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A microanalysis of the clarity of information in physicians' and patients' discussions of treatment plans with and without language barriers

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ABSTRACT

Objective: Physicians and patients discuss treatment plans. If tasks within plans are not described adequately, patients cannot adhere. We evaluated task descriptions, testing whether patient engagement and language barriers affected task clarity.
Method: We sampled 12 videotaped hospital interactions from a corpus of 497: two encounters each from six hospital physicians, interacting with one native-speaking and one non-native-speaking patient. We used *microanalysis of face-to-face dialogue* to assess whether the physicians and patients achieved a complete, clear description of each task's three core information elements (*who* should do *what* and *when*).
Results: We conducted detailed analysis on 78 of the 90 tasks. Core information elements were complete in 62 (0.79) and clear in 37 (0.47). Language barriers had no effect on task clarity. When native-speaking patients were engaged, tasks were clearer ($p < 0.05$). Although non-native-speaking patients were significantly more engaged ($p < 0.01$), their engagement had no effect.
Conclusion: Physicians may be pursuing patients' agreement, motivation, and commitment at the expense of working with the patient to be clear about what needs to be done.
Practice implications: Physicians need to improve how clearly they present basic task information. Previous research demonstrated that even a short course can significantly improve the clarity of instructions.

1. Introduction

During clinical encounters, physicians and patients discuss treatment plans, which include the tasks each should do afterward. We analyzed videotaped encounters, focusing directly on how physicians and patients described these activities, including the basic information patients need in order to do their tasks. This method provides direct insight into the effect of language barriers on the quality of information and clinically relevant criteria for clarity.

1.1. Patient adherence and communication

Treatment plans consist of discrete tasks that physicians and patients are expected to do in the future; these tasks are formulated and discussed during clinical encounters. The World Health Organization defined patient adherence as the degree to which the patient's actions correspond with the tasks the patient was expected to do [1]. Even so, patient adherence is widely recognized as being complex and multi-faceted. DiMatteo et al. [2] defined three related factors. First, patients need *information* so that they know how to adhere, including having the opportunity to express their concerns and to participate in the decision making process. These authors proposed that providing this information builds trust, empathy, and enhances patient recall. Second, patients need *motivation* to follow the plan, including the opportunity to discuss cognitive, social, and cultural aspects that could affect their beliefs and attitudes. Third, patients need a *strategy*, including the opportunity to explore practical barriers and how to overcome them.

Exchanging information, exploring motivation, and discussing strategy is a daunting undertaking in a clinical encounter, particularly if a treatment plan involves multiple activities. Effective communication between provider and patient is key: two meta-analyses clearly linked patient adherence to communication [3], specifically to collaboration during the encounter [4]. Active patient participation is important for adherence [5], perhaps because physicians provide more information to

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actively-participating patients [6]. However, patients recalled an average of half of all verbal instructions [5]; they recalled only 27% when treatment decisions involved actions that either the patient or health care professional should undertake [7].

1.2. Formulations of information

Verbal dialogue is important for accurate recall: in a study of emergency discharge instructions, although all patients had received written instructions, they were more likely to remember them if those instructions had been verbally discussed as well [8]. A Cochrane review showed that verbal instructions may not be sufficient; they were most effective for later patient knowledge if combined with written instructions [9]. However, these authors proposed that "the difference in knowledge scores could be attributed to the standardisation of the information, consistency of information provided and formalisation of the instruction process rather than necessarily the provision of written information" [9,p. 8]. Although, accurate patient recall of instructions is essential, it is not sufficient if those instructions were not described clearly in the first place. We propose that communication about tasks during the encounter is linked to later patient action in a hierarchically dependent series of requirements, as pictured in Fig. 1. Success at the higher levels (e.g., agreement and motivation) depends on whether the task was described clearly, discussed, and understood during the encounter. As DiMatteo et al. [2] put it, "patients are capable of doing only what they clearly understand; unintentional nonadherence is often rooted in failures at [the information] stage of the process" (p. 78). Moreover, if the patient's actions are based on a misunderstanding due to an incomplete or inadequate description of that task during the visit with the physician, then the patient's commitment to carrying out the task is counterproductive, even a risk to patient safety.

1.3. Literature motivating research questions

This project focused on communication processes, that is, how tasks within treatment plans were formulated and discussed during outpatient encounters.

1.3.1. Effort discussing tasks

Patient perceptions of "physician effort" may currently be the most widely used measure of patient participation [10]. However, a recent detailed analysis of two case studies showed that effort alone is not an accurate indication of quality: although these patients rated these physicians has having expended a great deal of effort attempting to collaborate with them on treatment decisions, analysis of the encounters showed that the physicians still conveyed ambiguous and imprecise information, which created confusion [11]. We assessed effort more directly as the proportion of time spent talking about treatment plans (operationalized as word count), a measure few studies have reported [12]. We could later compare our analysis of task clarity to this measure:

RQ1: How much effort was expended discussing tasks and how was this effort distributed between physician and patient?

1.3.2. Number of tasks, topics, and agency

Previous research has suggested a range of the number of tasks (or treatment decisions) to expect in a clinical encounter. In primary care [7,13,14] and outpatient encounters with surgeons [14], the average is typically three or fewer per visit. Using a broader definition of treatment decisions has led to identifying an average closer to six in outpatient specialist encounters [15] and seven in primary care [16]. Topics range from medication, follow up appointments, laboratory tests, activities of daily living, or self-management/lifestyle [e.g.,7,13,14,16]. In emergency department discharge instructions, dialogues included tasks about medication (80%), self-care (69%), follow up with primary care (73%), and conditions under which patients should return (34%) [17]. However, a review of the literature on patient adherence indicated that 75% of studies focused solely on instructions about medication, with only 15% focusing on other behaviors and 8% on appointment adherence [4]. For example, Tarn et al. [18] focused solely on instructions for newly prescribed medications. Finally, tasks in treatment plans may involve actions from both patients and health care providers (who may be responsible for ordering tests, writing notes, arranging follow up visits). The second research question focused on the tasks themselves, which were the unit of analysis:

RQ2: How many tasks were discussed in these encounters, what was the range of topics, and who was responsible for doing each task?

1.3.3. Clarity of task formulations

For the patient to carry out a task correctly, the task must be *actionable* (i.e. capable of being acted upon). Referring to Fig. 1, we approach actionability at its foundation: how tasks are formulated during the encounter. While studies on shared decision making have quantified treatment decisions and analyzed elements that would make it shared [e.g.,13,14,16], none have analyzed actionability. Research on this topic is limited, but it suggests that core information elements might be missing. For example, in discussions of newly prescribed medications, "physicians conveyed full medication dosing directions for less than 60% of all medications and informed patients about duration of intake and adverse effects or adverse events only approximately one third of the time" [18,p. 1859]. The overall quality of information was inadequate for meeting patients' needs [18]. Similarly, few emergency discharge instructions were complete; for example, although 73% of patients were instructed to seek follow up with their GP, in less than half of these discussions was a time specified [17]. Thus we aimed to explore the tasks discussed in detail:

RQ3: How complete and clear were core information elements in the formulations of these tasks, and were they formulated clearly more often if the patient was responsible?

1.3.4. Patient engagement

Research shows that collaboration and active patient involvement is linked to patient adherence [6], but we have located no research that shows the direct influence the patient has during the

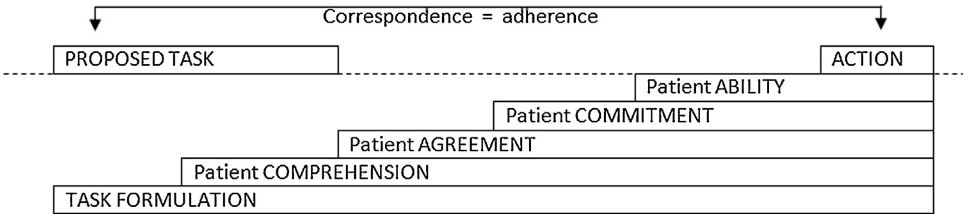

Fig. 1. Levels leading to adherence.