

Evaluation of the process of patient education recording and its compliance with patient perception and satisfaction after the implementation of clinical supervision: An embedded case-control

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ABSTRACT

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Background: Currently, patient education has been regarded as one of the important components of treatment in healthcare centers. Clinical provision, which is one of the legal tools with training-support dimensions, can evaluate the adaptation between the implemented procedures and planned activities. This study aimed to evaluate the process of patient education recording, compliance of education recording with patient perception and satisfaction after the implementation of clinical supervision.

Methods: This longitudinal, embedded case-control study was conducted during 2013-2015 to evaluate the effectiveness of a nurse-led role expansion program through action research. Evaluation process was carried out in three stages of designing the supervision program, as well as establishment and evaluation of this system using available sampling on 786 research units (medical records of patients being discharged) at Al Zahra Educational Center, affiliated to Isfahan University of Medical Sciences, Isfahan, Iran. Supervisory checklists were completed and the perception of patients was presented in the design stage. Afterwards, a designed patient satisfaction survey was used, reliability and validity of which was confirmed. In the establishment stage, the structure of monitoring program was designed with the assessment of eight supervisors. Meanwhile, 2333 checklists and surveys were completed at the time of hospital discharge in the stage of program evaluation during a course of 12 months. Data analysis was performed in SPSS version 18 using one-way ANOVA and Pearson's correlation coefficient.

Results: In this study, mean score of recorded patient education for 12 months was 88.5 ± 21.75 . Moreover, mean scores of patient satisfaction with the education process and compliance of patient perception with recorded education were 73 ± 25.13 and 47.17 ± 21.48 , respectively. According to these results, a significant reduction was observed in the mentioned scores on the sixth and twelfth months, compared to the first month of the study ($P < 0.001$). Meanwhile, mean score of patient satisfaction with the education process was significantly decreased at the mentioned times ($P < 0.00$).

Conclusion: According to the results of this study, while the results of clinical supervision during the study were indicative of gradual improvement in recording of education, a significant reduction was observed in patient perception and satisfaction at the end of the evaluation. Therefore, it is recommended that nurse-led role expansion programs be conducted through action research in other healthcare centers.

1. Introduction

The beginning of professional nursing can be traced to 19th-century, improved over time through the elimination of interprofessional and intraprofessional barriers leading to the provision of

patient-centered and expected care.¹⁻³ Patient education is used to enhance knowledge, skill and attitude of patients and their relatives, which could result in the protection and promotion of health and compatibility with health problems. In addition, patient education has been regarded as one of the most important fundamental roles and functions of

the nursing profession, recognized by many experts as a significant part of satisfactory patient care.^{3,5} Therefore, concomitant with healthcare reforms in modern societies, patient education has been identified as one of the most important determinants of quality of care and one of the requirements for accreditation of healthcare centers and care organizations since the late twentieth century.^{5,6}

Evidence suggests that despite the importance of patient education programs and hospital accreditation requirements, healthcare providers (e.g., nurses) do not pay sufficient attention to their educational role in this regard.^{7,8} Moreover, patient education has been neglected for several reasons, including lack of clear job description and weak foundation of structure, support and supervision.⁷

Patient satisfaction is one of the most important criteria for qualitative and quantitative assessment of all aspects of healthcare.² In a study by Soltani Khatibi et al. (2014), patients were unfavourably satisfied with nursing education at the time of discharge.⁴ In addition, Peyravi et al. (2013) reported undesirable patient satisfaction regarding nursing education and emphasized the importance of recognizing improving strategies in this regard.²

Several studies have focused on the need for regulatory intervention in the area of patient education, confirming the effectiveness of such programs through sufficient professional human resources, facilitating structures and monitoring systems to conduct educational programs in healthcare centers.^{5, 7, 8} Therefore, it is essential to use proper approaches to control and monitor the program in order to strengthen and institutionalize patient education programs and, at the same time, organize, lead and guide the improvement of nursing role in education.⁹

Grimshaw et al. (2001) performed a systematic review on published studies related to various interventions to change the functionality of healthcare providers during 1966-1998 and reported that non-interactive approaches (e.g., distribution of educational materials to clinical staff) were not independently effective and might not be beneficial for changing of the hospital staff attitude. In fact, distribution of educational materials can only be associated with raised knowledge of nurses toward a desirable attitude.⁶ In return, active approaches, such as controlling, auditing and providing feedback, have been considered to be more effective.¹⁰⁻¹² Other studies have concluded that actions did not institutionalized in the workflow of organization and their continuity was not be modified after the withdrawal of perpetrators, unless regulatory interventions and considerations were taken into consideration in policy-making and organizational planning.^{13, 14}

Monitoring and control could be used to evaluate the results of taken measures and their adherence to certain standards in order to completely and properly implement the programs, followed by the conduction of corrective measures to improve future operations.¹⁵ Being prior to control, monitoring is described as “regular observation of implementation of programs, as well as activities of organizations and individuals, used as an approach to evaluate the possible ways to improve the mentioned variables in order to achieve the desired goals”.¹⁶

Clinical supervision is recognized as an approach to ensure the provision of adequate and satisfactory clinical care, which is in accordance with legal advice and professional actions, used to improve the health of patients in a wider range (profession and community).¹⁷ This type of monitoring is a collaborative process based on cooperation between several professionals from one or more fields, which promote professional practices and quality of evidence-based practices through respecting and maintaining professional standards.¹⁸ Moreover, evaluation of education policies has revealed that interactions between nurses and patients, as well as nurses with other healthcare team members, are constantly monitored through regulatory approaches, guaranteeing the improvement of quality of services, effectiveness of duties and efficiency of the staff.¹⁹

Therefore, given the shortage noted in patient education and necessity of using monitoring approaches and control programs in order to supervise changes and identify the strengths and weaknesses of the monitoring program and apply changes and timely measures to improve the quality of education process, this study aimed to evaluate the process of patient education recording and its compliance with patient perception and satisfaction after the implementation of clinical supervision in the form of an embedded case-control research.

2. Methods

2.1. Design

This embedded case-control study was conducted to evaluate the effectiveness of education programs. Study samples were the medical records of patients being discharged from the Alzahra University Hospital in Isfahan, Iran during 2013-2015.

2.2. Participants and setting

In this Study, Sample size was calculated at 98 cases based on a study by Khorasani (2014)²⁰ and the sample size formula ($S=0.4$, $d=0.4$, $Z_2=0.84$,

$Z_1=1.96$) with 80% test power and 95% confidence interval. In this study, medical records of patients were evaluated through convenience sampling to assess checklists, as well as regulatory questionnaires and forms.

Inclusion criteria were being hospitalized in one of the medical surgical or internal wards of the hospital for at least three days, being discharged, having available medical records, being in a proper state to respond to questions and not being discharged from intensive care units, emergency rooms, operation room or neonatal ward since the type of disease does not provide the possibility of coordinated implementation of patient education or clinical supervision. Exclusion criteria were poor health status and absence of patient companion for responding to questionnaires.

2.3. Instruments

Study tools were demographic questionnaires, checklists for monitoring the patient education recording and its compliance with patient perception, patient satisfaction survey and proceedings on the clinical supervision of patient education.

Demographic questionnaires included age, gender, position, employment status, educational status and work experience of supervisors. The regulatory checklist for recording the process of patient education was designed to document education in medical records of patients based on the process and guidelines of healthcare education.²¹ This 10-item scale is used to evaluate the process of education documentation in medical records, scored based on a 4-point Likert scale and defined, as follows: a score of one indicated lack of education recording; a score of two recording one or two educational items; a score of three recording at least three educational items and a score of four complete recording of all the items (Appendix 1).

On the other hand, the checklist of patient education recording and its compliance with patient perception was used based on literature review.^{22, 23} This scale was applied in four stages, evaluating patient perception of recording education in medical records at the time of admission, during hospitalization, discharge and follow-up care at home. Patients were required to have an adequate perception toward at least three educational items in each stage. This tool is scored based on a 4-point Likert scale and through interviews by the researcher. In this regard, a score of one was indicative of lack of patient perception of all the three educational items, a score of two only one educational item, a score of three two educational items and a score of four three or more educational

items. The minimum and maximum obtained scores were 4 and 16, respectively (Appendix 2).

The patient satisfaction survey, which measures patient satisfaction, is designed based on the policy of monitoring the process and evaluation of patient education.²² In this questionnaire, patient satisfaction with education and provision of necessary information is evaluated using 14 questions, scored based on a four-point Likert scale. The minimum and maximum scores of this tool were 14 and 56, respectively (Appendix 3).

The clinical supervision proceeding on patient education used in this study was a researcher-made form, in which the emphasized issues, remaining problems of previous visits, active instructors of the ward, accurate educators, strengths or resolved problems, complications observed during visits, recommendations and reform programs for the next month are recorded to be followed up and modified by the next supervisor (Appendix 4).

Face and content validity of the mentioned study tools were confirmed by 12 experts of nursing school and 12 professionals, currently working in the clinical section of Isfahan University of Medical Sciences. Reliability of the study tools was determined using inter-rater reliability method through the evaluation of 6-10 joint research units (medical records of patients) by the related supervisor and responsible expert of the health education office. At the end, reliability of the checklist of patient education recording and its compliance with patient perception, monitoring checklist for recording of patient education and patient satisfaction survey was estimated at 0.85, 0.96 and 0.86, respectively. It is worth mentioning that points derived from the mentioned scales were evaluated based on the score of 100 to facilitate the comparison of results.

2.4. Data Collection

This study was carried out in three stages of designing the supervision program, as well as establishment and evaluation of the supervision system using available sampling to assess 786 research units (medical records of patients being discharged).

In the stage of clinical monitoring program design, two checklists for control of patient education recording and its compliance with patient perception and patient satisfaction survey were prepared under the supervision of design experts; moreover, reliability and validity of the mentioned tools were confirmed. In order to establish a supervision system, eight experts were invited. Afterwards, operational programs and implementation, education and motivation

mechanisms were confirmed in the department of workforce development and support center and notified to all the sections after the approval of the health education committee.

In the stage of clinical supervision establishment, forms and the process of clinical supervision of patient education, as well as executive patient education policies and prepared measures for coordinated monitoring were explained to the supervisors. Ultimately, adjusted supervisions were confirmed with a correlation coefficient of 0.80 after the implementation of 6-10 mutual clinical supervision sessions between the supervisor and the responsible expert of health education center.

In the evaluation stage, 22 wards were selected to be the setting of clinical supervisions; however, 19 wards were finally assessed due to some implementation problems. Data on inpatient discharge per shift was collected from statistics center, with the exception of patients discharged from the ICU, emergency admissions, operating room and neonatal wards. Afterwards, 785 research units consisting of checklists and patient satisfaction surveys were evaluated, leading to the assessment of a total of 2333 clinical supervision forms. Supervisors were required to complete the relevant scales for each ward during different shifts for at least 10 patients being discharged (30 research units in total).

Study content included strengths, weaknesses and improvement recommendations, along with the selection of a precise and active educator from each ward by the supervisor, confirmed by the head nurse and two colleagues in the relevant ward. Strengths, weaknesses and improvement recommendations were recorded by the supervisor in the related form at each visit in order to be followed up by the next supervisor. Improvement recommendations, including correction notes and highlighting of common problems in registration and implementation processes, were recorded by the supervisor and the encountered issues were documented in the clinical supervision proceeding.

At the end of each month, supervisors provided reports on component scores, total scores of recorded monitoring scales, implementation of educational processes in the wards and patient satisfaction surveys to the responsible expert of health education so that to forms could be compared and revised for the next month.

2.5. Ethical considerations

Ethical considerations were taken into account before and during the control and supervision processes. Study objectives were explained to the samples and their companions. Moreover, they were allowed to withdraw from the research at any time. To correct possible defects, evaluation results were provided monthly for the center and related ward officials after monitoring through the clinical supervision proceedings to make management decisions and reforms.

2.6. Statistical analysis

Data analysis was performed in SPSS version 18 using descriptive statistics and one-way ANOVA to compare the changes in scores of the study tools during a course of 12 months.

3. Results

In total, eight supervisors with mean age of 44 ± 3.5 years and work experience of 20.5 ± 3 years participated in this study. Other demographics of the supervisors are provided in Table 1. Research units included 785 patients (medical records) being discharged. Some research units were eliminated from the research due to failure to complete all the evaluated items, leading to the total assessment of 2333 forms (782 checklists for monitoring the documentation of patient education, 779 checklists for patient education recording and its compliance with patient perception and 772 patient satisfaction surveys). Mean scores of monitoring patient education recording, patient education recording and its compliance with patient perception and patient satisfaction with education based on various internal and surgery wards are provided in Table 2. As presented in Chart 1, the lowest score of patient education recording was related to the first month of monitoring, followed by primary and secondary increases in the scores of patient education recording ($P < 0.001$).

According to the Chart 2, a significant increase was observed in the score of patient education recording and its compliance with patient perception at the end of the monitoring process and the highest score was related to the second six months of the study ($P < 0.001$). Results of the Chart 2 revealed that patient satisfaction with education was less observed in the second six months of the study, compared to the first six months ($P < 0.001$).

Table 1. Demographics of nurses in charge of supervision and evaluation plan (patient education supervisor)

Variable		N (%)
Gender	Male	1 (12.5)
	Female	7 (87.5)
Position	Responsible for health education	1 (12.5)
	Health education expert	2 (25)
	Clinical supervisor	4 (50)
	Educational supervisor	1 (12.5)
Employment status	Contract nurse	5 (62.5)
	Registered nurse	3 (37.5)
Educational level	BSc	6 (75)
	MSc	2 (25)

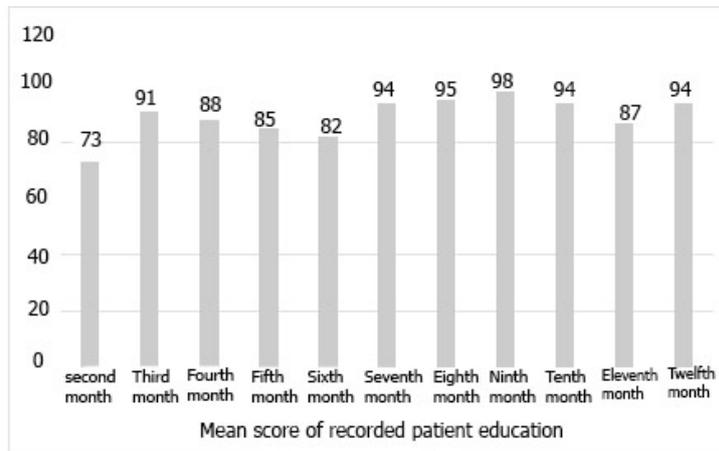


Figure 1. Changes in mean score of patient education recording during a 12 months course after the initiation of clinical supervision

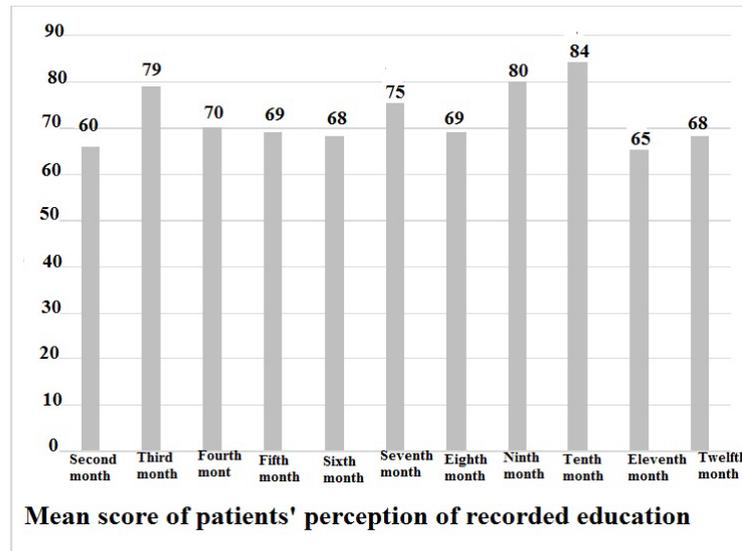


Figure 2. Changes in mean score of patient education recording and its compliance with patient perception during a 12 months course after the initiation of clinical supervision

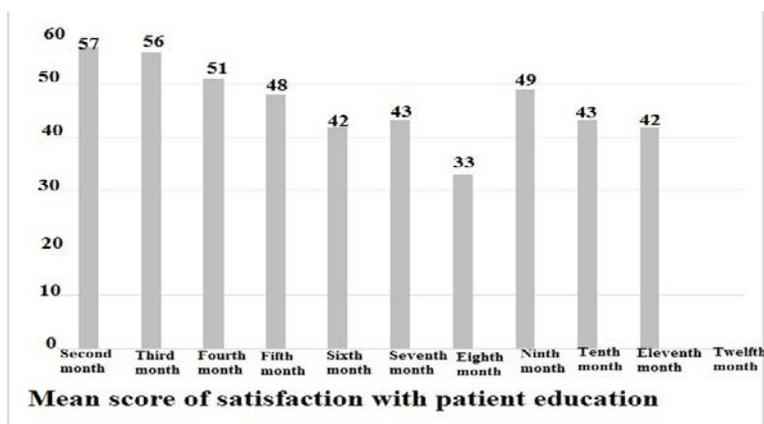


Figure 3. Changes in mean score of patient satisfaction with patient education during a 12 months course after the initiation of clinical supervision

Table 2. Mean total score of monitoring of patient education recording, patient education recording and its compliance with patient perception and patient satisfaction with education program based on hospital wards during a course of 12 months after the initiation of clinical supervision

Variable	Patient education recording			Patient education recording and its compliance with patient perception		Patient satisfaction with education	
	N (%)	M±SD	*P-value	M±SD	*P-value	M±SD	*P-value
Ward							
Elective surgery	45 (5.7)	100±0.00		90.37±13.52		52.45±19.72	
Internal gastroenterology	27 (3.4)	100±0.00		66.97±23.51		54.41±20.05	
Psychiatry	9 (1.1)	100±0.00		79.17±23.14		33.93±21.96	
Urology	27 (3.4)	99.5±2.57		82.72±20.40		58.06±19.48	
Infections	45 (5.7)	99.8±1.1		76.36±24.66		49.73±21.18	
Internal surgery	27 (3.4)	98.3±8.99		65.74±25.56		47.62±18.55	
Lung surgery	36 (4.6)	97.2±12.28		78.01±21.47		40.87±18.29	
Pediatric surgery	18 (2.3)	95.4±8.9		88.89±14.85		55.42±19.36	
Plastic surgery	45 (5.7)	95.1±8.59		84.62±15.58		54.40±19.44	
Men surgery	60 (7.6)	89.8±19.99		70.34±26.90		45.14±22.08	
Thoracic surgery	34 (4.3)	89.8±16.6		76.22±20.94		54.68±23.58	
Obstetrics and gynecology	45 (5.7)	89.5±22.1	<0.001	74.62±25.37	<0.001	40.53±24.87	<0.001
Neurosurgery	27 (3.4)	87.5±22.38		79.17±20.84		44.52±15.23	
Rheumatology	63 (8)	86.9±26.1		72.09±29.10		53.99±21.45	
Vascular surgery	88 (11.2)	86.4±21.5		72.92±23.51		50.15±21.45	
Neurology-internal	36 (4.6)	76.3±30.05		53.33±19.40		38.10±19.06	
Cardiovascular-internal	54 (6.9)	75.4±29.16		66.51±24.36		38.67±21.10	
Gynecologic surgery	45 (5.7)	75.3±29.48		73.89±28.01		42.29±22.03	
Men orthopedics	54 (6.9)	73.1±23.94		54.32±26.73		41.36±22.20	
Total	785 (100)	88.5±21.75		72.98±25.10		47.36±21.53	
M±SD (total)		88.5±21.75		72.98±25.10		47.36±21.53	

*One-way ANOVA

4. Discussion

According to the results of the present study, a significant increase was observed in the mean score of patient education recording and its compliance

with patient perception after 12 months of evaluation, whereas mean score of patients' and their companions' satisfaction with education programs was significantly decreased at the end of the evaluation.

In addition, score of patient education recording was elevated in two stages; the first was an increase in mean score of patient education recording after the initiation of clinical supervision, which could be resulted from applying an educational reform-incentive approach and using intersectoral instructions and feedbacks of supervisors during the control of patients' medical records. On the other hand, documentation of strengths and weaknesses, as well as announcement of active volunteers in the system had a significant role in this regard. Abdi *et al.* (2012) conducted a study to evaluate the outcomes of performance evaluation from the perspective of nurses and demonstrated that work motivation of nurses could be increased through the assessment and improvement of nursing performance.²⁴ In another study by Taghavi Larijani *et al.* (2006), the only factor for improved work motivation was identified as performance evaluation.²⁵ Moreover, Nikpeyma *et al.* (2012) pointed out in a study that performance evaluation was significantly related to work satisfaction and motivation, as well as recognition of nurses' training needs. In addition, objective evaluation, along with accurate implementation of education programs could be determining factors for project success, which is line with our findings.²⁶

The second wave of increase in the recording process was observed after the employment of the revised patient education recording forms. According to the results of the current research, change of structure (revising the patient education recording form) based on the received feedbacks and suggestions from various hospital wards was associated with significant improvement in the quality of recording and implementation of patient education programs. In fact, the highest scores of patient education recording was related to the visits of the Ministry of Health inspectors, evaluation of clinical governance and accreditation preparations. In this regard, Khorasani *et al.* (2015) reported in a study that application of patient education recording forms could facilitate the process of recording and implementation of patient education programs. In congruence with our results, it was demonstrated in the aforementioned study that some factors, including difficulties in understanding the initial form and lack of familiarity with the form by participants and supervisors during the first month of supervision, led to an incomplete implementation of this type of evaluation.²⁷ It was reported by Ahmadabadi *et al.* (2012) that not only nurses were completely aware of their educational role, they also had a positive attitude toward enabling factors for proper educational behavior. Therefore, it seems essential to use motivational processes to value this part of activities of nurses.²⁸

Heshmati Nabavi *et al.* (2007) conducted a research to evaluate the implementation of a pattern of clinical supervision and establishment of a clinical supervision system in three wards of Samen Alaeme Hospital in Mashhad, Iran, followed by a six-month follow-up. According to the results of the mentioned study, a significant difference was observed between the quality of patient education recording before and after the implementation of intervention.⁸ Moreover, Farzianpoor *et al.* (2014) identified quality assurance procedures and use of international standards as effective methods for improvement of patient education processes and standards, especially for the evaluation of patient education needs and recording in medical records.²⁹ Results obtained by Imanipoor *et al.* (2012) revealed the positive impact of clinical supervision with a programmed approach on the education process. Some of the most important advantages of this approach were being objective, providing feedbacks, being specific and covering all the purposes.³⁰

According to the literature and change management models, it could be stated that monitoring programs and periodic visits could be used to establish a change in order to improve other programs and accelerate the speed of process of change.^{17, 18}

Our results revealed that mean score of patient education recording and its compliance with patient perception was significantly increased during the study process, whereas a significant decrease was observed in the score of patient satisfaction with education program at the end of the intervention. However, patient satisfaction depend on many factors and improvement of education process is only a part of the patient satisfaction process. Improved patient perception in this regard could be indicative of the effectiveness of monitoring evaluation. While the total patient satisfaction level was lower in the second half of the year, two increase waves were observed in November and February in this regard. It seems that this change needs to be more assessed; nevertheless, improved awareness of patients toward their rights or other issues, such as crowded wards, numerous clients eager to obtain health reform plans and excessive workload of nurses (with its peak observed in the preparation of clinical governance and accreditation during 2012), might lead to less satisfactory interactions with patients.

These results are in line with the recorded benefits of strengthens of the patient education recording in patient education literature,^{1, 14, 31, 32} and several studies have confirmed these results.³³⁻³⁹ In this regard, Heshmati *et al.* (2007) demonstrated that implementation of a clinical supervision system could be associated with improved awareness and

self-care of patients, which confirmed the relationship between patient education recording and patient perception.⁸

Although patient satisfaction with provided treatments is one of the most crucial factors for the quality of care,⁴⁰ studies conducted in this area have revealed that patients had the least satisfaction with patient education.⁴¹⁻⁴³ According to previous studies, it was declared that a very small amount of time was devoted to asking questions, eliminating ambiguities and meeting the educational needs of patients by the medical team members.⁴⁴

One of the major drawbacks of this research was lack of similar domestic and international studies, conducted on clinical supervision system, and lack of implementation of multiple programs and interventions. It is worth mentioning that the aforementioned drawbacks limited the possibility of complete comparison with other studies. On the other hand, generalizability of the results of the present study was limited to the time and place of research due to lack of a control group.

5. Conclusion

According to the results of the present study, a 12-month clinical supervision led to gradual improvement in patient education recording and patient perception of recorded education programs. However, patient satisfaction with education programs was significantly decreased at the end of the evaluation. Given the fact that patient satisfaction could be affected by many factors other than elements related to education, it is recommended that this system, along with structural

features, be used in other healthcare centers to improve quality, modify the process and promote patient education programs.

Conflicts of interest

The authors declare no conflicts of interest.

Authors' contributions

Parvaneh Khorasani: Study design, study implementation, participation in data analysis, drafting of the initial and final version of the manuscript. Mahmood Nasr Esfahani: Study implementation, participation in data collection, participation in data analysis, participation in drafting of the final manuscript. Maryam Zamani: Participation in data collection and study implementation, confirmation of the final manuscript. Masoomeh Ghaneh: Participation in data collection and study implementation, final drafting of the manuscript.

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Appendix

Appendix 1. Scale of monitoring of patient education recording at Alzahra University Hospital

Name of ward:
Month and year:

Education record form	Letter head	Education during patient admission, transfer or discharge based on developed guidelines of Alzahra University Hospital for the implementation of patient education process	Items to be completed in the registration form	Total score of 40 points for recorded cases
Method of education record		1 (no education record), 2 (record of 1-2 cases), 3 (record of at least 3 cases), 4 (complete education record)		
Number of medical record:		1. Initial evaluation, characteristics, main diagnosis of the underlying problem	Details (safety, medications, etc.) card completion follow-up at the time of discharge	
Full name:		2. Education upon arrival (at the time of admission)	precautions, next visit and medication instructions	
		3. Date and duration of education		
		4. Demarcation of exact level of learning and training needs		
		5. Accurate recording of the topic of education Demarcation of media and teaching methods		
		6. Completion of evaluation of learning Dv/DP/S		
		7. Education documentation for at least three rows Home care		
		8. Education documentation for at least 3 rows (during patient admission)		
		9. Education documentation for at least three rows Home care		

Appendix 2. Scale of monitoring patient education recording and its compliance with patient perception at Al Zahra University Hospital

Row	Tel	Recording of at least 3 education processes at the beginning of intervention	Recording of at least 3 education processes at the time of admission	Recording of at least 3 education processes during homecare	Recording of at least 3 education processes at the time of discharge	Score of patient education recording and its compliance with patient perception (4-16)	Patient satisfaction (14-56)	Total score of patient perception and satisfaction (18-72)
		1- Familiarization with physicians, head nurse and visits 2- Method of contacting the ward 3- Health regulations and waste separation	1- Introduction to diagnosis of the causes of symptoms, course of illness and treatment process 2- Diagnostic and therapeutic procedures 3- Name, time and instructions of medications and pharmaceutical care	1- Nutritional advice/referral to a counselor 2- Activity at home 3- Personal hygiene	1- Warning signs 2- Date of the next appointment 3- Three critical medications			

Appendix 3. Patient satisfaction survey at Alzahra University Hospital

<p>Note: Respondents were asked to respond on a 4-point Likert scale (1. strongly disagree, 2. disagree, 3. agree, 4. strongly agree) to each statement. In addition, the satisfaction score was calculated based on total scores received in parts 1-14. The 15 and 16 sections were considered for translation and evaluation of the relationship between satisfaction with education and other items.</p>	Strongly disagree	Disagree	Agree	Strongly agree
1. I received hospital guidelines and required information of patient and companions at the time of hospitalization.				
2. I was allowed to easily discuss my health problems with the medical team (physician and nurse) at the time of admission to the ward.				
3. I was completely trained by the physician, nurses and other healthcare team members at the time of admission to the ward.				
4. I am satisfied with the attitude of the physician, nurses and other healthcare team members.				
5. I was notified about the disease, its symptoms, diagnostic and therapeutic methods and was given care tips at the time of admission to the ward.				
6. I was introduced to the Health Education Unit at the time of admission.				
7. Physicians and nurses responded to all my questions regarding my health problem.				
8. I obtained the necessary information about self-care at home after the education program.				
9. I was given pamphlets, handouts and educational brochures about my disease.				
10. Scientific resources were introduced to me regarding my disease.				
11. Diet, activity and medication instructions were trained to me at the time of discharge.				
12. I found the educated materials very helpful.				
13. Important information (next appointment, pharmaceutical care and complications) were given to me at the time of discharge.				
14. Overall, I am satisfied with the services of health education to patients at the center.				
**15. Overall, I am satisfied with nursing and care services at this center.				
**16. Overall, I am satisfied with medical services at the center. Comments and suggestions of patients and their companions:				

