Patients’ Expectations And Knowledge of Patient Counseling Services That Are Available From Pharmacists¹

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The purpose of this article is to present research findings from a stream of research undertaken in the 1990s that address three questions: (i) Why are patient’s expectations and knowledge of counseling services provided by pharmacists important?, (ii) What do patients expect from pharmacists?, and (iii) How are patients’ expectations of pharmacist services formed? The results from this stream of research show that many patients lack an understanding about the expanded counseling roles that pharmacists are prepared to provide. A predominant patient expectation of pharmacists is that of a supplier of prescription products rather than that of a concerned counselor regarding medications. There is much more work to be done to inform patients about what their pharmacist is capable of doing in the health care system and how pharmacist services can add value to a patient’s health care.

“All too frequently, the patient is met by a clerk, who delivers the prescription to the pharmacist, who resides in splendid isolation within a glass enclosure. After an inordinately long time the clerk returns with the medication and rings up the sale. I’ve seen this entire transaction completed without any verbal exchange whatsoever! ... Although this picture of the pharmacist is not universal, it is common enough so that the pharmacist has lost professional stature with physicians and the public. Only when pharmacists really provide professional services and inform physicians and the public of their active role in patient care will the image improve.”

Crosby(1)

“What we see here is greater and greater pressure to perform with less and less help. That means more errors for pharmacists, more error lawsuits for owners, and more consumers winding up dead. Somebody has got to stand up and say, ‘Enough is enough.’”

Anonymous(2)

Over the last several decades, pharmacists have been trained in a more clinically-oriented fashion, researchers have established that patient counseling by pharmacists is important for improving appropriate medication use and achieving desired patient outcomes, pharmaceutical care has been embraced as the mission of pharmacy, and pharmacists have become required by law to provide patient counseling about medications. Unfortunately, the statement made by Crosby in 1969 still applies to a number of pharmacy practices; one such pharmacy is reflected in the anonymous pharmacist’s statement made in 1996.

In the 1990s researchers have reported that between 40 and 67 percent of patients who receive prescriptions in pharmacies do not talk with their pharmacist about health related aspects of their medications²(3-6). Some might blame these disappointing findings on the great amounts of time, effort, and financial resources that are required to remain viable in the uncertain and dynamic pharmaceutical marketplace as new products, new payment mechanisms, new distribution channels, new corporate entities, and new technologies have emerged. Pharmacists report that there just isn’t enough time to provide counseling to their patients since they have so many other roles to fulfill(7,8).

A marketing perspective would posit, however, that patient counseling might not be provided very frequently or in great depth due to a lack of demand for these services. If demand were at a sufficient level so that profits could be made, providers would devote labor, technology, and other resources to the provision of counseling. The marketing perspective argues that the source of demand (whether directly from patients or from a third party) is patient expectations and knowledge of these services. There is some evidence for this position. Pharmacists have reported that, although they believe that they have a responsibility to counsel their patients, they primarily determine the amount and content of counseling they offer to a patient based on the patient’s desire and acceptance of it(7).

Studies that have investigated patient expectations and knowledge of these services also provide evidence that low patient demand for counseling from pharmacists is problematic. Spencer(9) reported low patient expectations of pharmacist counseling services may be a reason for the lack of communication between pharmacists and patients. Gagnon(10) reported that patients rated the importance of most professional services given by a pharmacist less important on average than pharmacists did. He suggested that the patients may have been uninformed about the value of professional services given by pharmacists. Mackowiak and Manasse(11) reported that patrons of an office practice pharmacy expressed significantly higher expectation scores for pharmaceutical services than patrons of a traditional pharmacy. Patrons of the office practice pharmacy also reported more frequent counseling by a pharmacist than patrons of the traditional pharmacy. Results from a recent study by Wiederholt and Rosowski(12) also supported the

¹This article is a summary of a presentation given at the Social and Administrative Sciences program titled, “Pharmaceutical Care: The Lost Patient,” at the 96th Annual Meeting of the American Association of Colleges of Pharmacy, Philadelphia PA, July 9, 1995.

notion that the type of pharmacy practice site can influence patients’ expectations.

Carroll(13) reviewed the literature on patient demand for patient-oriented services in community pharmacies. He commented that these studies should be interpreted with caution because they are based on the assumption that patients are familiar with pharmacy services. It may be that patients have not had a chance to evaluate or try, or even become aware of pharmacy services because pharmacists have not provided them.

Culbertson, et al. (14) reported that patients who preferred talking with their pharmacist about medications more likely patronized an HMO pharmacy, were high school educated, or had prescriptions for new medications. Patients who did not prefer talking with their pharmacist more likely patronized a community pharmacy, were postgraduate educated, or had prescriptions for a renewal medication. Mackowiak and Manasse(15) reported a significant difference in expectations for pharmaceutical services based on age. Respondents categorized as “less than age 35” and those categorized as “age 35 to 49” both reported significantly higher expectations than those categorized as “greater than age 65” for some services.

According to Schering Report XIV(16), only 27 percent of the patients surveyed reported that they thought a pharmacist should talk to them personally about their prescription every time a prescription is filled. Thirty-six percent reported that the pharmacist should talk to them only if they ask and 32 percent reported that the pharmacist should talk with them only if the pharmacist thinks it is necessary. In the same study, 64 percent reported that nothing should be added to the cost of a prescription as a pharmacist’s consultation fee, if a law required all pharmacists to consult with their patients every time they filled a prescription. Twenty-three percent answered “don’t know” to the question. Of the remaining 13 percent who did report a dollar amount, the average was only $2.17.

The literature just reviewed shows that most patients have low knowledge and expectations of patient counseling offered by pharmacists. It is not well known if patient’s expectations are changing sufficiently to increase demand for these services. To learn more about how patients’ expectations may serve to create a demand for pharmacist services and to determine if their expectations can be changed, a marketing perspective was used for this article. The focus is on patients as a possible “rate-limiting” step to counseling. That is, if patients do not want or perceive a need for counseling, it is futile to seek reimbursement for these services since there is little demand for them. Even if these services would be provided unilaterally by pharmacists, the advice may not be adhered to by patients which would sever the theoretical link between counseling and desired patient outcomes.

The purpose of this article is to present research findings from a stream of research undertaken in the 1990s by the author in collaboration with colleagues primarily from the University of Wisconsin, Sonderegger Research Center and The Ohio State University that address three questions: (i) Why are patients’ expectations and knowledge of counseling services provided by pharmacists important? (ii) What do patients expect from pharmacists? and (iii) How are patients’ expectations of pharmacist services formed?

**Why Are Patients’ Expectations and Knowledge of Counseling Services Provided by Pharmacists Important?**

A field study was conducted to identify participant and environment variables that affect patient counseling provided by pharmacists, and test their effects in a range of community pharmacy practices(17). Data were collected through unobtrusive observation, patient interviews, and pharmacist interviews in 12 Wisconsin community pharmacies. A total of 360 dispensing episodes were included for study. Pharmacist and patient expectations (role orientations) and the environmental variables lack of time, patient privacy, prescription transfer by the pharmacist, and importance of information were studied (please refer to the article for definitions and measurement of these variables). The relationships between each of these variables and occurrence of communication, length of communication, and content of communication were tested using logistic or multiple linear regression where applicable.

The results of the study showed that pharmacists, patients, and pharmacy environments all are important for the provision of patient counseling provided by pharmacists. Pharmacists’ role orientation for counseling, perceived time pressures, and perceived importance of information were important determinants for whether pharmacists personally transferred prescriptions to patients, which, in turn, had a strong association with the occurrence of counseling taking place. Once counseling was initiated, patients’ role orientation (i.e., expectations) for counseling and the perceived importance of information were important determinants for the length and content of counseling. These findings are consistent with results of an earlier study in which pharmacists reported they primarily determine the amount and content of counseling they offer to a patient based on the patient’s desire and acceptance it(7).

Taking a closer look at the effects that the participants (pharmacists and patients) can have on the provision of counseling, the same data utilized in the previous article were re-analyzed to compare the effects that interrole incongruence could have on patient counseling by pharmacists (18). Interrole congruence/incongruence was operationalized based on a median split of the difference scores between pharmacists’ and patients’ scores for role orientation. Pharmacists’ role orientation for counseling was measured based on work by Mason and results of a survey of Wisconsin pharmacists(7). Patients’ role orientation for counseling was measured from patient interviews using eight items parallel to those used to measure pharmacists’ role orientation.

The mean role orientation for pharmacists was 49.5 (SD = 3.52) and for patients was 39.7 (SD = 5.92). Difference scores were computed by subtracting patients’ role orientations from their pharmacists’. The mean for difference scores equaled 10.8 and the median equaled 11. Thus, interrole congruence was defined as a difference less than 11 units between a pharmacist’s and patient’s role orientation scores. Interrole incongruence was a difference of 11 or more units. For all interrole incongruence cases, pharmacists’ role orientations were 11 or more units higher than patients’ scores. Thus, all role incongruence was due to patients reporting lower role orientations than their pharmacists reported.

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The average length and content of counseling for encounters with interrole congruence were 74 seconds and 4.1 types of information, respectively, compared with only 36 seconds and 3.0 types of information for those with interrole incongruence. \((t(229) = 3.5, P < 0.05\) and \((t(229) = 3.7, P < 0.05)\) for each respective comparison. Interrole incongruence was more common between pharmacists and older patients.

Based on these results, it appears that patients’ expectations and knowledge of counseling services provided by pharmacists are important for the provision of this service. While pharmacists can offer counseling and even start to provide it at a superficial level, patients influence the length and content of these interactions. The effect that patients’ expectations can play in the provision of counseling services is important since the potential positive outcomes that result from counseling could remain unrealized if patients do not attend to or comply with counseling.

Another study was conducted to investigate how patients’ expectations can influence their evaluation of counseling services provided by pharmacists(19). The effects of normative expectations (what a patient believes should occur) and predictive expectations (what a patient believes will occur) on patients’ evaluation of: (i) a specific counseling episode; (ii) counseling services overall; and (iii) the trustworthiness of the pharmacist who provided the counseling were studied within the context of high and low performance levels of counseling. Normative expectations, predictive expectations, and performance levels were manipulated experimentally using written scenarios and videotaped counseling episodes. Multiple item measures were used for the dependent variables. The results showed that higher predictive expectations resulted in lower evaluation scores for a specific counseling episode but higher scores for counseling services overall. Also, higher normative expectations resulted in lower evaluation scores for the trustworthiness of the pharmacist. These findings suggest that normative and predictive expectations play differential roles in patients’ evaluation of counseling provided by pharmacists. For example, patients who expect that their pharmacist will provide counseling are more difficult to satisfy for a given encounter but also will view the services more favorably overall than those with lower predictive expectations. In addition, patients with high expectations that the pharmacist should provide counseling are more likely to lose trust in the pharmacist if the service is not provided than patients with lower expectations.

These findings reveal the relevance of patients’ expectations regarding pharmacist counseling since favorable evaluations of services are important for an individual’s commitment to a long term relationship with the service provider(20). If effective counseling services are dependent upon long term, patient-oriented relationships(21,22), it appears that patients’ expectations will play a significant role in determining whether or not this can be accomplished.

In summary, patients’ expectations may influence how effectively pharmacists can provide counseling services because patients’ expectations can influence the length and content of counseling and also patients’ evaluations of these services. In the next section, recent work regarding what it is patients expect from pharmacists is discussed.

**What Do Patients Expect from Pharmacists?**

Another phase of our research was to determine what patients presently expect from their pharmacists. Two studies that obtained pharmacists’ opinions about their responsibility for providing risk assessment and risk management counseling already had been conducted(8) and showed that pharmacists believed they should share the responsibility with physicians for providing risk assessment counseling to patients, but primarily be responsible for providing risk management counseling to patients. Risk assessment counseling is providing information related to the appropriate choice of medications. Risk management counseling is providing information related to the appropriate use of medications once the prescribing decision is made.

We modified the pharmacist survey for administration to patients and repeated the study in Ohio(23). The majority of patients who responded reported that both the pharmacist and physician should share an equal responsibility for providing risk management counseling and that their physician should be primarily responsible for providing risk assessment counseling. While patients make a distinction between risk management and risk assessment counseling, their expectations regarding the pharmacist’s responsibility for providing such counseling is lower than pharmacist’s, on average.

Researchers conducted a study in Wisconsin(23) and investigated patients’ perceived barriers to receiving counseling from a pharmacist. The first and second most frequently reported barriers to asking a pharmacist questions were “fear/intimidation” (don’t want to ask a stupid question, embarrassed, shy) and “lack of awareness” (not aware pharmacist can answer questions). The same question was incorporated into a study conducted in Ohio(24). Fear/intimidation and lack of awareness again were given by the respondents as the first and second most frequently reported barriers. These findings suggest that patients’ expectations and knowledge of counseling provided by pharmacists are low. Not only are some patients reluctant to ask their pharmacist a question, but also some are not even aware that the pharmacists are able to provide counseling services!

Based on the studies just discussed, another study(7) was conducted in which pharmacists and patients from the same geographic region (Ohio) were surveyed regarding three aspects of patient counseling offered by pharmacists: (i) the pharmacist’s responsibility for providing risk management and risk assessment counseling to patients; (ii) the pharmacist’s role as a counselor about medications; and (iii) the pharmacist as a source for answering patient’s questions. This study design allowed comparisons of pharmacists’ and patients’ expectations regarding counseling services.

Data were collected via mailed survey from randomly selected samples of 600 practicing pharmacists and 600 adult individuals in Ohio. Each respondent randomly received one of two risk management or two risk assessment scenarios and was asked who (pharmacist or physician) should be responsible for the patient counseling task in the given scenario(25). Eight items were used to measure the pharmacist’s role as a counselor(7), and one open-ended question asked respondents why some people might not ask their pharmacist questions(23).

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The results confirmed that pharmacists agree with the risk management/risk assessment distinction in that they should be primarily responsible for providing risk management counseling but they share the responsibility with physicians for providing risk assessment counseling. Patients’ viewpoints were different than pharmacists’, however. Patients more likely viewed the physician as the individual who should be responsible for providing both types of counseling, with pharmacists only sharing the responsibility for risk management counseling with physicians.

Regarding the pharmacist’s role as a counselor about medications, pharmacists’ and patients’ viewpoints differed as well. Patients reported a greater agreement than did pharmacists with items that reflected a greater reliance on the physician for information about medications. Finally, pharmacists and patients did not agree on the reasons for why patients don’t ask their pharmacist questions. Pharmacists most frequently listed pharmacy environment barriers (40 percent of responses), patient barriers (22 percent of responses), and fear/intimidation on the patients’ part (17 percent of responses). Patients, on the other hand, most frequently listed lack of awareness by patients (31 percent), pharmacy environment barriers (26 percent), and trust in and loyalty to their physician (20 percent). Although patients did report pharmacy barriers as problematic, they most frequently cited a lack of awareness on their part about the availability of the pharmacist as a counselor as the reason for why patients don’t ask pharmacists any questions.

In summary, the results of these studies suggest that patients have very low expectations and knowledge of patient counseling services offered by pharmacists. The pattern of responses show that pharmacists and patients do not share common expectations about pharmacists’ roles in health care. Also, it appears that while pharmacists view their role as one that adds value to a patient’s health care above and beyond a level that can be provided by a physician alone, patients view the pharmacist’s role as one that fits into their overall health care and is controlled by their physician.

How Are Patients’ Expectations of Pharmacist Services Formed?

This leads us to our last question: Can we understand how patients’ expectations of pharmacist counseling services are formed so that we can implement strategies to change them? A study(24) was conducted to determine if experientially-based factors or individual traits exert a strong influence on patients’ role orientation (expectations) for counseling from pharmacists. Data were collected from a randomly selected sample of 640 households in the United States. Of 562 surveys presumably delivered, 329 individuals (59 percent) responded. Two experientially-based factors we studied were: (i) experience with counseling, and (ii) medication purchase for a child. Three individual traits we investigated were: (i) need for cognition; (ii) involvement with medications; and (iii) self-perceived medication knowledge (please refer to the article for definitions and measures of these variables).

Results from multiple regression analysis showed that an individual trait variable, need for cognition, exerted the strongest effect on a respondent’s role orientation (expectation) for counseling from a pharmacist. Individuals who have a low need for cognition (that is, a low tendency to engage in and enjoy thinking) might possess low expectations for counseling that are resistant to change. Provision of counseling by pharmacists could be difficult since these patients may not have an intrinsic need to know about how their medications work and may not wish to put much thought into their medication taking. Thus, they may perceive no need to exert any effort in talking with their pharmacist to get more information about their medications. Respondent age was negatively correlated with need for cognition (r = -0.30, P<0.01) which suggests that older individuals most likely comprise the low need for cognition group. This finding is consistent with previously reported research(5,12). Thus, some elderly individuals might be resistant to the pharmacist’s expanded role as counselor. Currently, is not known if a lower need for cognition for elderly is a cohort effect for their generation or if it corresponds with the aging process.

Although not the most significant predictor of patients’ role orientation for counseling, experience with counseling did have an effect on an individual’s role orientation. Therefore, pharmacists may have some influence over patients’ expectations for pharmacist services by providing the service at a level that will be appreciated by their patients. At the same time however, low need for cognition patients might not respond to this strategy.

Self-perceived medication knowledge was the third most significant predictor of role orientation scores. Individuals who believed that they understood all they needed to know about their medications reported a lower role orientation for counseling. It should be noted that possessing more knowledge about a product or service may allow an individual to formulate more questions and be more aggressive in information search behaviors(25). Since we did not objectively measure individuals’ absolute levels of knowledge about their medication therapies, it is possible that those who have low levels of actual knowledge might have had the perception that the little knowledge they did possess was sufficient.

The other variables we investigated (medication purchase for a child and involvement with medications) did contribute to the overall prediction of role orientation scores in our regression model (P < 0.05), but to a lesser extent than the other variables already discussed. The results of this study showed that both experientially-based factors and individual traits can influence a patient’s role orientation (expectations) for counseling provided by a pharmacist. While positive experiences with counseling can increase some patients’ role orientation towards it, we also identified a segment of patients for which this strategy might not work. Low need for cognition individuals might resist counseling services because they may not have an intrinsic need to know more about their medications.

Chewning and Schommer(23) tested whether an inexpensive intervention could increase patients’ short-term
knowledge of pharmacist roles related to patient counseling. A total of 355 pharmacy patrons from 19 community pharmacies in Wisconsin participated in the study. Each respondent completed a survey which assessed knowledge of pharmacists’ counseling roles, with the participants in the experimental group receiving a short brochure on pharmacists’ roles to read as they waited for their prescription while a control group did not receive the brochure. The results showed that a significantly greater proportion of experimental group patients than control group patients correctly answered survey questions regarding pharmacist roles and training. Thus, it appears that inexpensive interventions such as pamphlets can increase patients’ short-term knowledge of pharmacists roles. It is unknown if this increase translates into increased expectations of pharmacists, however.

CONCLUDING REMARKS
Many patients lack an understanding about the expanded counseling roles that pharmacists are prepared to provide. Thus, their expectations more likely portray the pharmacist as a supplier of prescription products rather than that of a concerned counselor regarding medications. As one respondent to an interview put it, “If my doctor tells me to drink prune juice and take a prescription drug to help me overcome my ailment, I go to my grocery store on my way home from the doctor’s office to get them. The prune juice is in one section of the store and the prescription is filled in the pharmacy located in another section of the store. I view the prune juice and the prescription as products to pick up as directed by my physician. I really don’t expect to get any advice for the prune juice or the prescription at the store. I just get them and take them like my doctor instructed me.”

Many patients view the pharmacist’s role as one that fits within their overall health care that is directed and controlled by their physician. There is much more work to be done to inform patients about what their pharmacist is capable of doing in the health care system and how pharmacist services can add value to a patient’s health care above and beyond what the patient’s physician can provide alone. Only when a patient is informed about services pharmacists are able to provide and about the fact that these services are not being provided by others will he or she come to have a view of pharmacists that is congruent with how pharmacists are viewing themselves. It might only be then that pharmacy practice can change from a product-oriented to a patient-oriented profession.

Acknowledgment. The author acknowledges Stephen Birdwell, Betty Chewning, William Doucette, Robert Hammel, Candace Haugtvedt, David Kreling, Suzan Kucukarslan, Earlene Lipowski, David Mott, Jeanine Mount, John Murry, Folakemi Odedina, Dev Pathak, Lionel Pinto, Paul Rosowski, Richard Segal, Donald Sullivan, Bonnie Svarstad, Joseph Wiederholt, and Marcia Worley for their research efforts and expertise that directly contributed to this presentation.