

Original Article

Patients' Interest in Shared Medical Records

M Adhikary^{1*}, A.Wazed², MS Ahmed³

Abstract

To determine the proportion of patients who are interested in examining their medical records, the personal characteristics related to their interest, and the reasons for their interest. This descriptive cross sectional study was conducted among randomly selected 110 inpatients in a tertiary level hospital. Data were collected through face-to-face interview using one pretested semi-structured questionnaire as the research instrument. Collected data were processed, and analyzed by using the SPSS software Version 11.0. The study was conducted in inpatients departments of Comilla Medical College Hospital during May- June 2007. Male patients were more interested (85 out of 90) than female (7 out of 20) patients to anticipate the benefits of shared medical records

and they were also somewhat more likely to anticipate problems with shared records. Significant predictors of sharing medical records by the patients were anticipation of improving the patient's adherence to their doctor's recommendations (90%), improving understanding of own medical condition (88%), anticipation of increasing patient's trust in physicians (95%) and anticipation of being reassuring (85%). Shared medical records are almost universally endorsed across a broad range of socio-economic groups. Patients' interest in reading their medical record is better predicted by their consumer approach to health care. A group of patients were also interested in Internet-accessible records.

Key words: Shared medical records, patient access, physician-patient relation

Introduction

In 1973, a seminal editorial by Shenkin and Warner began the debate of whether patients should be given their medical records.¹ Subsequent editorials have debated the merits of releasing medical records to patients, some believing that trust would be eroded, that patients would become needlessly worried, or that physicians would be constrained in what they would record.²⁻⁴ But empirical research regarding the effect of sharing medical records with patients suggest that sharing the medical record has a modest, positive effect on knowledge or perceived knowledge, on patient-physician relationships, and even on limited health outcomes. So in different parts of the world the momentum to involve patients in all aspects of their health and health care is increasing. This movement

is demonstrated in the drive to engage patients in managing their chronic diseases, in selecting care based on quality, in improving the quality of the care delivery system, and in increasing their share of costs.⁵⁻⁸ Simultaneously, information sources that support patients' active participation are rapidly expanding. In this context, patients should have unfettered access to their own medical records. The arrival of electronic medical records may mean that patients will have easier access to their medical records.⁹ A study of patients in the United Kingdom found that 83% of patients were "very interested" in reading their clinic medical records.¹⁰ Roughly half were interested in reading a paper copy of their medical record at home, and roughly half were interested in an online version. So to improve doctor-patient communication, patient adherence to treatment, patient education, patient empowerment, correcting inaccuracies, encouraging better record keeping, and increasing trust, involving patients in all aspects of their health and health care shared medical records is essential.

Materials and Methods

This descriptive cross-sectional study was conducted from May to June 2007 in Comilla Medical College Hospital's inpatient departments. A total of 110 patients (90 male and 20 female) were included in this

1. Dr. Minati Adhikary, Assistant Professor, Department of Community Medicine, Comilla Medical College, Comilla

2. Dr. A. Wazed, Medical Officer, Civil Surgeon's Office, Patuakhali.

3. Dr. Md. Sharfuddin Ahmed, Associate professor, Department of Eye, BSMMU, Dhaka.

*Corresponding author: Dr. Minati Adhikary, Assistant Professor, Department of Community Medicine, Comilla Medical College, Comilla

study. A semi-structured questionnaire including the following patient constructs: health status, health concern, health habits, relationship with physician, involvement in health decision making, general information-seeking patterns, health information-seeking patterns, concern about medical errors, experience of medical injury, history of reading medical record, and socio-demographic characteristics (age, sex, religion, income, education, and employment status) was used to collect data through face to face interview. Data were edited, processed, and analyzed with the use of the SPSS for windows; Version 11.0.

Results

Table-I: Majority of the respondents (92 out of 110) interested in shared medical records. Mean age of the interested patients (92 in number) was 42(\pm 15 SD) years. Among 92 respondents majority were male(92%). About 54% had educational level \geq HSC and 43% had income $>$ Tk 10000 per year. Internet facility was accessible at home or works to 22% and 33% were interested in communicating with doctor by e-mail.

Table I
Socio-demographic characteristics (n =92)

Characteristics	Number (%)
A. Sex:	85(92)
Male	07(o8)
Female	
B. Household Income	40(43)
$>$ Tk.10000 per Year	50(54)
C. Educational level \geq HSC	
D. Have internet access at home or work	20(22)
E. Interested in communicating with doctor by e-mail	30(33)
Mean age of the respondents: 42(\pm 15 SD) years.	

Table-II: The patients anticipated benefits with shared records. The patients were particularly more likely to anticipate that they would better understand their medical conditions (88%), and better adhere to their doctors' recommendations (90%). According to 95% of the patients, trust in physician would increase.

Table II
Respondents by Expected benefits of shared medical records

Expected Benefits	no	%
Improve understanding of medical conditions	82	88
Improve understanding of doctors' instructions	69	75
Improve patient adherence	83	90
Would prepare patients for visits	74	80
Be reassuring	78	85
Increase patients' sense of control	46	50
Increase trust in doctors	87	95
Increase patient satisfaction	72	78
Identify errors in the medical record	55	60

Table-III: Patients also anticipated the encountering difficulties of shared medical records. About 54 % anticipated that patients may become confused by various parts of medical records and embarrassed or referred by the doctors notes (54%). Increasing patient's worry is another concern of the respondents (30%).

Table III
Distribution of the Respondents by Expected difficulties of shared medical records n=92

Expected difficulties	no.	%
Lab and x-ray reports would be confusing	50	54
Doctors' notes would be confusing	40	44
Would increase patient worry	18	20
Would cause offense or embarrassment	50	54
Would increase questions between visits	25	27

Table-IV: Respondents who were interested in reading their medical record had many reasons, and most had more than 1. The most common reason for wanting to look at their medical records were to see what their physician said about them (80% for somehow interested and 99% for very interested), to be more involved in their health care (95% for very interested), and to see if getting better or worse (98% for very interested).

Table-V: Various measures of health information seeking, patients safety, relation with physician and medical record access were independently related to

Table IV
Reasons for wanting to read the medical record

Reasons	Somehow interested		Very interested	
	no.	%	no.	%
Be more involved in own health care	7	70	78	95
Understand condition better	7	70	75	92
See what physician said about the patient	8	80	81	99
Look for trends or pattern in health history	6	60	64	78
Make sure it is complete	7	70	67	82
See if getting better or worse	5	50	80	98
Check for mistakes in record	4	40	57	70
Track changes in medication	5	50	64	78
Figure out what might be wrong	3	30	22	27

Table V
Distribution of sample characteristics and percentage of those with each characteristic who were very interested in reading their medical records

Reasons	no.	% Within Sample	Very interested in reading their medical records	
			no.	%
Current medical problem				
Arthritis or joint pain	18	16	13	72
High blood pressure	20	19	15	75
Respiratory tract problems	21	19	15	72
Diabetes	16	15	12	75
Stomach or bowel problem	12	11	9	75
Genitourinary problem	15	14	12	80
Others	8	7	6	75
Concern about health				
Very worried about health	80	73	70	88
Think often about health	30	27	12	40
Relation with physician		28		
Have great faith and trust in physician	30	41	20	67
Has lost faith and trust in physician	45	32	40	89
Uncertain	35	75	22	63
Strongly agree that physician would think that it is a good idea to read their medical records	83	8	67	81
Any physician ever suggested using internet for health information	9	40	8	89
Like to communicate with physician by e-mail	44		30	68
Health care use				
3 visits in last 4 weeks	38	16	30	79
Have seen 6 different physicians in past 12 months	40	16	36	90
Health information seeking				
Subscribe to a health magazine or news letter	20	18	18	90
Used health or medical resource book in past few months	12	11	10	83
Internet as very important source of health information	30	27	25	83
Used internet within last 1 week for health information for current disease	10	9	10	100
Patient safety				
Very concerned about error resulting in injury happening when seeking care	50	45	35	70
Suffered harm due to medical error during last 12 months	5	4	5	100
Medical record access				
Looked at medical records in the past	30	27	20	67
Did not know that patients have legal right to look at their records	80	73	77	96

being very interested in reading their medical record, including finding the Internet an important source of health information (83%), having a health newsletter subscription (90%), using internet in last one week (100%), using health resource book in last month (83%), being very concerned about patient errors (70%), and lacking trust in their physician (89%) table-5. Patients who did not know that they had the legal right to inspect their records were more interested in reading their record (96%) than who had looked at their medical record in the past (67%). Patients were most often interested in seeing their laboratory results (60%), closely followed by the physician's notes (55%). Majority of patients (81%) strongly agreed that their physician would think it was a good idea for them to read their medical records. 32% were interested in reading a paper copy of their medical record at home, 68% preferred obtaining access by internet.

Discussion

Our study supports the information provided by Stephen E Ross et al.¹¹ In their study; Expectations of Patients and Physicians Regarding Patient-Accessible Medical Records, on outpatients to primary care practices in metropolitan Denver, Colorado, they observed that on average 95% of patients (94% of academic medical center patients and 96% of community health center patients) were interested to share their medical records. In the present study also it is found that the vast majority of patients (among 110 respondents 92) endorse the concept of patient-accessible medical records and 82 out of 92(75%) of them were very interested in sharing records. In our study it is also observed that thirty (37%) of those who were very interested in reading their medical records support online access. This result confirms the strong polarity of opinion towards Internet-accessible records that was reported in the Minnesota survey.¹² This survey further demonstrates that these attitudes are shared even by patients in socioeconomically disadvantaged populations. Demographic features such as age, gender, religion, and education did not predict an interest in patient-accessible records, though less educated patients found test results to be less understandable than higher educated patients. The primary predictors were previous experience with the Internet, Sufferings due to medical error, followed by Subscribe to a health magazine or news letter. Patients are particularly likely to anticipate that shared records will be empowering, although fifty patients interested in shared medical record anticipate that access to their medical records will be embarrassing and another fifty four percent of them anticipated finding the laboratory

and radiographic reports in the medical record to be confusing, but this concern was not a predictor of whether a patient would share their medical records.

Conclusions

Patients' interest in examining the medical record is widespread and is better predicted by their consumer approach to health care than it is by their clinical characteristics. Demographic characteristic of residence and gender, socioeconomic factors of education and income were not related. Larger trials will better define how to enhance the experience of patient-accessible records to promote the benefits that patients expect.

References

1. Shenkin BN, Warner DC. Sounding board: giving the patient his medical record: a proposal to improve the system. *N Engl J Med.* 1973; 289:688-691.
2. Blau JN. Patients reading their notes. *Lancet.* 1987; 1:45.
3. Ross AP. The case against showing patients their records [editorial]. *Br Med J (Clin Res Ed).* 1986; 292:578.
4. Strasser AL. Opening patient records to the public could hamper quality medical care [editorial]. *Occup Health Saf.* 1987; 56:41.
5. Sawicki PT. A structured teaching and self-management program for patients receiving oral anticoagulation: a randomized controlled trial. *JAMA.* 1999; 281:145-150
6. Marshall MN, Shekelle PG, Leatherman S, Brook RH. The public release of performance data: what do we expect to gain? A review of the evidence. *JAMA.* 2000; 283:1866-1874.
7. Institute of Medicine, Committee on Quality of Health Care in America. *Crossing the Quality Chasm, A New Health System for the 21st Century.* Washington, DC: National Academy Press; 2001.
8. Christianson JB, Parente ST, Taylor R. Defined-contribution health insurance products: development and prospects. *Health Aff (Millwood).* 2002; 21:49-64.
9. Cimino JJ, Li J, Mendonca EA, Sengupta S, Patel VL, Kushniruk AW. An evaluation of patient access to their electronic medical records via the World Wide Web. *Proc AMIA Symp.* 2000; 7(suppl):151-155.
10. Fowles JB, Kind AC, Craft C, Kind EA, Mandel JL, Adlis S. Patients' interest in reading their medical record: relation with clinical and sociodemographic characteristics and patients' approach to health care. *Arch Intern Med* 2004 Apr 12; 164(7):793-800.
11. Stephen E Ross, MD, Jamie Todd, MS-IV, Laurie A Moore, MPH, Brenda L Beaty, MSPH, Loretta Wittevrongel, and Chen-Tan Lin, MD, Expectations of Patients and Physicians Regarding Patient-Accessible Medical Records. *J Med Internet Res.* 2005 Apr-Jun; 7(2): e13. Published online 2005 May 24. doi: 10.2196/jmir.7.2.e13
12. Fowles Jinnat B, Kind Allan C, Craft Cheryl, Kind Elizabeth A, Mandel Jeffrey L, Adlis Susan. Patients' interest in reading their medical record: relation with clinical and sociodemographic characteristics and patients' approach to health care. *Arch Intern Med.* 2004 Apr 12; 164(7):793-800. doi: 10.1001/archinte.164.7.793.164/7/793 [PubMed]