

## To BATHE or Not to BATHE: Patient Satisfaction With Visits to Their Family Physician

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**Background:** *BATHE* is an acronym for *Background, Affect, Trouble, Handling, and Empathy* and refers to specific questions or comments incorporated into a standard medical interview. The *BATHE* technique was developed as a rapid psychosocial intervention for the assessment of psychological factors that may contribute to patients' physical complaints. The present research was designed to determine whether the use of *BATHE* significantly increased patient satisfaction during a visit to a family physician. **Methods:** Four family physicians in a busy urban family practice center were involved in the study. Two physicians were instructed to use the *BATHE* protocols until data had been collected from 10 patients and then to proceed in their usual fashion with their next 10 patients. The other two physicians conducted their interview as usual with their first 10 patients and then used *BATHE* with the following 10 patients. All patients were asked to complete a satisfaction survey following their consultation. **Results:** *BATHEd* patients responded with significantly higher ratings for 8 of the 11 satisfaction measures, including those related to information provided, perception of physician concern, and likelihood of recommending the physician to others. **Conclusions:** The results of this pilot study support the use of *BATHE* with primary care patients, as it increases patient satisfaction, possibly by helping patients sense that their physician is sympathetic and concerned.

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*BATHE* is an acronym for *Background, Affect, Trouble, Handling, and Empathy* and refers to specific questions or comments that physicians can incorporate into a standard interview with patients. It was developed by Stuart and Lieberman<sup>1</sup> as a rapid intervention for the assessment of psychosocial factors that may be contributing to physical complaints and was designed to fit within a 15-minute appointment.

Preliminary research and anecdotal evidence suggests that inclusion of the five *BATHE* questions (Table 1) may contribute to improving patient satisfaction and clinician-patient relationships without requiring significant additional appointment time.<sup>1</sup> McCulloch et al<sup>2</sup> provide several case examples demonstrating the use of *BATHE* with different types of patients. They note that the focus and structure the method provides

may be beneficial for working both with overly talkative patients as well as anxious and quiet patients. Although the *BATHE* approach is often included as part of the educational curriculum of physicians and allied health professionals,<sup>3-6</sup> there has been little empirical research examining its efficacy and influence on patient satisfaction.

As van Charante et al<sup>7</sup> point out, "A major objective of all medical care" is the "satisfaction of patients' legitimate demands." Indeed, patient satisfaction is increasingly seen as an important outcome measure in quality of care assessment.<sup>8</sup> Patients' own evaluations are thus often incorporated in determining quality of care.<sup>9-11</sup> The objective of the current research was to conduct an investigation of the effect of the *BATHE* technique (versus usual practice) on patient satisfaction following a consultation visit with a family physician.

### Methods

#### *Participants and Procedure*

Prior to the start of data collection, the methods were reviewed and approved by the Institutional Review

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Table 1  
BATHE Questions

		<i>Example Question</i>	<i>Description</i>
B	Background	“What is going on in your life?”	This question helps elicit the context of the patient’s visit.
A	Affect	“How do you feel about that?” or “What is your mood?”	This question allows the patient to report on his/her current feeling state.
T	Trouble	“What about the situation troubles you the most?” or “Is there anything about that that troubles you?”	This question should be asked even when the patient’s affect is positive, as they may still be stressed about their current life circumstances.
H	Handling	“How are you handling that?” or “How could you handle that?”	This question is asked to evaluate what psychological stress the patient may be experiencing that may be contributing to their physical complaint or affective state.
E	Empathy	“That must be very difficult for you.”	Expressing empathy or sympathy conveys a sense of concern and of being understood, which affirms the patients and enhances positive feelings toward their health care provider.

Board of the governing institution. Patients presenting to a large family practice center in New Brunswick, NJ, were approached by a research assistant and invited to participate in the study. Participating patients were then provided the informed consent form and assured that they were under no obligation to participate in this research. Those who wished to participate were instructed to see the research assistant following their visit with the physician. Although precise records were not kept, approximately 50% of patients declined participation before the study could be described.

The participating physicians (three females, one male) were notified prior to the beginning of their shift whether to BATHE their patients or interview them in their usual fashion. The physicians all had prior knowledge of and training in the BATHE method. Their specific written instructions were:

“As you know, you will be asked to ‘BATHE’ or not to ‘BATHE’ a series of 10 patients; your assignment will be determined randomly by the investigators.

“When you are in the BATHE condition, for consistency’s sake, please ask the BATHE questions immediately after you obtain the history of present illness, if at all possible. Also, when you do BATHE, stick as closely as possible to the published protocol.”

To eliminate potential order effects, BATHE was used with sequences of patients in varying order. Specifically, two physicians used BATHE with their first 10 patients and then proceeded as usual with their next 10 patients, while the other two physicians proceeded as usual with their first 10 patients and then BATHED their next 10 patients.

### *Questionnaire*

At the completion of a visit, patients were asked to complete an anonymous satisfaction questionnaire in the waiting room. The questionnaire (see Appendix 1) was developed for this study and included 10 Likert scale items taken from the patient satisfaction survey in routine use at our university medical group. That survey was developed and validated by Press-Ganey Associates, Inc.<sup>12</sup> The survey took all patients less than 5 minutes to complete.

### *Data Analysis*

The data did not meet the requirements of parametric tests. Chi-square tests were used to compare satisfaction scores and categorical demographic data between the BATHE and non-BATHE groups, and the Mann-Whitney test was used to compare the ages of the two groups.

Because two of the physicians began by using the BATHE intervention, and the other two applied BATHE to their second group of 10 patients, the possibility of an order effect was evaluated by comparing the group that was BATHED by physicians instructed to BATHE first to the group BATHED by physicians instructed to do so second. Similar comparison of the two non-BATHED groups was conducted.

## **Results**

### *Demographics*

The questionnaire was completed by 78 patients, of whom 59 (75.6%), were female. The patients’ ages ranged from 18 to 84, with an average of 43.7 (standard deviation [SD]=16.1). Two patients were excluded from the study due to incomplete data. There were no significant differences in demographic profile between

the patient populations of the participating physicians. Further, there were no significant differences in age or gender between those patients who were BATHed and those who were not. No order effects were detected for the groups BATHed first or second

#### *Reason for Appointment*

Respondents were asked why they had come. The majority (59%) reported a specific problem while the remainder presented for routine health maintenance examinations. Patients in these two categories were evenly distributed among the four physicians and among those receiving the BATHE and non-BATHE interviews.

#### *BATHE Versus NON-BATHE: Patient Satisfaction*

Table 2 shows that BATHed patients were significantly more satisfied with their visits, as demonstrated by 8 of the 11 satisfaction measures, including those related to information provided, perception of physician concern, information about medications, instructions for further care, and likelihood of recommending the physician to others. In terms of overall satisfaction with the day's visit, patients asked the five BATHE questions returned a mean score of 4.7 (SD=.5) versus 4.0 (SD=1) for non-BATHed patients.

#### *Confirmation of BATHE Components*

To help determine whether the physicians asked or omitted the BATHE questions when appropriate, respondents were queried whether their physician asked about each topic specified in the BATHE protocol. As shown in Table 3, a significant difference was found between the patients receiving the BATHE intervention versus those not receiving BATHE for each BATHE component.

#### **Discussion**

The results of this pilot study provide support for the use of the BATHE intervention with primary care patients. There were significantly higher satisfaction ratings on 8 of the 11 questions devoted to evaluation of the health care provider and visit when the BATHE questions were included as part of the interview.

Patients in both BATHE and non-BATHE conditions rated their physician as sympathetic (95% of BATHE patients versus 76% of non-BATHE patients,  $P<.01$ ), generally indicating overall satisfaction with the physician, irrespective of whether the BATHE questions were specifically asked. Nonetheless, it is notable that the addition of several BATHE questions was associated with improved positive satisfaction ratings. Although the increases in patient satisfaction were small (eg, changes of only a fraction of a point), the fact that any statistically significant changes were

Table 2

#### Average Satisfaction of BATHed and Non-BATHed Patients

	<i>BATHE** Mean, SD</i>	<i>No BATHE** Mean, SD</i>	<i>Significance*</i>
Friendliness/courtesy of your doctor	4.7, 0.5	4.4, 0.7	NS
Explanations your doctor provided about any problems/condition you may have	4.5, 0.7	3.9, 1.1	.022
Concern your doctor showed for your questions/worries	4.5, 0.9	3.9, 1.0	.014
Your doctor's efforts to include you in decisions about your treatment	4.1, 1.3	3.5, 1.4	.028
Information your doctor gave you about medications	4.6, 0.6	3.9, 1.1	.044
Instructions your doctor gave you about follow-up care	4.6, 0.6	3.9, 1.0	.004
Degree to which your doctor talked with you using words you could understand	4.7, 0.7	4.6, 0.9	NS
Amount of time your doctor spent with you	4.4, 0.9	3.9, 1.2	.020
Your confidence in this doctor	4.6, 0.5	4.4, 0.8	NS
Likelihood of your recommending this doctor to others	4.6, 0.6	4.2, 1.0	.011
Please rate your overall satisfaction with today's visit to your doctor	4.7, 0.5	4.0, 1.0	<.00

\* Significance calculated using a one-tail Chi-square test at a 95% confidence interval

\*\* 1=very poor, 5=very good

SD—standard deviation

NS—not significant

Table 3

## Reported Use of Specific BATHE Components by BATHE or No BATHE

	BATHE n (%)	No BATHE n (%)	Significance*
Did your doctor ask what has been going on in your life or what may have changed recently?	32 (84.2%)	20 (50.0%)	.001
Did your doctor ask how your mood or feelings have been affected by what has been going on in your life lately?	24 (63.2%)	8 (20.0%)	.000
Did your doctor ask what worries or concerns you may have about what has been going on in your life lately?	28 (73.7%)	11 (27.5%)	.000
Did your doctor ask how you are handling or coping with what has been going on in your life lately?	28 (73.7%)	10 (25.0%)	.000
Was your doctor sympathetic to your needs or concerns?	36 (94.7%)	30 (75.5%)	.008

\* Significance calculated using one-tailed Chi-square test

observed is noteworthy. All participating physicians were experienced health care providers, and yet the BATHE intervention led to measureable improvements in patients' satisfaction.

#### Limitations

This study was a preliminary investigation and as such includes several possible sources of confounding. For example, the actual number of minutes each physician spent with each patient during the BATHE and non-BATHE condition was not controlled. It is thus conceivable that consultations were longer when the BATHE questions were asked, and additional time with the physician was the actual underlying reason for increased patient satisfaction. Indeed, patients seen in the BATHE condition were somewhat more satisfied with the amount of time their physician spent with them. However, when asked about their satisfaction with the amount of time "your doctor spent with you," even patients in non-BATHE consultations gave an overall rating of 3.9 (equivalent to a rating of good), suggesting that most patients did not feel they were being rushed.

Additionally, the survey was constructed in such a way that the questions about whether or not the patient had been BATHEd were asked before the section on patient satisfaction. It is possible that this order artificially raised the satisfaction scores of one or both groups. This possibility should be explored in future research.

Further, despite the fact that physicians were instructed whether or not to BATHE patients, there was some overlap in the conditions. At least 50% of participants in both conditions indicated that their physician inquired as to what was going on in their lives and/or what had changed recently. However, about 75% of patients in the BATHE condition reported being asked about current concerns and coping strategies versus only about 25%

of those in the non-BATHE condition. The additional BATHE questions may have conveyed added physician interest and concern to patients.

The number and demographic profile of patients who declined to participate was not determined in this study. While there is no reason to believe that these patients differed in some important way from study participants, this cannot be known with certainty.

#### Conclusions

Overall, the results of this research suggest that the BATHE intervention may be useful with primary care patients. Further investigation of the intervention, including patients of diverse ages, ethnicities, and physical complaints, is warranted.

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## Appendix 1

### Questionnaire

#### Patient Satisfaction

Date: \_\_\_\_\_

Gender: Male Female (Circle one)

What is the name of the doctor who treated you today? (Circle name below)

Dr A Dr B Dr C Dr D

What is this appointment for (Circle one) Routine Physical Examination Other

Please circle YES or NO for questions 1–5:

- Yes No 1. Did your doctor ask what has been going on in your life or what may have changed recently?  
 Yes No 2. Did your doctor ask how your mood or feelings have been affected by what has been going on in your life lately?  
 Yes No 3. Did your doctor ask what worries or concerns you may have about what has been going on in your life today?  
 Yes No 4. Did your doctor ask how you are handling or coping with what has been going on in your life lately?  
 Yes No 5. Was your doctor sympathetic to your needs or concerns?

Please use the following scale to respond to items 6–16:

1=Very poor  
 2=Poor  
 3=Fair  
 4=Good  
 5=Very good  
 N/A=not applicable

6. Friendliness/courtesy of your doctor \_\_\_\_
7. Explanations your doctor provided about any problem/condition you may have \_\_\_\_
8. Concern your doctor showed for your questions/worries \_\_\_\_
9. Your doctor's efforts to include you in decisions about your treatment \_\_\_\_
10. Information your doctor gave you about your medications \_\_\_\_
11. Instructions your doctor gave you about follow-up care \_\_\_\_
12. Degree to which your doctor talked with you using words you could understand \_\_\_\_
13. Amount of time your doctor spent with you \_\_\_\_
14. Your confidence in this doctor \_\_\_\_
15. Likelihood of your recommending this doctor to others \_\_\_\_
16. Please rate your overall satisfaction with today's visit to your doctor \_\_\_\_