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Just Talk to Me - A Qualitative Study of Patient Satisfaction in Emergency Departments

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Abstract

Communication between patients and hospital staff is a vital part of patient satisfaction and can contribute to better healthcare outcomes. Especially in emergency departments, where the workload is high, it is difficult to always address the communication needs of patients. In a qualitative study, we interviewed 32 patients in emergency departments in Australia. We found that, in the context of the emergency department, the characteristics of the source assumes an essential role in the appraisal of information. Especially if patients show low health literacy hospital staff needs to engage with them. It is important that patients feel informed as this increases patient satisfaction, even though they may not fully understand the delivered information.

Keywords:

Patients; Communication; Emergency Department

Introduction

Doctor-patient communication strongly affects how patients perceive the interaction with their physician and further influences important patient-related outcomes such as trust, satisfaction, adherence to prescribed treatments or medication [13]. With the increasing digitalization of health there are more processes that are independent of humans in healthcare contexts which involve heavy emotional investments. From a patient's perspective, this emotional investment is very important.

Patients nowadays are increasingly informed and more are interested in shared decision making when it comes to their own health. However, they are reliant on the information provided by clinicians to understand their condition. For example, information flow is vital for patients with cancer, enabling them to make better decisions on what therapeutic actions should be taken [5].

In contrast to patients with cancer, who attend scheduled diagnostic and therapeutic visits, patients presenting to an emergency department (ED) face different information needs given the unexpected and generally urgent nature of their clinical encounters. EDs face overcrowding issues and clinicians often need to deliver complex information within limited timeframes [4]. ED overcrowding is an important issue across the globe [6] which is attracting considerable attention [8; 15]. Due to the substantial workload of ED staff, it is not always easy to inform patients adequately, while still maintaining and considering the patients' individual information needs for a satisfactory treatment experience. Within the ED diagnostic work relies on patient history as well as diagnostic testing including pathology tests and medical imaging studies [1]. Clinicians and patients agree that adequate communication of diagnostic test information is especially crucial, as diagnostic understanding impacts shared-decision making and, in turn, adherence to treatment and thus patient outcomes [10]. Digitalization could help health professionals to more efficiently communicate the relevant information to their patients. However, there is little known about overall patient satisfaction with the type of information provided to patients and the communication of diagnostic test information between patients and healthcare professionals, as well as the overall satisfaction of the treatment. In this paper we therefore seek to answer the question: What information, related to diagnostic testing, shape the overall satisfaction of patients' emergency department visits

Appraisal and Information Needs – Existing Information theoretical perspectives

Johnson and Meischke [9] applied their model of media exposure and appraisal (MEA) in the context of cancer-treatment. In essence, the model proposes information carrier factors (characteristics of the source) of the information and the utility of information depending on the individual's information needs. With regards to the former, individuals react differently to the same information, if provided by different sources, and what they associate with the source. It is argued that if people feel that the information source has questionable motives, the information -even if it might be true- is likely to be rejected.

In the healthcare context, information needs have a special role due to the fact that illnesses or diseases can have a significant negative impact on the individual's quality of life. This is in contrast to information needs concerning products where unmet needs and therefore uninformed decisions do not necessarily threaten one's personal life. The literature therefore shows a high volume of information needs of health professionals, who rely on critical information to make the right decisions, as well as information needs of e.g., cancer patients, who need to understand their life-threatening condition.

Reddy and Spence [14] investigated the information needs of patient care teams in emergency departments. Especially in EDs a constant flow of the right information is of utmost priority for the team to make the right decisions. In their study, information seekers, as well as information sources, were interviewed in the context of a qualitative data collection. The results showed that quick information flow is crucial, while the most commonly questions of the hospital staff related to patients.

Shifting the perspective, there are also information needs for patients. Leydon et al. [12] interviewed cancer patients concerning their information needs and found ambivalent results.

Table 1– Hospital Characteristics

Site	Hospital demographic (bed size; average monthly ED presentation*)	ED patient n (% female)	Patient Age range, n		
			18-44	**45-64**	**65+**
1	Major Metropolitan (500+; 5,749)	13 (62)	7	3	3
2	Large Regional (~200; 3,341)	10 (60)	1	5	4
3	Medium Metropolitan (~200; 2,564)	9 (5)	4	3	2
Total		**32 (59)**	**12**	**11**	**9**

The interview was structured so that four main personal characteristics derived from the literature, could be investigated: information about cancer and treatment, faith, hope and charity. They found that while all patients wanted to receive basic information about their diagnosis and the treatment, their faith, hope and charity (meaning that patients did not want to occupy more of the time of the clinical staff since they have to help others who are worse off) affected whether or not they would seek additional information about their condition. Any additional information-seeking behavior was tied to a complex interaction between the patient's faith, hope and charity.

We see that patients do not process every piece of information equally. Information serves as a tool for their mental well-being and is associated with satisfaction of their quality of life and the quality of care. Larson et al. [11] asked patients about their information needs to identify the impact of the information provided on the perceived quality of life, benefits of the treatment and satisfaction with hospital care. They found that information flow from clinicians to patients had a significant impact on satisfaction, perceived quality of life and the perceived benefit of the treatment. Overall, the information puts patients at ease and underlines the importance of doctor-patient communication for positive patient outcomes [13].

Methods

Between October 2016 and May 2018 semi-structured face-to-face interviews were conducted with 32 patients across the Emergency Departments of two metropolitan (site 1 and 3) and one regional (site 2) Australian teaching hospitals.

Table 1 provides the detailed site and participant demographics. Patients presented a diverse case mix of clinical cases and ranged in ages from 18-25 to 75-84. Patient interviews ranged from 3.5 to 10 minutes (total 165 minutes). All interviews were audio-recorded, transcribed, and de-identified for analysis.

Patients presented to ED following severe incidents including falls, seizures, motor vehicle or work accidents. The patients self-reported presenting complaints commonly included acute pain (chest, head, abdominal, extremities), allergic reactions as well as nausea and vomiting. Only three of the interviewed patients (9% of all patients) attended for non-acute conditions: one patient for chronic pain, one patient for a catheter replacement, and one patient with avascular necrosis following a referral from his General Practitioner. Given that these were not immediately life-threatening presentations, the majority of patients were interviewed in the subacute treatment area or ED Short Stay Unit, and were likely assessed as urgent, semi-urgent, or non-urgent triage categories. For the purpose of this study, we conducted a directed content analysis [7] with the patient interviews to identify their level of overall satisfaction, information needs related to diagnostic test information, and the characteristics of the information provided.

Results

Patients (n=32) were interviewed across three Australian EDs to identify their overall satisfaction with the diagnostic test information provided during their ED visit and to gauge whether the information provided met their individual information needs. We found that every patient in the sample was satisfied with their overall treatment, regardless of whether it matched their personal information needs. Patients appeared satisfied with the diagnostic information provided, as long as it was communicated by a medical professional.

The findings section attempts to identify patterns in how information and sources of information relate to the overall satisfaction of patients in the context of EDs. In our coding, we identified information appraisal as one main contributor to patient satisfaction in EDs. The quotes represent the general tendency that could be applied to the whole sample, if not stated explicitly otherwise.

We found evidence that the patient's information appraisal influences their overall satisfaction with their care/treatment. Patients who articulated their satisfaction with the treatment, also showed high information appraisal as illustrated in the quote below:

Interviewer (I): "And are you happy with the way that he explained everything to you?"

Patient (P) A2: "Yeah, yeah. I'm happy. I'm happy for this hospital every time. […] With me coming here I'm worry but now what the doctor said, everything okay. I stop worry."

Patients generally articulated their satisfaction. There was only one instance in which it was not the case. Participant PF2 (site 2) stated:

"Being in hospitals is generally negative",

Table 2– Sample Demographics

Patient	Gender	Self-reported Condition/Treatment	Age Range	Hospital Site
PA1	Female	Vomiting (late-stage pregnancy)	25-34	1
PB1	Female	Fractured bone	25-34	1
PC1	Female	Gastroenteritis	25-34	1
PD1	Male	Spinal cord paralysis	25-34	1
PE1	Male	Catheter	65-74	1
PF1	Female	Vehicle accident	35-44	1
PG1	Male	Fall	65-74	1
PH1	Female	Allergic reaction	45-54	1
PI1	Male	Fall	75-84	1
PJ1	Male	Fall	55-64	1
PK1	Female	Migraine	15-24	1
PL1	Male	Flu	25-34	1
PM1	Female	Bladder infection	45-54	1
PA3	Male	Heart problems	55-64	3
PB3	Male	Chest pain	35-44	3
PC3	Male	Fingertip cut off	65-74	3
PD3	Female	Seizure	35-44	3
PE3	Female	Symptoms of heart attack	75-84	3
PF3	Female	-	55-64	3
PG3	Female	Vomiting	25-34	3
PH3	Male	Fall	35-44	3
PI3	Female	Fall	55-64	3
PA2	Female	Vomiting	65-74	2
PB2	Female	Fall	65-74	2
PC2	Female	Abdominal pain	35-44	2
PD2	Female	Migraine	45-54	2
PE2	Male	Leg pain	55-64	2
PF2	Male	Venal necrosis	55-64	2
PG2	Male	-	55-64	2
PH2	Female	Abdominal pain	55-64	2
PI2	Male	Chest pain	65-74	2
PJ2	Female	Fall	75-84	2

which indicates a general antipathy towards hospitals and not a direct critique of the treatment. This sheds light on the importance of communication between doctor and patient. Healthcare outcomes are not always pleasant or immediate. There are situations where time will tell whether treatment was actually successful. In the immediate context, right after the treatment, proper communication between professional and patient seems to be incremental for the satisfaction of the patient.

Another dimension, which is proposed by the literature is the utility of information, which refers to whether the content of the information meets the need of the receivers. In this regard, we found no consistent pattern. In the cases where patients' information needs were met (patients experienced higher utility of information) patients showed a high information appraisal and understood the doctor quite well. In cases where the information needs were not met, patients still showed high information appraisal. The following quote illustrates the high utility of information:

I: *"Was the information easy to understand?"*

PG3: "*Yes, it was easy to understand. I was able to ask questions to find out a bit more, and very easy to communicate with."*

The following quote highlights a contrasting low utility of the information, but still with high satisfaction among the patient.

I: *"What would you have done differently?"*

PG3: *"Probably more of a timely manner finding out – learning the results. They did come back quite a while ago. I've been informed there was a bit of a time lag in between."*

We therefore could not find evidence that the utility directly influences the information appraisal. In most cases, patients wanted to receive additional information, but this wish did not affect their general positive information appraisal. This can be explained by patients generally being laymen without deeper knowledge of the medical context. Detailed information may not be useful since they do not know how to evaluate them. A simple "Your condition is fine" seems to be adequate in this context to satisfy the information needs of patients in EDs.

In contrast to established theory, we could not find evidence that the characteristics of the information source influences the perceived utility. There were several instances in which patients received information from a health professional and reported the insufficient utility of the information. This suggests that the characteristics of the information source among doctors do not influence the utility. Meaning, patients do not value the content of the information based on who is the source but can distinguish between content and source.

PA1: *"They could have maybe told me the specifics of the results, but I might not remember them. just know that they were normal, and I assume they're probably in there for my GP."*

PC1: *"I don't think [they could have done anything better] so; yep, they [staff] were good."*

Several instances in which the characteristic of the professional staff did not correlate with individuals' expectations of their information needs lead us to the conclusion that the source characteristics of the information provider do not influence the perceived information content.

Concerning the information appraisal, we found that all patients who received their information from the ED clinicians were satisfied and indicated that they understood everything. This suggests that patients show high information appraisal if the source is a health professional, due to the high likelihood that patients

do not have the expertise to question mentioned information. In this instance, the source characteristics directly influence the information appraisal.

I: *"Did they tell you everything in a way it was easy to understand?*

PB3: *"Yeah, very clear."*

Furthermore, we controlled whether specific complaints showed abnormalities among the sample and influenced information appraisal. We found that the vast majority within the sample presented with physical injuries, for example, as a consequence of suffering a fall or following a motor vehicle accident. Also, cases of stomach upsets or vomiting were often mentioned. However, the specifics of the presenting complaints did not influence information appraisal. Age as a further potential moderating effect also did not influence information appraisal among our patient sample.

Discussion

In line with Johnson and Meischke [9] we found that, in the context of the emergency department, the source of information plays an essential role in the appraisal of information, but not on the content of information (i.e., utility). This draws attention to the role of the ED clinical staff and how patients' perception of clinicians influences information appraisal. It stands to reason that patients often feel they lack the necessary expertise to question the doctor's decision on the treatment and therefore are more willing to accept it. This is reflected in the fact that most patients were satisfied, even though some of them did not receive information that matched their information needs. However, it is necessary to mention that the patients were asked directly after the treatment. Therefore, this satisfaction is only short-termed. If we consider that the sample consisted of people who had just received treatment in ED it is not surprising that the vast majority were satisfied as they received treatment easing their pain. In this case, the characteristics of the reason for the ED visit were not relevant.

We found that information content is not relevant in this context. Even though patients' information needs were not met, patients still showed information appraisal and satisfaction with what they were told. Belkin and Vickery [2] state that it is difficult to observe an individual's information needs and therefore we drew on the concept of whether or not people articulated that they received a shortage of information. This shows that there has to be a minimum of information exchanged between clinician and patient so that the patient feels accepted. If there is more information, beyond the individual's information needs, patients experience higher information appraisal. However, the higher appraisal did not strongly influence overall satisfaction. Conversely, insufficient information also did not influence information appraisal. The interviews indicated that clinicians need only to communicate with the patient about test results in the most general terms. Patients were satisfied regardless of whether or not they received tailored detailed information about diagnostic testing. This is in line with Ware [16] who states that the doctor-patient relationship is a strong influence on the patient's satisfaction. The specific details of the provided information seem to be not relevant in this specific context (in contrast to e.g. cancer treatment [12]).

Furthermore, we found that overall patient satisfaction has tight links to the information provided. This finding is in line with Larson et al. [11]. In this case, we showed that it is especially the case in the context of the emergency department. Patients visit the ED because they think their condition is urgent. The information provided by the staff/physician after the treatment acts like an additional relief, which elevates their satisfaction. Looking at the individual reason for presentation to the ED, we see that most presenting complaints were not chronic conditions but complaints of sudden and unexpected nature. Therefore, any additional information about their current complaint was generally seen as helpful. The content detail of the information is not as relevant, as long as the physician stays in contact with the patient and can properly communicate what they did. We assume that the simple conversation with the physician and the patient puts the patient at ease. However, it should be mentioned that this communication is often shrouded in medical language and between people with different levels of medical background knowledge who may attach different meanings to medical terms used in the discussion of diagnostic test information.[3]

Evidence from an Australian study surveying 135 primary care patients on their understanding of diagnostic testing showed that while patients report they understood the information provided by their doctor, less than a fifth of patients was able to name all tests done, and more than a third could not name any tests done [10]. Our study supports earlier findings and suggests that clinicians should be mindful of the fact that patients tend to perceive that they have a better understanding of the information conveyed while their actual understanding is often less comprehensive and/ or divergent from the clinician.

Patients' satisfaction should be one of the goals of a healthcare facility. Therefore, striving for better practices to achieve this goal is crucial. Doctor-patient communication was found to be the main driver for said satisfaction and should be focused in the context of emergency departments. For health professionals, these findings show that in the context of emergency departments, communication still needs to be done via face-to-face interaction between patient and health professional. The emotional anchor for the rather unpleasant visit remains the human working at the facility. As shown, the utility of the information is almost irrelevant as long as health professionals engage with patients and make them feel comfortable.

Contribution to Theory

This research contributes to theory by suggesting the main influences on patient satisfaction due to information appraisal in an ED context. We propose the following hypotheses and elaborate on literature that suggested differently by providing arguments why in this specific context influences differ.

Overall, we tried to observe if patients were satisfied with the information provided, or if they still had concerns and articulated them by stating what could have been done better. Since patients are usually lay people, they have difficulties evaluating their treatment. Doctor-patient communication has been shown to play an integral role in treatment [13]. If patients trust their health professional, they are more likely to comply with their treatment and show higher overall satisfaction [16]. Furthermore, Larson et al. [11] showed the link between adequate information provided to patients and the perceived quality of life, benefit of the treatment, and the overall satisfaction in the context of hospital care. We, therefore, assume that an adequate information flow from the professional to the patient significantly influences the overall perception of the treatment. The literature and the presented data are here in line. Therefore, we hypothesize:

H1: *The better the information appraisal by the patients of information provided by the clinician, the higher the overall satisfaction of the patient.*

In contrast to the literature that argues that utility (the information content) influences information appraisal, we did not find such a link in the ED context. Utility relates to whether the raw content of the information serves the patient's needs without considering the source or other external influences [9]. If the information presented is topical, relevant, and serves the individual's information needs, the information is perceived as useful and will likely be adopted.

On the other hand, characteristics of the information source play a big role in the ED context. Characteristics refer to how the communication is perceived by the receiver. It incorporates editorial tone, which reflects the perceived credibility of the source, and communication potential, which refers to how the information is presented (e.g., simple, and easy to understand). In this case, the professional has the role of the medium. Johnson and Meischke [9] state that if individuals think that the medium has other motives than simply trying to provide information, this will weigh heavy on the individual's exposure decisions. In this context, the exposure decision would be the individual's positive or negative evaluation of the information. Furthermore, the characteristics of the information source do not only influence the exposure decision, but also the utility. If information is presented in a complicated way, patients will not be able to extract the necessary information and therefore will perceive the raw information value as low. In our data, we found that simple communication via the health professional is sufficient in this context. We, therefore, formulate the hypotheses:

H2: *It is sufficient for health professionals to engage with patients, even though the informational content is lacking.*

H3: *Emotional attachment to the patient outweighs the raw information incorporated in the conversation heavily.*

Conclusions

The study shows that diagnostic test information provided by the health professionals in EDs generally sets patients at ease and helps them to cope with the situation. Even if the diagnostic test information did not fully meet the expectations of the patients, they still articulated that they were satisfied with the overall treatment. The findings indicate that communication between health professionals and patients is crucial in terms of helping patients to cope with the stressful situation in the emergency room and only to a lesser extent to inform them about specific medical details.

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