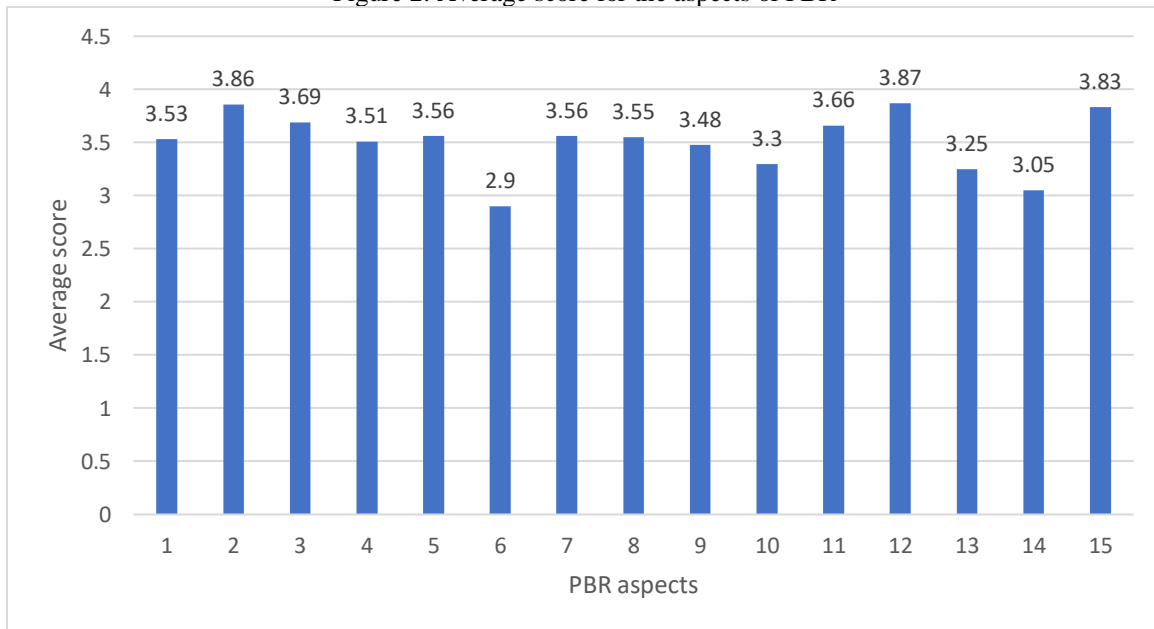
Characteristics	
Age, years (mean, SD)	40.6 (± 11.3)
Male	41.7 (± 11.4)
Female	36.4 (± 9.8)
Gender, n (%)	
Male	400 (78.7%)
Female	108 (21.3%)
Education, n (%)	

Graduation	356 (70.1%)
Post-graduation	92 (18.1%)
Primary and secondary	60 (11.8%).
Occupation, n (%)	
Housewife	14 (2.8%)
Student	35 (6.9%)
Public sector employee	361 (71.1%)
Private sector employee	35 (6.9%)
Others (retired, unemployed, self-employed)	63 (12.4%)
Education about patients' rights, n (%)	
Yes	181 (36.5%)
No	327 (64.4%)
Abbreviations: SD: standard deviation	

In this study, patients were asked about the extent to which each PBR item is agreed/disagreed upon. Figure 2. showed the average score for each aspect of the PBR questionnaire. The mean score average of most items was

greater than 3.5, which indicates agreement. However, patients were neutral regarding items 6, 10, 13 and 14. No mean score average of any of the items indicates disagreement.

Figure 2: Average score for the aspects of PBR



Comparisons of patients bill of right scores based on gender

Of all male patients included in the study (n=400), 135 (33.8%) had received information about PBR, compared to 46 (42.6%) of all female patients (n=108). The difference did not reach statistical significance (p-value of

0.089). The gender-wise difference in average score for each question asked to evaluate the patients' awareness regarding PBR is presented in Table 2. Interestingly, male and female patients do not differ in their perceptions of the PBR items; they perceive all PBR items similarly.

Table 2: Difference in patients' perception about knowledge of patient bill of right in relation to gender

Aspects of patient bill of right	Gender		P-value
	Male	Female	
1. Patients are provided with health care which meets their needs	3.52	3.58	0.584
2. Patients are treated with respect	3.86	3.88	0.830
3. Precautions are taken to ensure patients' privacy	3.68	3.67	0.942
4. Patients are encouraged to play roles in their health decisions	3.51	3.52	0.916
5. Patients are provided with understandable information	3.55	3.56	0.950
6. Patients can obtain information about the treating health staff	2.90	2.91	0.934
7. Patients are informed about their treatment plans	3.58	3.49	0.438
8. Patients are informed about options of treatments about their health conditions	3.54	3.59	0.705
9. Patients are informed about complications/risks involved in their treatments	3.51	3.38	0.289
10. Patients have continuous / follow up of their health problems	3.28	3.37	0.458
11. Patients' approval is obtained before managing their health problems	3.63	3.75	0.309
12. Information about patients' condition is kept confidential	3.85	3.93	0.499
13. Patients' complaints are taken seriously	3.27	3.18	0.506
14. Patients can change their treating doctors if they wish	3.06	2.99	0.581
15. Patients can obtain reports about their health conditions	3.85	3.78	0.545

*Statistically significant at 0.05 level of significance

Having received any education about PBR was assessed based on the level of education and age. As shown in Table 3, patients who had received information about PBR were younger (38.9 (±11.5) years) than those who had not (41.5

(±11.1) years), p-value 0.012. Even in those who had a similar education level, those exposed to PBR information were younger in general.

Table 3: Patients' average age in comparison with education level and education about PBR

Education Level	Education about PBR	
	Yes	No
	Average age (SD)	
Primary	24.75 (22.8)	-
Secondary	37.8 (15.8)	40.1 (12.2)
Graduation	39.5 (10.3)	41.0 (11.5)
Post-graduation	38.7 (10.5)	43.8 (8.6)

Comparisons of patients bill of right scores based on the education level

Of patients who have received information about patients' rights (n=181), the proportion of patients with higher education (graduation or more) were higher than those who had up to secondary level education, (n=156 (86.2%) vs n=25 (13.8%)).

Patients who had information about patients' rights had a significantly greater mean average score of all PBR questionnaire items (Table 4). Patients, irrespective of the level of education, had a similar mean average score for most PBR items. However, those with higher education (graduation and above) valued some aspects of the PBR questionnaire, namely 2,3,6, and 10, more than patients with lower education (up to secondary).

Table 4: Difference in patients' perception (according to education) about knowledge of patient bill of right

Aspects of patient bill of right	Education about PBR		P-value	Mean scores		P-value
	Yes	No		Up to secondary	Graduation and above	
	1. Patients are provided with health care which meets their needs	4.07		3.23	<0.001	
2. Patients are treated with respect	4.2	3.68	<0.001	3.83	4.08	0.039*
3. Precautions are taken to ensure patients' privacy	4.1	3.44	<0.001	3.65	3.92	0.049*
4. Patients are encouraged to play roles in their health decisions	4.04	3.22	<0.001	3.72	3.49	0.112
5. Patients are provided with understandable information	4.05	3.28	<0.001	3.8	3.52	0.053
6. Patients can obtain information about the treating health staff	3.55	2.54	<0.001	2.83	3.4	0.001*
7. Patients are informed about their treatment plans	4.04	3.3	<0.001	3.7	3.54	0.309
8. Patients are informed about options of treatments about their health conditions	4.06	3.28	<0.001	3.65	3.54	0.465
9. Patients are informed about complications/risks involved in their treatments	4	3.2	<0.001	3.4	3.5	0.531

10. Patients have continuous / follow up of their health problems	3.87	2.98	<0.001	3.25	3.63	0.018*
11. Patients' approval is obtained before managing their health problems	4.05	3.44	<0.001	3.77	3.64	0.383
12. Information about patients' condition is kept confidential	4.23	3.67	<0.001	3.98	3.85	0.334
13. Patients' complaints are taken seriously	3.8	2.94	<0.001	3.55	3.21	0.051
14. Patients can change their treating doctors if they wish	3.56	2.76	<0.001	3.27	3.02	0.146
15. Patients can obtain reports about their health conditions	4.22	3.61	<0.001	4.02	3.81	0.147

*Statistically significant at 0.05 level of significance

4 Discussion

In this study, we have assessed the awareness level about PBR among patients attending one of the Armed Forces Hospitals in Saudi Arabia. The main findings indicate that males and females do not differ in their perception of PBR, and both genders have a similar level of information about patients' rights. However, patients with higher education have been exposed to patients' rights information more than patients with lower education and valued the PBR more. This study adds to the body of literature about the importance of increasing awareness of PBR in Saudi Arabia.

The importance of gaining better understanding of patients' rights have been widely acknowledged. However, there are some uncertainties on whether patients have received information about their rights. In this study, only one-third of the participants reported receiving information about patients' rights. This implies that a considerable proportion of patients have a lack of awareness about their rights. This could be attributed to the fact that disseminating information to the general population has not been very successful. Alternatively, patients may not even know they have rights, as they trust the healthcare system and providers. Thus, more efforts need to be put on towards increasing patient's awareness.

Our findings that only a small proportion of patients have heard about their rights are consistent with the literature. In a previous study, Halawany et al. reported that 84% of the participants had not received any information about patients' rights (10). Likewise, another study conducted in Riyadh on 500 patients showed that only 21% of patients heard about PBR (11). It is clear from our findings as well as from previous ones that patients do not have sufficient information about their rights. This contrasts with other findings from another country, where the proportion who had received information about patients' rights are higher

(12). Therefore, delivering information about patients' rights to Saudi citizens is of considerable importance. Males and females are exposed to information about patients' rights similarly. In other words, there is gender equity in healthcare delivery, as patients, either male or female, are treated similarly. However, this should not detract from the low awareness level of patients' rights. Furthermore, the importance of each item of the PBR questionnaire is perceived the same by both genders, as no difference has been noted. Another reason for the non-significant difference could be due to the larger proportion of males compared to females, as it may have resulted in unequal proportion of both genders. Consequently, the male perception of the PBR items may have been more pronounced.

Age is an important factor contributing to the awareness level of patients' rights. In this study, patients with a younger age were more likely to be aware of PBR than older patients; although age was not markedly different. This is in line with current literature. A previous cross-sectional study among inpatients of a Tertiary Care Teaching Hospital reported that younger adults were more aware of patients' rights than middle and older adults (12). Although there is no clear explanation for the observed association, it would be assumed that younger people are more knowledgeable about technology and social media, which may allow them to have access to any information. Indeed, it has previously been shown that social media is one of the primary sources of getting information about patients' rights (13). Therefore, more time should be dedicated to educating older patients about their rights.

The educational level plays a crucial role in whether or not patients are aware of their rights. As seen in this study, patients with a higher education level have prior knowledge about patients' rights compared to those with a lower level of education. The majority of the participants

had a university/college level of education which could explain the observed findings. For instance, patients with higher education had a greater mean score for obtaining information about their healthcare providers compared to their counterparts. This could be explained by the fact that they are more interested in knowing their physicians/nurses' qualifications, which could help to put more trust in them. These findings are concordant with previous studies (14,15). It is worth noting that patients with lower education levels may not understand and comprehend all the elements in the PBR, and therefore, healthcare providers should take this issue into consideration.

Although PBR was introduced in 2006 in Saudi health care system, current findings suggested the proportion of patients having education about PBR is still relatively low. This could be attributed to the health care practitioners being less informed about the bill (10), and consequently, not transferring the message to the patients. Therefore, well-educated physicians and nurses could help their patients to get educated about their rights. In addition, media can play a significant role to educate people about their legal and social rights (16). Thus, it is important to incorporate all aspects into increasing awareness and knowledge of PBR.

Implementing, maintaining and practising PBR is the responsibility of all stakeholders including patients, health care providers, management and policymakers. Ensuring privacy and confidentiality through the implementation of PBR enables patients to discuss their health-related problems with their physicians comfortably, leading to improving compliance with the given instructions and medication.

a. **Strength and limitation**

A major strength of this study is that it has used a validated tool to report on patients' awareness of PBR. Secondly, an appropriate sampling technique was used; thus, selection bias has been reduced. In the meantime, we do not claim that our findings should be generalized to all Saudi citizens. In fact, one limitation of this study is that it was conducted in one hospital, where all patients have a somewhat similar background (military background). This has limited the ability to explore a broader spectrum of all Saudi citizens. In addition, most of the study participants were male, although these patients were selected unintentionally based on our sampling technique. It is also worth noting that the reported findings were based on a self-administered questionnaire, which as its disadvantages (e.g. differences in understanding and interpreting questions).

5 Conclusion

In conclusion, PBR had been introduced in the health care system of Saudi Arabia to improve the quality of health services provided to the patients as well as protecting their rights. However, from the study findings, most patients visiting armed forces hospital were not having any education about PBR. This suggests that health care institutions should make an effort to increase awareness about PBR. Policymakers and the media can work collectively in this regard as well. Major aspects of PBR can be presented on the waiting areas' walls in hospitals, and primary health care centres may be a step towards introducing the patients to their existing rights. Future multicentre studies are recommended to generalize the findings.

References:

1. World Health Organization. Available from: <http://www.who.int/hhr/en/>. [Last accessed on 2010 12 September].
2. Hariharan S, Jonnalagadda R, Walrond E, Moseley H. Knowledge, attitudes and practice of healthcare ethics and law among doctors and nurses in Barbados. *BMC Med Ethics* 2006;7:E7.
3. Almoajel A. Hospitalized Patients Awareness of Their Rights in Saudi Governmental Hospital. *Middle East Journal of Scientific Research* 2012; 11 (3): 329-335.
4. Joolae S, Nikbakht-Nasrabadi A, Parsa-Yekta Z, VerenaTschudin V, Mansouri I. An Iranian Perspective on Patients' Rights. *Nursing Ethics* 2006; 13(5): 488-502.
5. WHO. Declaration on the Promotion of Patient's Rights in Europe, 1994. WHO Regional Office for Europe, Copenhagen. Available at: www.who.int/genomics/public/eu_declaration1994.pdf
6. Joolae S, Tschudin V, Nikbakht-Nasrabadi A, Parsa-Yekta Z. Factors affecting patients' rights practice: the lived experiences of Iranian nurses and physicians. *International Nursing Review* 2008; 55:55-61.
7. Kangasniemi M, Halkoaho A, La'nsimies-Antikainen H, Pietila AM. Duties of the patient: A tentative model based on metasynthesis. *Nurs Ethics* 2012; 19(1): 58-67.
8. Ministry of Health. Patient's Bill of Rights and Responsibilities; 2011. Available from: <http://www.moh.gov.sa/en/HealthAwareness/EducationalContent/HealthTips/Pages/Tips-2011-1-29-001.aspx>. [Last cited on 2013 25 May].
9. Ministry of Health. Saudi Arabia. Available from: <http://www.moh.gov.sa/ar/modules/news/print.php?storyid=281>. [Last accessed on 2010 12 September].
10. Halawany HS, AlTowiher OS, AlManea JT, Abraham NB, Jacob V, AlMaflehi N. Awareness, availability and perception of implementation of patients' rights in Riyadh, Saudi Arabia. *The Saudi Journal for Dental*

- Research. 2016;7(2):132–7.
doi:10.1016/j.sjdr.2016.04.003
11. Alghanim SA. Assessing knowledge of the patient bill of rights in central Saudi Arabia: a survey of primary health care providers and recipients. *Annals of Saudi medicine*. 2012 Mar;32(2):151-5.
 12. Agrawal U. Awareness of patients' rights among inpatients of a tertiary care teaching hospital– a cross-sectional study. *Journal of clinical and diagnostic research*. 2017; doi:10.7860/jcdr/2017/24961.10544
 13. Mahrous M. Patient's bill of rights: Is it a challenge for quality health care in Saudi Arabia? *Saudi Journal of Medicine and Medical Sciences*. 2017;5(3):254. doi:10.4103/sjmms.sjmms_147_16
 14. Khalaf SK, Al-Asadi JN, Abed AH, Shami SA, Al-Shammary H. Assessment of patients' knowledge and awareness about their rights and duties. *Kufa J Nurs Sci*. 2014;4:1-1.
 15. Ducinskiene D, Vladickiene J, Kalediene R, Haapala I. Awareness and practice of patient's rights law in Lithuania. *BMC International Health and Human Rights* 2006; 6:10.
 16. Joolae S, Tschudin V, Nikbakht-Nasrabadi A, Parsa-Yekta Z. Factors affecting patients' rights practice: The lived experiences of Iranian nurses and physicians. *Int Nurs Rev* 2008;55:55-61.