

Which Pharmaceutical Sales Representatives' Features do Slovenian Family Physicians Value?

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ABSTRACT

Introduction: One of the key strategies for marketing new drugs to physicians is personal selling by pharmaceutical sales representatives (PSRs). **Goal:** The aim of this study was to determine which features of PSR's are most valued by Slovenian family physicians (FPs). **Methods:** We performed a cross-sectional observational postal survey in FPs. We sent the invitation for cooperation in the study to all Slovenian FPs working in family

practices at the primary level of care (N = 895). Data was collected using a validated PSRs' assessment scale. It consists of 12 questions on PSRs' assessment that could be answered on a seven-point Likert scale. **Results:** The response rate was 27.6%. There were 174 (70.4%) of female physicians among the respondents. Average age of the respondents was 48.3 ± 9.0 years. Highly assessed PSRs' characteristics were "Provides objective product information", "Does not mislead", and "Shows good knowledge on

the subject promoted". Worst rated PSRs' characteristics were "Possesses knowledge on health care system", "Same person for the product of company for a longer period of time", and "Acts friendly". **Conclusions:** Slovenian FPs value PSRs' selling and communication skills and trustworthiness highly. FPs and PSRs develop a personal relationship which reflects in different perceptions of various PSRs' characteristics by FPs.

Key words: family practice, pharmacy, cross-sectional study.

1. INTRODUCTION

Pharmaceutical companies use a number of marketing strategies to promote their products (1, 2). One of the key strategies for marketing new drugs to physicians is personal selling by pharmaceutical sales representatives (PSRs) which seems to be the most powerful marketing tool of pharmaceutical companies (3).

Family physicians (FPs) are frequently visited by PSRs (4, 5). The most important roles of PSR' are to educate physicians about the company's drug and to convince the physician of the added values of a given product (6). However, the FPs themselves believe that PSRs' visits are beneficial to their own practice and to patient care, they trust the information received from PSRs and feel that they are able to evaluate information provided by PSRs in order not to be negatively affected in their prescribing patterns (7).

FPs are, in general, fond of PSRs' visits (2) as they think that PSRs bring information about new drugs quickly, are convenient and accessible, and can be consulted with a saving of time and effort (8, 9). But, as studies indicate, PSRs' visits

can change physicians' prescribing patterns (10) and even augment irrational prescribing and rise prescribing costs (11). Furthermore, the credibility and social characteristics of the PSRs are instrumental in shaping FPs' perceptions of PSRs as legitimate information providers (8).

The overall physicians' perception of the PSRs is based on three major elements: the perception of pharmaceutical corporation PSRs work for, perceived PSRs' values and perceived PSRs' personal characteristics. Among perceived values, ethical behavior, honesty and trustworthiness are the most important components of the physicians' overall perception of the PSRs. Among perceived personal characteristics, similarity in views and personal attractiveness are important (12).

Physicians were shown to be more satisfied with PSRs who have good informative and scientific traits, express empathy and are reliable and responsible (6). It can be expected that physician will perceive positively those PSRs who exhibit a high degree of honesty, are trustworthy, ethical, physically attractive and express congeniality and similarity (12).

A Slovenian study from 2011 (13) showed three groups of PSRs' characteristics that were valued by FPs: selling skills, communication skills, and sense of trustworthiness. The first three most important characteristics, as rated by the FPs, were "Shows good knowledge on the promoted subject", "Provides objective product information", and "Makes brief and exact visits".

2. GOAL

The aim of this study was to determine which features of PSR's are most valued by Slovenian family physicians.

3. METHODS

We performed a cross-sectional observational postal survey in Slovenian FPs in October 2011. Detailed methodology is described elsewhere (14). We obtained an ethical approval from the National Ethical Board (No. 81/03/11). We sent the invitation for cooperation in the study to all Slovenian FPs working in family practices at the primary level of care (N = 895) (15). We inserted a letter of invitation from the president of Slovenian Family Medicine Society and a questionnaire. It consisted of a previously vali-

dated PSRs' assessment scale (13). This scale consists of 12 questions on PSRs' assessment that could be answered on a seven-point Likert scale (ranges from 1 – not important to 7 – very important). Minimum composite score of this scale is 12 points and maximum is 84 points. The scale consists of three subscales: the selling skills scale (ranges from 5 to 35 points), the communication skills scale (ranges from 3 to 21 points) and the trustworthiness scale (ranges from 4 to 28 points). The questionnaire also consisted of demographic questions.

Data were entered into the computer programme and analyzed with SPSS 19.0 package (SPSS Inc, Chicago, IL). Descriptive statistics were computed. For the bivariate analyses, we used independent t-test, and Spearman correlation test. We regarded $p < 0.05$ as statistically significant.

4. RESULTS

We received 247 questionnaires, which gave us the response rate of 27.6%. There were 174 (70.4%) of female physicians among the respondents. Most of the respondents were specialists of family medicine (192, 77.7%), others were family medicine residents (23, 9.3%) and specialists of other specialties (3, 1.2%). 28 (11.3%) respondents did not have a specialization. Most of the respondents (157, 63.6%) were employed by public sector and others were family physicians with concession (90, 36.4%). There were 109 (44.1%) family physicians working in central region of Slovenia, 78 (31.6%) in eastern region and 57 (23.1%) in western region (Table 1). Mean composite score of PSRs' assessment scale was 70.0 ± 7.7 points, of selling skills 26.3 ± 4.5 points, of communication skills 17.8 ± 2.7 points and of trustworthiness 25.9 ± 2.2 points. Highly assessed PSRs' characteristics were "Provides objective product information", "Does not mislead", and "Shows good knowledge on the subject promoted". Worst rated PSRs' characteristics were "Possesses knowledge on health care system", "Same person for the product of company for a longer period of time", and "Acts friendly" (Table 2).

In general, female family physicians assessed PSRs' characteristics higher when compared to the male ones. Some PSRs' characteristics were also assessed higher by FPs working in central region

Characteristic	Mean	Standard deviation
Age	48.3	9.0
Years of working in practice	21.8	9.2
Number of residents in practice catchment area	128,469	136,513
Number of patients on practice list	1,907	455
Number of contacts with patients in last month	835	297
Number of congresses sponsored by pharmaceutical companies attended by family physician in last year	2.1	2.7
Number of lectures sponsored by pharmaceutical companies attended by family physician	3.8	4.1
Number of PSRs' visits to a single practice in last 5 days	4.0	2.4

Table 1. Demographic characteristics of the respondents

Characteristic	Mean \pm SD ²	% of FPs ³ with answer 6 or 7 on the seven-point Likert scale
Provides objective product information	6.6 ± 0.7	91.9
Does not mislead	6.6 ± 0.7	92.3
Shows good knowledge on the subject promoted	6.4 ± 0.9	86.2
Makes brief visits	6.3 ± 0.9	81.0
Does not act too pushy	6.3 ± 1.0	81.8
Adapts to time limitations of FPs ³	5.8 ± 1.2	61.5
Does not appear too often	5.6 ± 1.4	59.5
Acts correctly	5.5 ± 1.1	51.4
Regards FPs ³ problems, complaints, proposals	5.4 ± 1.2	50.2
Possesses knowledge on health care system	5.4 ± 1.2	48.2
Same person for the product of company for a longer period of time	4.8 ± 1.6	40.1
Acts friendly	5.2 ± 1.2	38.5

Table 2. PSRs¹ assessment by family physicians. 1 pharmaceutical sales representatives. 2 standard deviation. 3 family physicians

of Slovenia, by FPs with lower number of patients on the lists and by FPs visited more often by PSRs (Table 3). FPs that participated at lectures sponsored by pharmaceutical companies assessed PSRs better when compared to others in means of knowledge (6.6 ± 0.6 vs. 6.3 ± 1.0 , $p = 0.030$) and worse in means of acting not too pushy (6.1 ± 1.0 vs. 6.4 ± 0.9 , $p = 0.006$). FPs working in public health care centres assessed PSRs better when compared to their colleagues – private contractors in means of knowledge (6.5 ± 0.7 vs. 6.2 ± 1.1 , $p = 0.018$). FPs working in region with lesser inhabitants appreciated more to be visited by the same person for the product of company for a longer period of time ($r = -0.199$, $p = 0.003$). No significant differences were found regarding other variables.

5. DISCUSSION

Slovenian FPs value PSRs' characteristics highly. Selling and communication skills and trustworthiness highly. Sense of trustworthiness is a group of PSRs' characteristics that Slovenian FPs value the most and selling skills is the group that they value the least. Trustworthiness was recognized as the most valuable set of

characteristics also in our previous study (13) and in some foreign studies (6, 12). Also, selling skills were recognized less important, same as in our previous study (13). These results may indicate that physicians, when visited by PSRs, focus on trust and objectivity of information regardless of the selling skills PSRs poses. However, this might also indicate that FPs blindly trust the information provided by PSRs even though they claim they are able to recognize the biased information and are able to judge them independently (4, 7). As previous studies showed, information provided to FPs by PSRs is often the only source of presumably professional information on new drugs and studies on drugs (4, 16) and therefore our finding that they appreciated those characteristics at most did not come as a surprise. It seems that high appreciation of PSRs' trustworthiness leads to a misunderstanding of trustworthiness to the drugs promoted and therefore to the higher prescribing rates which is actually the aim of PSRs' marketing skills (17). Ethics seems to be one of the most valuable PSRs' characteristic as perceived by physicians (12). Also, FPs are aware of potential ethical dilemmas that

Characteristic	Male vs. female		Central region (yes vs. no)		Number of registered patients per practice		Number of PSRs ¹ visits in last 5 days	
	Mean ± SD ³	p	Mean ± SD ³	p	r	p	r	p
Shows good knowledge on the subject promoted	6.1 ± 1.2 vs. 6.5 ± 0.7	0.003	6.5 ± 0.9 vs. 6.4 ± 0.8	0.177	0.001	0.791	-0.020	0.754
Makes brief visits	6.2 ± 0.9 vs. 6.3 ± 0.9	0.866	6.4 ± 0.8 vs. 6.1 ± 1.0	0.044	-0.140	0.028	0.081	0.209
Provides objective product information	6.4 ± 0.9 vs. 6.7 ± 0.6	0.006	6.7 ± 0.6 vs. 6.5 ± 0.8	0.046	-0.058	0.368	0.069	0.286
Does not mislead	6.3 ± 0.9 vs. 6.8 ± 0.5	< 0.001	6.7 ± 0.6 vs. 6.4 ± 0.7	0.181	-0.046	0.475	-0.017	0.786
Does not act too pushy	6.2 ± 1.0 vs. 6.4 ± 0.9	0.173	6.4 ± 0.9 vs. 6.3 ± 1.0	0.412	-0.187	0.003	0.139	0.030
Adapts to time limitations of FPs ²	5.8 ± 1.2 vs. 5.8 ± 1.1	0.909	5.8 ± 1.2 vs. 5.9 ± 1.1	0.393	-0.095	0.137	0.221	0.001
Regards FPs ² problems, complaints, proposals	5.4 ± 1.3 vs. 5.4 ± 1.1	0.673	5.3 ± 1.2 vs. 5.5 ± 1.1	0.096	-0.018	0.780	0.148	0.021
Acts friendly	5.3 ± 1.3 vs. 5.2 ± 1.1	0.707	5.1 ± 1.1 vs. 5.3 ± 1.3	0.375	-0.099	0.122	0.062	0.337
Possesses knowledge on health care system	5.2 ± 1.4 vs. 5.4 ± 1.1	0.104	5.2 ± 1.3 vs. 5.5 ± 1.2	0.160	-0.098	0.127	0.011	0.871
Acts correctly	5.3 ± 1.3 vs. 5.6 ± 1.1	0.051	5.6 ± 1.1 vs. 5.4 ± 1.1	0.415	-0.097	0.129	0.028	0.667
Does not appear too often	5.5 ± 1.6 vs. 5.7 ± 1.2	0.335	5.7 ± 1.4 vs. 5.6 ± 1.4	0.491	-0.090	0.162	0.150	0.019
Same person for the product of company for a longer period of time	4.9 ± 1.6 vs. 4.8 ± 1.7	0.745	4.6 ± 1.7 vs. 5.1 ± 1.6	0.014	0.177	0.066	0.208	0.001
Selling skills	25.9 ± 5.0 vs. 26.4 ± 4.2	0.394	25.7 ± 4.4 vs. 26.7 ± 4.5	0.095	-0.040	0.533	0.149	0.021
Communication skills	17.5 ± 3.2 vs. 17.9 ± 2.5	0.283	17.8 ± 2.6 vs. 17.7 ± 2.8	0.785	-0.515	0.018	0.217	0.001
Trustworthiness	25.1 ± 3.0 vs. 26.3 ± 1.7	0.002	26.3 ± 1.9 vs. 25.6 ± 2.4	0.017	-0.091	0.156	0.046	0.480
SUM	68.4 ± 9.3 vs. 70.6 ± 6.8	0.081	69.9 ± 7.2 vs. 70.0 ± 8.1	0.862	-0.105	0.103	0.180	0.005

Table 3. Bivariate associations between PSRs' characteristics and characteristics of FPs² and practices. 1 pharmaceutical sales representatives. 2 family physicians. 3 standard deviation

may arise from their relationship with PSR (18). However, FPs should be careful when assessing PSRs' trustworthiness without paying attention to their selling skills. As physicians' perceptions depict, such traits as scientific and informative skills, empathy, responsiveness and reliability, reflecting a selling approach of a relational type, appear to be enablers of a much desired effect in pharmaceutical marketing, i.e., the physician satisfaction, with all its favorable repercussions upon detailer performance (6).

As in our previous study (13), female physicians regarded PSRs' trustworthiness to be more important in comparison to male physicians. This is similar as in a German study where female FPs appreciated information provided by PSRs at most (4). Our study also found that other demographic and professional characteristics might have affected the PSRs' perception but no clear pattern was observed. For example, selling and communication skills and total score of the questionnaire were positively associated with more frequent PSRs' visits to FPs. This might indirectly indicate that those FPs who perceive PSRs higher accept their visits more often, i.e. are more satisfied with them (6). However, larger studies should be employed to find out whether such associations are not random.

This study has several limitations, which need to be addressed. The first one is the low response rate, which could at-

tribute to the selection bias. Also, postal surveys are known to give low response rate but are despite of that able to provide trustful information (19). Therefore we could regard the results of this study as a fair snapshot of current situation but should also interpret them with caution. Another limitation lies in the self-reporting of data by FPs which could also be a source of potential bias.

6. CONCLUSIONS

This is one of rare studies in Slovenia and in other countries to provide insight into subjective perceptions of PSRs by FPs. It seems that FPs and PSRs develop a personal relationship which reflects in different perceptions of various PSRs' characteristics by FPs. Further studies are needed to determine the nature of such relationship, to determine clear pattern of associations with demographic and other FPs' characteristics, and to determine the effect of such perceptions on PSRs' selling abilities and success.

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