Physician Response to "By-the-Way" Syndrome in Primary Care

Pierre-Yves Rodondi, MD[1], Julia Maillefer, MA[1], Francesca Suardi, MA[1], Nicolas Rodondi, MD, MAS[1], Jacques Cornuz, MD, MPH[1], and Marco Vannotti, MD[2]

[1]Department of Ambulatory Care and Community Medicine, University of Lausanne, Lausanne, Switzerland; [2]Department of Psychiatry, University of Lausanne, Lausanne, Switzerland.

BACKGROUND/OBJECTIVE: "By-the-way" syndrome, a new problem raised by the patient at an encounter's closure, is common, but little is known about how physicians respond when it occurs. We analyzed the content of the syndrome, predictors of its appearance, and the physician response.

DESIGN/PARTICIPANTS: Cross-sectional study of 92 videotaped encounters in an academic primary care clinic.

RESULTS: The syndrome occurred in 39.1% of observed encounters. Its major content was bio-psychosocial (39%), psychosocial (36%), or biomedical (25%), whereas physician responses were mostly biomedical (44%). The physician response was concordant with the patient's question in 61% of encounters if the content of the question was psychosocial, 21% if bio-psychosocial, and 78% if biomedical; 32% of physicians solicited the patient's agenda two times or more in the group without, versus 11% in the group with, the syndrome (P=0.02). In 22% of the encounters, physicians did not give any answer to the patient's question, particularly (38.5%) if it was of psychosocial content.

CONCLUSIONS: "By-the-way" syndrome is mainly bio-psychosocial or psychosocial in content, whereas the physician response is usually biomedical. Asking about the patient's agenda twice or more during the office visit might decrease the appearance of this syndrome.

KEY WORDS: communication skills; primary care; doctor-patient relationship; physician questions; psychosocial.
J Gen Intern Med 24(6):739–41
DOI: 10.1007/s11606-009-0980-2

INTRODUCTION

Exploring all of a patient's requests during a medical encounter is a difficult task. Physicians tend to focus on the immediate biomedical problem and often forget to ask their patients if they would like to discuss other concerns.[1,2] A study evaluating 264 medical encounters found that in 24%, physicians did not question patients about their present concerns, while in 47%, the doctor only inquired once at the beginning of the visit.[3] The question "Do you have any other worries today?" often appears very late in the encounter;[4] however, patients usually have more than one concern per visit.[5]

In some medical visits, it is the patient who raises a new problem at the end of the visit. This "by-the-way" syndrome has been shown to occur in 21% of encounters [4] and has been described to be emotionally charged.[6] Studies have shown that this syndrome can be prevented or reduced [2–4,10] by soliciting a patient's agenda as openly as possible during the medical visit [9] or by using a patient-centered approach that facilitates the revelation of a patient's whole agenda.[6–8] We know of no studies that examined the biomedical or psychosocial content of the question(s) asked by the patient at the end of the encounter and the physician's response. The aim of this study was to assess the content of the "by-the-way" syndrome by classifying patients' preoccupations as biomedical, psychosocial, or bio-psychosocial, to evaluate physicians' responses to these questions, and to determine whether the occurrence of this syndrome decreases if physicians give their patients more opportunities during the encounter to voice their concerns.

METHODS

This cross-sectional study used 92 primary care encounters videotaped from 2004 to 2006 at the University Outpatient Clinic of Lausanne, Switzerland, where physicians complete their postgraduate training in general internal medicine. These videotapes were selected from 120 randomly videotaped primary care non-emergency follow-up visits. Patients had to be French-speaking and free of serious mental illness. To avoid altering the physician-patient interaction, both were blinded to the specific aims of the study. This study was approved by the ethical committee of the University of Lausanne, and all participants provided written informed consent.

All encounters were analyzed independently by two investigators, and both agreed on the presence of "by-the-way" syndrome for most of the videotaped encounters (kappa= 0.76, P<0.001). The videotapes of six encounters in which there was disagreement were examined by a third investigator and a decision made based on consensus. In the encounters with "by-the-way" syndrome, the patient's question and the physician's response were transcribed and categorized by their content independently by both investigators. They were then categorized by a tri-modal typology adapted from Peltenburg[11] as biomedical (medical histories, symptoms, and physical condition), psychosocial (stress, emotions, values, and beliefs),

Previous presentation: *Preliminary data were presented at the 2006 meeting of the Society of General Internal Medicine in Los Angeles as an oral presentation.*
Received August 18, 2008
Revised February 25, 2009
Accepted March 30, 2009
Published online April 24, 2009

or bio-psychosocial (mix of biomedical and psychosocial). If the physician did not answer the patient's question, it was coded as "no answer." The inter-coder agreement was high for both content and response (kappa=0.94, $P<0.0001$; kappa=0.95, $P<0.0001$, respectively). The presence of the physician question "What else?" was also sought for all encounters. In visits where "by-the-way" syndrome was identified, the time from the beginning of the visit to the moment the patient asked the question was measured.

A bivariate statistical analysis using chi-square tests and Mann-Whitney rank sum tests was used to examine the differences between the groups with and without "by-the-way" syndrome.

RESULTS

"By-the-way" syndrome occurred in 39% (36/92) of encounters (Table 1). The age range of the 92 patients from our video sample was 17 to 90 years (mean age 53.5±18.8 years). Of the 44 physicians that were part of the video sample, approximately half were women (mean age 32.1±3.5 years). There was no statistical difference in mean age between those with the syndrome and those without it. Gender ratio did not differ between the two groups for patients and physicians. After adjusting for patients' and physicians' age and gender, the visits with the syndrome had a significantly increased duration compared to those without (26.14 versus 33.55 min; $P=0.006$).

Patients' questions were mostly either bio-psychosocial or psychosocial (Table 2). The content of the answer was mostly biomedical (44%). Physicians' answers were concordant with patients' questions in 61% of encounters if the content of the question was psychosocial, 21% if it was bio-psychosocial, and 78% if it was biomedical. For example, in one videotape the patient tells his physician that he is worried that his HIV test result might be positive. The doctor answers that it is necessary to be prepared for a potentially positive HIV test result. She adds, however, that she will not deliver the result of his test by phone and briefly explains why she is recommending HIV testing. This case illustrates the potential gap between a patient's anxiety and the biomedical response of the physician as fear concerning the potentially HIV-positive test result is not discussed. In 22% of encounters, physicians did not answer the patient's question, particularly if the question was of psychosocial content (38.5%).

Physicians solicited the patient's agenda at the beginning and during the encounter more often in the group without the syndrome (32%) compared to those with it (11%; $P=0.02$). However, there was no statistical difference if the question was asked at the opening of the medical visit (42.9% and 30.6%, respectively; $P=0.24$) or during it (51.89% and 47.2%, respectively; $P=0.67$). In the group without the syndrome, questions mainly consisted of "What else?" and "Do you have more concerns?," whereas the most common question in the other group was "How are you?"

Table 1. Patient and Physician Characteristics

	No BTWS*, n=56 (60.9%)	With BTWS, n=36 (39.1%)	P†
Patient age	51.3±18	57±19.8	0.16
Patient gender-male	66.1% (37)	47.2% (17)	0.07
Physician age	31.6±2.3	33.1±4	0.043
Physician gender-male	48.2% (27)	47.2% (17)	0.92
Adjusted duration of visits‡	26.14±12.26	33.55±12.34	0.006

Results are reported as mean ± SD or % (n)
**BTWS, "by-the-way" syndrome*
†*T-test for continuous variables and chi-square test for categorical variables*
‡*Adjusted for patient and physician age and sex (minutes)*

Table 2. Content of the "By-the-Way" Syndrome (n=36)

	Content of the physician's response			
Content of the patient's question	Psychosocial 22% (8)	Bio-psychosocial 11% (4)	Biomedical 44% (16)	No answer 22% (8)
Psychosocial 36% (13)	61% (8)	0	0	38.5% (5)
Bio-psychosocial 39% (14)	0	21% (3)	64.3% (9)	14.3% (2)
Biomedical 25% (9)	0	11.1% (1)	77.8% (7)	11.1% (1)

Results are reported as % (n)

DISCUSSION

In this study, we found that the content of patients' questions at the end of the encounter was mainly of bio-psychosocial or psychosocial content. Physicians did not respond to 22% of the questions asked by the patient, and when they did, the content was mostly biomedical.

Discrepancies between the content of patients' questions and physicians' responses may be related to several factors. The lack of time at the end of the consultation is likely a potential explanation. To have time to give an adequate response, one solution may be to give the patient the opportunity to talk earlier about his/her agenda. Also, physicians usually choose to give a short biomedical response instead of a more complex answer that would include psychological or emotional elements. This type of response may be frustrating for patients. Another explanation is limited exposure of physicians to communication skills training; most continuing medical education programs focus on the technical and biomedical aspects of health care.[12] In our study, the absence of an answer from the physician was mostly linked to a psychosocial question, which might be explained by limited training in the psychosocial aspects of consultations.

Marvel[3] found that physicians solicited patients' agendas at least once in 75% of encounters, which is close to the 64% found in our study. As suggested in the same study,[3] soliciting the patient agenda decreases the risk of "by-the-way" syndrome. This is consistent with our results showing that a patient's agenda had to be solicited twice (at the beginning and during the encounter) to decrease the appearance of "by-the-way" syndrome. Soliciting it only once, at any moment of the visit, did not affect its rate of appearance.

The duration of the consultation seems to play a role. Our results indicate that increasing the length of consultation did not necessarily decrease the occurrence of the syndrome. This suggests that increasing the length of the medical visit will not necessarily avoid the appearance of this phenomenon. Perhaps, it is the fact that as the visit is coming to an end, the patient dares to ask his/her question. Because physicians' time is limited, it remains certainly more important to prioritize the patient's medical problems and negotiate which issues should be discussed that day rather than lengthening the encounter. It will then be easier to interrupt the patient and return him/her to the established agenda for that visit.[8] Soliciting a patient's agenda several times during the consultation may not be sufficient; the way the question is asked might play a role. In our study, using the question "What else?" seemed to be more effective than "How are you?" for establishing the agenda. Also, open questions such as "Is there something else you would like to address?" instead of closed ones (e.g., "Any other concerns?") seems to be better at capturing the patient's agenda.[13,14]

Our study has several limitations. First, we did not code non-verbal behavior, such as posture or facial expression. Second, our sample size was small, and some differences, such as solicitation of the agenda at the opening, might have reached statistical significance with the inclusion of more participants. Finally, we did not have information about patients' satisfaction and how much importance the patient placed on the question asked.

In conclusion, our study shows the discrepancy between the bio-psychosocial or psychosocial content of the patient question at the end of encounter and the usually biomedical response of the physician. Although the syndrome is not always avoidable and a problem raised at the end of a visit may be better than not mentioning it at all, asking about a patient's agenda during the office visit might decrease the appearance of this syndrome. The concluding moments of a visit is not the place to start the consultation again; nonetheless, physicians should validate the importance of the question raised by the patient at that time and suggest that, unless the problem is an emergency, it will be addressed during the next encounter. As this study is based on French-speaking videotaped encounters, it confirms that "by-the-way" syndrome occurs in another language than English. Additional cross-cultural research is needed to assess how frequently it shows up in other cultures and languages. Additional studies should also be performed to explore the importance the patient places on the question asked at the end of the visit. Educational interventions should be developed to help physicians offer more appropriate responses to "by-the-way" syndrome.

Acknowledgments: *Funding: the salaries of Pierre-Yves Rodondi and Julia Maillefer for this study were paid by the Department of Ambulatory Care and Community Medicine, University of Lausanne, Switzerland. We thank Dr. Vanessa de Bosset Sulzer for her careful reading of the manuscript.*

Conflict of Interest: *None disclosed.*

Corresponding Author: *Pierre-Yves Rodondi, MD; Department of Ambulatory Care and Community Medicine, University of Lausanne, Lausanne, Switzerland (e-mail: pierre-yves.rodondi@hospvd.ch).*

REFERENCES

1. **Kravitz RL, Callahan EJ, Paterniti D, Antonius D, Dunham M, Lewis CE.** Prevalence and sources of patients' unmet expectations for care. Ann Intern Med. 1996;125(9):730–7.
2. **Beckman HB, Frankel RM.** The effect of physician behavior on the collection of data. Ann Intern Med. 1984;101(5):692–6.
3. **Marvel MK, Epstein RM, Flowers K, Beckman HB.** Soliciting the patient's agenda: have we improved? JAMA. 1999;281(3):283–7.
4. **White J, Levinson W, Roter D.** "Oh, by the way…": the closing moments of the medical visit. J Gen Intern Med. 1994;9(1):24–8.
5. **Barry CA, Bradley CP, Britten N, Stevenson FA, Barber N.** Patients' unvoiced agendas in general practice consultations: qualitative study. BMJ. 2000;320(7244):1246–50.
6. **Barsky AJ.** Hidden reasons some patients visit doctors. Ann Intern Med. 1981;94(Part 1):492–8.
7. **Barrier PA, Li JT, Jensen NM.** Two words to improve physician-patient communication: what else? Mayo Clin Proc. 2003;78(2):211–4.
8. **Baker LH, O'Connel D, Platt FW.** "What else?" Setting the agenda for the clinical interview. Ann Intern Med. 2005;143(10):766–70.
9. **Boyle D, Dwinnell B, Platt F.** Invite, listen, and summarize: a patient-centered communication technique. Acad Med. 2005;80(1):29–32.
10. **White JC, Rosson C, Christensen J, Hart R, Levinson W.** Wrapping things up: a qualitative analysis of the closing moments of the medical visit. Patient Educ Couns. 1997;30(2):155–65.
11. **Peltenburg M, Fischer JE, Bahrs O, van Dulmen S, van den Brink-Muinen A.** The unexpected in primary care: a multicenter study on the emergence of unvoiced patient agenda. Ann Fam Med. 2004;2(6):534–40.
12. **Levinson W, Roter D.** The effects of two continuing medical education programmes on communication skills of practising primary care physicians. J Gen Intern Med. 1993;8:318–24.
13. **Robinson JD.** Closing medical encounters: two physicians and their implications for the expression of patients' unstated concerns. Soc Sci Med. 2001;53:639–56.
14. **Heritage J, Robinson JD, Elliott MN, Beckett M, Wilkes M.** Reducing patients' unmet concerns in primary care: the difference one word can make. J Gen Intern Med. 2007;22(10):1429–33.