RESEARCH ARTICLE

The counter and consultation room work explored in the Netherlands

Mark P. Mobach

Abstract *Objective* To determine the frequency and nature of conversations at the counter and of private consultations at three Dutch community pharmacies. *Methods* In a purposive and convenience sample of three Dutch community pharmacies two work categories were investigated: counter work and consultation room work with self-reporting tally. The study took 6 weeks: 2 weeks at each pharmacy. *Main outcome measure* The number of care related conversations and consultations emerging in the counter work and consultation room work. *Results* About 43% of all counter conversations consisted of the provision of pharmaceutical information and 72% of the consultations in the separate consultation room dealt with care related activities. However, only 18 consultations were held in this latter room: 0.4% of all reported conversations. *Conclusion* The proportion of care related work at the counter and in the consultation room did have significant substance. There are however serious possibilities to change pharmaceutical care for the better. It is suggested that standard procedures at the counter may help increasing care related work. The presence of a separate consultation room may increase the number of consultations held in private, when combined with raising patient awareness of its existence.

Keywords Care related work · Community pharmacy · Consultation room · Counter · Pharmacy organization · The Netherlands

M. P. Mobach (✉)
Faculty of Economics and Business, University of Groningen,
P.O. Box 800, Landleven 5, 9700 AV Groningen,
The Netherlands
e-mail: m.p.mobach@rug.nl

Impact on practice

- Standard procedures at the counter may help increasing care related work
- A separate consultation room may increase the number of consultations held in private, when combined with raising patient awareness of it's existence
- Staff underestimates the number of care-related counter conversations
- Staff overestimates the number of consultations held in private

Introduction

An earlier connected article [1] analyzed the general work at three Dutch pharmacies. It was concluded that although care-related work was a substantial proportion of Dutch community pharmacy practice, more could be done. This article examines the work carried out in the private consultation areas at the same three pharmacies.

Literature review

Counter work

Different studies have investigated the counter work in community pharmacy practice. Some of these results are useful for comparison with the Dutch study. Two studies reported frequencies of care-related activities that ranged from 56.2 to 60% in the U.S. and the U.K. [2, 3]. Other studies reported frequencies that ranged from 2 to 79% of clients receiving prescribed medicines supported by advice [4].

Although it remains hard to compare the studies, the results of two studies [3, 4] do seem to have particular relevance for this current Dutch study. This allows three comparisons to be made. Firstly, a comparison between the Dutch category 'care-related conversations at the counter' and a British literature review [4]. This review is of particular relevance for the Dutch findings because it provides a broad overview on the subject. The review focused upon the frequencies of customers receiving prescribed medicines supported by advice from pharmacists, from assistants, or from unspecified staff. For pharmacists the frequencies ranged from 5 to 79%, for assistants from 2 to 4%, and for unspecified staff from 14 to 33%. Since the reported percentages varied enormously, it was decided to derive a median value as a basis for comparison with the Dutch results. The central tendencies were 42, 3, and 23.5% for pharmacists, assistants, and unspecified staff in the U.K. Consequently, if the Dutch results were to exceed 42% it would suggest a higher rate of advice-giving. Secondly, a comparison was made between the Dutch category 'other conversations at the counter' with the 28.3% of non health-related communication from a British study at ten pharmacies [3]. Thirdly, a comparison was made between the Dutch category 'first-time use' and the 15.2% of the communication for Rx (prescription medicines) new from the same British study [3]. It is therefore concluded that the standards for comparison were 42% for care-related conversations at the counter, 28.3% for other conversations at the counter, and 15.2% for conversations about the first-time use.

Although the studies illuminate the importance of oral information at the counter, this argument must also be put into perspective for three reasons. Firstly, patients do not always remember what has been said or remember it incorrectly [5]. Secondly, pharmacists should combine oral and written information sources in order to provide information to patients successfully [6]. Third, approximately 72% of visitors to Dutch pharmacies return for a repeat of their medicine(s) within 6 months [7]. Even though it is not substantiated with scientific evidence, many of them will know precisely how to take their medicine. Put differently, every customer does not need information every time they visit the pharmacy to collect their prescription.

Consultation room work

Very little is known about the work carried out in consultation rooms. A recent Dutch survey study among 198 Dutch pharmacies has shown that pharmacists say to provide an average of 1.2 consultations in private per working day [8]. The vast majority of respondents provided face-to-face and telephone consultations (94.4 and 91.9%,

respectively) and only a minority gave consultations per e-mail (30.8%). The average number of 1.2 consultations in private per day was relevant for the current findings and used as a standard for comparison with the results of this current Dutch study.

Methods

It was decided to use self-reporting tally for the work measurements at the counter and in the separate consultation room. With the self-reporting technique subjects document their own use of time continuously in a log or a diary [9–11]. Self-reporting tally was found to be the most convenient, efficient, and reliable method for data-collection. Firstly, the frequencies and nature of the content of the communication were central in this study. Secondly, the activities were measured at fixed places (counter, separate consultation room).

In the connected article [1] it was argued that both studies were made in the context of discovery and exemplification. They were designed to stimulate the design of better care practices. Therefore the sample of pharmacies was not randomly obtained: the method of recruitment was purposive and convenient. The three Dutch community pharmacies were selected based on their motivation to participate in the study. Pharmacies 1 and 2 coincidently appeared to be best case practices. Pharmacy 1 had a real separate consultation room, pharmacy 2 only had the regular pharmacist's office, and pharmacy 3 had a multi-functional room with priority for consultation. In order to overcome these differences for the moment, a common definition was introduced. Therefore, the term consultation room refers to a separate room or space where the staff member and the patient have a consultation in private.

The data of this current study were collected during 6 weeks in the spring of 2004. Two weeks at each pharmacy always directly after the 2-weeks study of the general work with the multi-dimensional work sampling (MDWS) technique [1]. The study at counter and consultation room and the study of the general work were staggered in order to avoid mutual influences of the data collection. The machines for MDWS were expected to disturb the measurements at the counter and the consultation room. The methods of measurement at the counter and in the consultation room were the same but were not expected to influence the results because self-report is silent whereas MDWS uses a sound producing machine. There were no mutual disturbances expected because they were also done in different places (counter, separate consultation room). Finally, the counter and consultation room work were related. The consultation in the consultation room was regarded as an extension of the counter conversation.

Consequently, the work studies at the counter and in the consultation room were made in the same period.

After these measurements had been made each individual staff member was asked to estimate the mean number of care-related counter conversations per day and the mean number of consultations in the consultation room per day. These perceptions were compared with the results from this current study. In this case, the observed number of care-related conversations at the counter and the observed number consultations in the consultation room.

Induction for the definitions of work

Various studies have applied related but very different categories of care-related work in the context of community pharmacy practice [2–4, 10–27]. Again, as in the connected article [1], pharmacists themselves gave the definitions based on the principle of induction [28, 29]. Similar to the other study, the definitions were discussed and one was chosen. If a category was present in one pharmacy only, but very relevant for the study, it was included. For instance, the brief medication review was a standard procedure only present at pharmacy 2. All pharmacy staff (repeated) explaining the prescription medication and the way of use with the customer at the counter. This approach resulted in the following definitions:

- *Counter work*: all conversations at the counter.
- *Consultation room work*: all work done in the separate consultation room.

Both work categories comprised the sub categories care-related work and other work. The definition of care-related work was the same as in the related article: the work where at least parts of the work content related to a pharmacotherapeutic consultation. With the other work this was never the case.

For the counter work study, care-related work and other work was divided into 11 elements. The induced definitions of these 11 elements of counter work are presented in Table 1. Lists of the elements were used for the self reporting tally of counter work and after each contact with a patient the staff recorded that nature of the conversation using these lists.

For the consultation room study, care-related work and other work was divided into six elements. The induced definitions of these six elements for the consultation room work are presented in Table 2. Lists of the elements were used for the self reporting tally of consultation room work and after each contact with a patient the staff recorded that nature of the conversation using these lists.

Table 1 Elements comprising counter work

Care related work	
Brief medication review	A quick scan of the prescription medication together with the patient
First-time dispensing	Conversation about first-dispensing of a certain drug
Second-time dispensing	Follow-up conversation about second-dispensing of a certain drug
Instruction	Instruction on patient skills to take medication or to use medical aids, e.g. diabetes injection or COPD inhaler
Medication surveillance history	Conversation about the comparison of new medicine with medication
Medication counseling	Conversation about medication use or optimization of it
Self care	OTC counseling and other conversations about the use of nonprescription medication
Information about disease or lifestyle	Conversation about patients' disease or lifestyle
Other work	
Only social	Conversation about patients' personal situation
Other	All other counter conversations
No information	Only dispensing medicine

Table 2 Elements comprising consultation room work

Care related work	
First time use	Conversation about a first use
Instruction	Instruction on patient skills to take medication or to use medical aids (diabetes injection, COPD inhaler or incontinence products)
Medication counseling	Conversation about medication use or optimization of it
Information about disease	Conversation about patients' disease
Other work	
Only social	Conversation about patients' personal situation
Other	All other conversations in the consultation room

Results

Tables 3 and 5 present the results from each pharmacy, for each element and for counter work and consultation room work as a whole. It all presents the cumulative observed frequencies of the items over 2 weeks, the mean per day, the percentage per item as part of all observed frequencies, and the standard deviation of the mean over the measured period. Tables 4 and 6 also combine the results per pharmacy with the total results for all three pharmacies. It presents the mean per day, the standard deviation of the

mean over the measured period, and the sample size. It distinguishes the perceived from the actual number of counter conversations and consultations in private.

Table 3, the counter work at the pharmacy, shows that 43% (1,882) of the counter conversations were care-related. A total of 57% (2,504) of the observations related other conversations. The results also show that in 53% (2,330) of the counter conversations no information was provided. However, at pharmacy 2, a standard procedure to provide patients with a brief review of their medicines was used in 51% (614) of the counter conversations. The presence of this type of standard procedure was associated with a lower level of 26% (314) of counter conversations in which no information was provided, compared to 55% (849) and 71% (1,167) for pharmacies 1 and 3 respectively that did not train their staff to offer a brief review of the patient's medicines at the counter. Moreover, the category 'other' was also lower at pharmacy 2 (26; 2%) compared to pharmacies 1 (69; 4%) and 3 (49; 3%) respectively also. In contrast, the scores for the category 'first-time use' at pharmacies 1 and 3 were 19% (291) and 15% (242), and higher than the 11% (130) that was observed at pharmacy 2.

Table 4 shows that the mean number of perceived conversations estimated by the staff of the three pharmacies (27) was less than half of the self reported conversations (61). An underestimation of the staff by 34 care-related conversations per day. At pharmacy 2, this difference was the largest (69). At pharmacies 1 and 3 the observed differences were 23 and 19 respectively. Both the standard deviations of the perceived and the actual means are relatively high. This means that there is a large difference of opinion between team members about the number of conversations per day, which is confirmed by the actual numbers. At pharmacy 1 the internal team difference is much higher than the actual situation and at pharmacy 2 it is much lower than the actual situation. At pharmacy 3 both standard deviations are comparable.

Table 5, the consultation room work at the pharmacy, shows that a total of 18 consultations were observed in the consultation rooms of all three pharmacies. A total 13 of the consultations in the consultation room were care-related and five were other consultations. The use of the consultation room was 0.4% of all registered conversations at counter and consultation room (18 out of 4,404).

Table 6, the perceived and actual number of consultations in separation, shows that the perceived number of consultations (2.6) is more than four times higher than the actual ones (0.6). Even though the absolute numbers are relatively low, it is an overestimation of the staff by two consultations per day. At pharmacy 1, this difference was the largest (4.3). At pharmacies 2 and 3 the observed differences were 4.2 and 0.4 respectively. There were again differences of opinion between team members about the number of consultations per day, which is reflected in the standard deviations. At all pharmacies the internal team differences were higher than the actual situation.

Discussion

The results support the idea that the factors that facilitate pharmaceutical care in Dutch pharmacy practice have lead

Table 3 Counter work at the pharmacies

Items	Cases															
	Pharmacy 1				Pharmacy 2				Pharmacy 3				Total			
Measures:	Σ	μ	%	σ	Σ	μ	%	σ	Σ	μ	%	σ	Σ	μ	%	σ
Brief medication review	0	0.0	0	0.0	614	61.4	51	17.8	0	0.0	0	0.0	614	0.0	14	354.5
First time use	291	27.5	19	13.5	130	13	11	7.6	242	24.2	15	8.2	663	186.8	15	82.5
Second time use	16	1.5	1	1.8	21	2.1	2	1.4	6	0.6	0	1.0	43	7.8	1	7.6
Instruction	28	2.6	2	2.9	6	0.6	1	1.0	12	1.2	1	0.8	46	14.2	1	11.4
Medication surveillance	16	1.5	1	1.6	2	0.2	0	0.4	6	0.6	0	0.7	24	7.8	1	7.2
Medication counseling	64	6.0	4	5.4	10	1	1	1.1	57	5.7	3	2.5	131	42.3	3	29.4
Self care	161	15.2	10	5.9	68	6.8	6	3.9	91	9.1	5	2.8	320	89.1	7	48.4
Information about disease or lifestyle	26	2.5	2	2.6	4	0.4	0	1.0	11	1.1	1	0.7	41	13.2	1	11.2
Subtotal care related conversations	602	56.8	39	26.9	855	85.5	71	25.8	425	42.5	26	11.3	1,882	361.3	43	216.1
Only social	14	1.3	1	1.1	2	0.2	0	0.4	14	1.4	1	1.5	30	9.8	1	6.9
Other	69	6.5	4	4.6	26	2.6	2	2.2	49	4.9	3	3.0	144	41.5	3	21.5
No information	849	80.1	55	31.5	314	31.4	26	12.9	1,167	116.7	71	15.2	2,330	698.7	53	431.1
Subtotal other conversations	932	87.9	61	33.6	342	34.2	29	13.8	1,230	123.0	74	15.4	2,504	750.0	57	451.9
Total conversations	1,534	144.7	100	58.4	1,197	119.7	100	25.9	1,655	165.5	100	17.0	4,386	1,111.2	100	237.3

Table 4 Perceived and actual care-related counter conversations

Items	Cases											
	Pharmacy 1			Pharmacy 2			Pharmacy 3			Total		
Measures:	μ	σ	N	μ	σ	N	μ	σ	N	μ	σ	N
Perceived care-related counter conversations per day (staff query)	37.1	43.0	22	15.9	8.8	14	23.1	11.6	15	27.1	29.8	51
Actual care-related counter conversations per day (self report)	56.8	20.2	1,534	85.5	25.8	1,197	42.5	11.4	1,655	61.5	26.4	4,386

Table 5 Consultation room work at the pharmacies with self-reporting tally

Items	Cases															
	Pharmacy 1				Pharmacy 2				Pharmacy 3				Total			
Measures:	Σ	μ	%	σ	Σ	μ	%	σ	Σ	μ	%	σ	Σ	μ	%	σ
First time use	2	0.2	22	0.4	0	0	0	0	0	0	0	0.0	2	0.7	11	1.2
Instruction	7	0.7	78	1.2	0	0	0	0	3	0.3	33	0.5	10	3.3	56	3.5
Medication counseling	0	0.0	0	0.0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0
Information about disease	0	0.0	0	0.0	0	0	0	0	1	0.1	11	0.3	1	0.3	6	0.6
Subtotal care related consultations	9	0.9	100	1.4	0	0	0	0	4	0.4	44	0.7	13	4.3	72	4.5
Only social	0	0.0	0	0.0	0	0	0	0	1	0.1	11	0.3	1	0.3	6	0.6
Other	0	0.0	0	0.0	0	0	0	0	4	0.4	44	0.7	4	1.3	22	2.3
Subtotal other consultations	0	0.0	0	0.4	0	0	0	0	5	0.5	56	1.0	5	1.7	28	2.9
Total consultations	9	0.9	100	1.4	0	0	0	0	9	0.9	100	1.1	18	6.0	100	5.2

Table 6 Perceived and actual number of consultations in separation

Items	Cases											
	Pharmacy 1			Pharmacy 2			Pharmacy 3			Total		
Measures:	μ	σ	N	μ	σ	N	μ	σ	N	μ	σ	N
Perceived day frequency (staff query)	5.2	4.6	22	4.2	2.8	14	1.3	1.5	15	2.6	3.8	51
Actual day frequency (self report)	0.9	1.5	9	0	0	0	0.9	1.1	9	0.6	1.1	18

to a substantial proportion of the work carried out at the counter being care-related, but that this association is not reflected in the utilization of consultation rooms. Moreover, the staff appear to underestimate the number of care-related counter conversations and to overestimate the number of consultations held in private.

Counter work

Three standards were used to compare the Dutch counter work with the international situation. Firstly, the observed 43% of the Dutch care-related conversations at the counter was remarkably similar to the 42% of the customers that received prescribed medicines supported by advice that was derived from the U.K. study [3]. This may be regarded as a good result, even though the communication at the counter is just a part of all communication and must not be overestimated [5–7]. It is worth mentioning that the observed frequency of 71% at pharmacy 2 is even better and close to the absolute highest reported frequency of 79% in the U.K. study. Secondly, the results of 57% for the Dutch category 'other conversations' is much higher than the 28.3% of non health-related communication in the U.K. [3]. Finally, the observed 15% first-time use in the Netherlands is almost the same as the 15.2% of the communication for Rx new in the U.K. [3].

Even though international comparisons are fraught with difficulty, on one hand this may be regarded as a positive result. In an international context Dutch pharmacies do seem to perform rather well. All three pharmacies performed even better than their own staff had expected; they largely underestimated the actual number of care-related counter conversations. On the other hand, it can also be counter-argued that although 43% of the counter work is care-related, 53% of all patients seem to leave the

pharmacy without any information and only 0.4% of all counter contacts results in a conversation in the consultation room. Work that was directly related to patient care did not compromise the majority of the work done by the staff. How can this situation be improved?

Firstly, the use of a standard procedure to provide a brief discussion of the patient's medications appeared to increase the extent to which conversations with significant information content took place at the counter. The situation at pharmacy 2 suggests that the frequency in the provision of information can be improved substantially with standard procedures, in this case for reviewing the dispensed medication briefly. In this procedure all pharmacy staff were obliged (to repeat) explaining the prescription medication and the way of use with the customer at the counter. In this case the brief medication review was performed at 51% of all counter contacts. This procedure at pharmacy 2 led to substantial differences in the observations in the category 'no information': 55, 26, and 71% for pharmacies 1, 2, and 3 respectively.

Secondly, the general work study [1] also showed that counter work is only 11% of the total work. With so few opportunities it is clearly important to make the most of the contact with the patient. Raising the awareness of the pharmacy staff of the potential of these moments may help to improve the provision of care still further. The qualified staff should not only ensure that the procedures and facilities of the pharmacy enable the provision of information, such as with a good counter design [30] and a consultation room [8], but also act at the appropriate time to provide care. This may sometimes be very hard to assess. Other patients waiting and listening in with a counter conversation combined with the sensitivity and embarrassment of patients and staff members can seriously hinder a planned change process from solely dispensing to providing pharmaceutical care. Pharmacy staff may need to be trained to be sensitive in such situations and to understand that they can act as a barrier to the provision of pharmaceutical care.

Consultation room work

Lastly, the results of the consultation room work comprising 18 observations or 0.6 per working day is half of what was expected from literature. In terms of the quantity of care that can be delivered, counter work would seem to offer many more possibilities and be more likely to repay an investment in staff development than focussing on the consultation room. There is however no evidence either way about the patient's awareness or lack of, regarding the consultation rooms. It may be as much a matter of the procedures and approach to patient care in which staff has

been trained that determines the utilization of these facilities.

A recent Dutch study suggests that pharmacists provide an average of 1.2 consultations in private per working day [8]. In this current study that would correspond with approximately 36.7 consultations. However, the Dutch study was a survey measuring estimated numbers, not actual ones, which may explain the observed differences. The current results have confirmed this assumption. The perceived number of consultations in private was much more positive than reality. A difference of two consultations per day. The measurements in the consultation room showed that only 18 patients were taken apart in 6 weeks at three pharmacies. Most patients may not even know that there is a possibility to have a consultation. It is striking to see that pharmacies 1 and 3 were responsible for all 18 consultations, especially if it is compared with the physical environment. Pharmacy 1 had a real consultation room, pharmacy 3 had a multi-functional room with priority for consultation, and pharmacy 2 only had the regular pharmacist's office. It suggests that a room or a multi-functional room with strict priority rules for consultation may have positive effects on the number of consultations held. At pharmacy 2 staff members may not have been so comfortable with consultations in the pharmacist's office. Future research should assess if this suggestion is correct, but also if new interior designs can create the right atmosphere for pharmaceutical care or if new privacy oriented counter designs can make a consultation room redundant. Currently, experiments are taking place in The Netherlands to design and evaluate a counter that also provides privacy to see if it is attractive to patients and staff and if, as a result, more care-related conversations take place [31].

Limitations

The main limitation is that this is a small quantitative study and that while some speculation about the relationship between the proportion of counter conversations and the utilization of consultation rooms can be done [1], the study raises possibilities that need to be assessed in other studies. There are however some difficulties with the international comparison. Firstly, non-prescription medicines are sold in pharmacies and specialized retail outlets, so-called 'drogisterijen', in The Netherlands, which may not be the case in other countries. For instance, in the U.K. these medicines are sold in pharmacies and supermarkets. Secondly, there was no difference made in the data collection among staff with different levels of qualification. Finally, activity in pharmacies may also be affected by the differences in national policies and strategies of the Health Services.

Each of these could be expected to alter patient attitudes and behavior towards pharmacies and affect the results and conclusions.

Conclusion

Although care-related work is vividly present at Dutch pharmacies, counter work and consultation room work still needs serious attention of the pharmacists in order to advance pharmaceutical care. It is suggested that standard procedures at the counter may help increasing care related work. The presence of a consultation room may increase the number of consultations held in private, when combined with raising patient awareness of its existence. New studies should illuminate to what extent this situation is actually present in the population of Dutch community pharmacy practice or in other countries. New experiments could reveal if these procedures and consultation rooms actually generate positive results in terms of care-related activities.

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