Conference Paper

Implementation of Patient Safety Culture Survey in Jombang Islamic Hospital

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Abstract

Patient safety is the indicator of healthcare service quality. To improve patient-safety culture in hospital, conducting a survey is important to determine which dimension should be managed. Jombang Islamic Hospital (Rumah Sakit Islam Jombang) has an established Patient Safety Team since 2011, but the patient-safety culture is still low because only three incidents were reported in 2015. This study aims to measure patient-safety culture in hospital to identify the factors that need to be improved in hospital unit. This was a descriptive analytic study. Primary data were collected in 2016 using an Indonesian-translated version of Hospital Survey on Patient Safety Culture (HSOPSC) questionnaire. The HSOPSC measures 12 patient safety dimensions. The respondents were 117 Jombang Islamic Hospital staff members who work in hospital unit that gives a direct medical service. Questionnaire final response rate was 91%. The overall average positive response in Jombang Islamic Hospital was 68%, slightly higher than the average positive response for the AHRQ database report in 2016 (65%). Pharmacy had the lowest positive response (54%), while Obstetric and Operation Room had the highest positive response (83%). The dimension that received the highest percentage of positive response was ‘Teamwork within units’ that reached 94% and the lowest was ‘Staffing’ with only 34%. This study concludes that the staff members feel positive toward patient-safety culture. It is important to give an intervention to hospital unit and dimensions that received low percentage of positive response in order to achieve better healthcare service quality.

Keywords: HSOPSC, hospital dimension, patient safety culture, survey

1. Introduction

Patient safety is the indicator of healthcare service quality. Assessing the organization’s existing safety culture is the first stage of developing a safety culture [1]. Patient safety culture assessments, required by international accreditation organizations, allow healthcare organizations to obtain a clear view of the patient safety aspects requiring urgent attention, identify the strengths and weaknesses of their safety
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Jombang Islamic Hospital already established Patient Safety Team since 2011 but the patient safety culture is still low because only 3 incidents had been reported in 2015. This study aims to measure patient safety culture in hospital identify the factor that should be improved in hospital unit.

| Work unit/department       | n  | %  | Time worked in their current unit | n  | %  |
|----------------------------|----|----|-----------------------------------|----|----|
| ER                         | 13 | 11 | Less than 1 year                  | 27 | 27 |
| Outpatient                 | 8  | 8  | 1–5                               | 41 | 41 |
| Class 1                    | 17 | 16 | 6–10                              | 14 | 14 |
| Class 2                    | 9  | 9  | 11–15                             | 11 | 11 |
| Class 3                    | 12 | 11 | 16–20                             | 8  | 8  |
| Obstetrics                 | 9  | 9  | 21 years or more                  | 0  | 0  |
| Operating Room             | 12 | 11 | Missing                           | 4  |    |
| Pharmacy                   | 13 | 12 |                                    |    |    |
| Laboratorium & Radiology   | 6  | 6  | Typical hours worked per week     |    |    |
| Nutrition                  | 6  | 6  | Less than 20 hours/week           | 0  | 0  |
|                            |    |    | 20–39                             | 18 | 18 |
| Staff position             |    |    | 40–59                              | 74 | 76 |
| Physician assistant/Nurse practitioner | 59 | 58 | 60–79                              | 6  | 6  |
| Pharmacist                 | 2  | 2  | 80–11                              | 0  | 0  |
| Dietician                  | 1  | 1  | 100 hours/week or more            | 0  | 0  |
| Unit assistant             | 21 | 21 | Missing                            | 7  |    |
| Other                      | 18 | 18 |                                    |    |    |
| Missing                    | 4  |    | Time worked in their current specialty |    |    |
|                            |    |    | Less than 1 year                  | 16 | 16 |
|                            |    |    | 1–5                               | 36 | 35 |
|                            |    |    | 6–10                              | 16 | 16 |
|                            |    |    | 11–15                             | 21 | 21 |
|                            |    |    | 16–20                             | 13 | 13 |
|                            |    |    | 21 years or more                  | 0  | 0  |
|                            |    |    | Missing                            | 3  |    |

| Time worked in the hospital | n  | %  |
|-----------------------------|----|----|
| Less than 1 year            | 19 | 19 |
| 1–5                         | 25 | 25 |
| 6–10                        | 17 | 17 |
| 11–15                       | 27 | 27 |
| 16–20                       | 12 | 12 |
| 21 years or more            | 0  | 0  |
| Missing                     | 5  |    |
### Table 2: Average positive response rate for the HSOPSC results for Jombang Islamic Hospital and AHRQ data.

| Patient Safety Culture Composites                        | Average % Positive Response (n: 105) | Average % Positive Response AHRQ (n: 261,102) |
|----------------------------------------------------------|-------------------------------------|---------------------------------------------|
| 1. Teamwork within units                                  | 94%                                 | 82%                                         |
| 2. Supervisor/manager expectations & actions promoting patient safety | 71%                                 | 78%                                         |
| 3. Hospital management support for patient safety        | 92%                                 | 73%                                         |
| 4. Organizational learning-continuous improvement        | 81%                                 | 72%                                         |
| 5. Overall perception of safety                          | 62%                                 | 66%                                         |
| 6. Feedback & communication about error                  | 72%                                 | 68%                                         |
| 7. Communication openness                                | 60%                                 | 64%                                         |
| 8. Frequency of event reporting                          | 52%                                 | 67%                                         |
| 9. Teamwork across hospital units                        | 80%                                 | 61%                                         |
| 10. Staffing                                             | 34%                                 | 54%                                         |
| 11. Hospital handoffs & transitions                      | 68%                                 | 48%                                         |
| 12. Non-punitive response to error                       | 50%                                 | 45%                                         |
| **Overall average positive response**                    | 68%                                 | 65%                                         |

### 2. Materials and Methods

This was descriptive analytic study. Primary data was collected in 2016 used Indonesian-translated version of Hospital Survey on Patient Safety Culture (HSOPSC) paper-based questionnaire adopted from The Agency for Healthcare Research and Quality (AHRQ). The HSOPSC questionnaire measures 12 patient safety dimension. The respondents were 117 Jombang Islamic Hospital staffs who work in hospital unit that give direct medical service.

### 3. Results

Questionnaire final response rate was 91%. The overall average positive response in Jombang Islamic Hospital was 68%, slightly higher than the average positive response for the AHRQ database report in 2016 (65%). From Table 1, it can be seen that most of the respondents was work in Class 1 Inpatient Unit (16%), assigned as physician assistant (58%), had been working in the hospital for 11-15 years (27%) and work in their current unit for 1-5 years (41%). In addition, 76% respondents worked 40-59 hours/week and 35% of them already work in their current specialty for 1-5 years.
Table 2 shows the dimension that received the highest percentage of positive response was ‘Teamwork within units’ that reached 94% and the lowest was ‘Staffing’ with only 34%. The composites which got higher positive response than AHRQ database report was ‘Teamwork within units’, ‘Hospital management support for patient’, ‘Organizational learning-continuous improvement’, ‘Feedback & communication about error’, ‘Teamwork across hospital units’, ‘Hospital handoffs & transitions’, and ‘Non-punitive response to error’. In contrary, ‘Supervisor/manager expectations & actions’, ‘Overall perception of safety’, ‘Communication openness’, ‘Frequency of event reporting’, and ‘Staffing’ need to be improved. In Table 3, it is clear that Pharmacy had

| Patient Safety Culture Composites                          | ER (n:13) | OUT PATIENT (n:8) | CLASS 1 (n:17) | CLASS 2 (n:9) | CLASS 3 (n:12) | OBS GYN (n:9) | OK (n:12) | PHARMACY (n:13) | LAB & RAD (n:6) | NUTRITION (n:6) |
|------------------------------------------------------------|------------|-------------------|----------------|---------------|----------------|---------------|------------|----------------|----------------|----------------|
| Teamwork within units                                     | 98         | 100               | 91             | 83            | 100            | 100           | 100        | 92             | 88             | 79             |
| Supervisor or manager expectations & actions promoting patient safety | 79         | 56                | 72             | 89            | 77             | 97            | 77         | 19             | 83             | 79             |
| Hospital management support for patient safety           | 95         | 75                | 82             | 56            | 94             | 96            | 94         | 70             | 47             | 69             |
| Organizational learning-continuous improvement           | 100        | 96                | 85             | 70            | 97             | 100           | 97         | 92             | 94             | 89             |
| Overall perception of safety                             | 57         | 53                | 48             | 47            | 61             | 94            | 71         | 68             | 75             | 58             |
| Feedback & communication about error                      | 66         | 63                | 81             | 78            | 86             | 70            | 89         | 50             | 67             | 56             |
| Communication openness                                   | 62         | 46                | 57             | 44            | 81             | 74            | 81         | 28             | 61             | 61             |
| Frequency of event reporting                             | 21         | 29                | 56             | 48            | 50             | 33            | 83         | 77             | 67             | 50             |
| Teamwork across hospital units                           | 100        | 56                | 91             | 47            | 94             | 100           | 92         | 56             | 65             | 68             |
| Staffing                                                  | 37         | 34                | 32             | 44            | 25             | 42            | 48         | 20             | 17             | 46             |
| Hospital handoffs & transitions                          | 65         | 63                | 69             | 47            | 80             | 97            | 92         | 54             | 40             | 53             |
| Non-punitive response to error                           | 49         | 63                | 38             | 37            | 64             | 89            | 69         | 15             | 28             | 56             |
| Average across composites                                | 69         | 61                | 62             | 58            | 76             | 83            | 83         | 54             | 61             | 64             |
the lowest positive response (54%) while Obstetric and Operation Room had the highest positive response (83%).

4. Discussion

This is the first study to report on the status of patient safety culture in Jombang Islamic Hospital. Since the publication of the Institute of Medicine (IOM) report ‘To err is human’, [3] patient safety culture has become a core element in improving patient safety. The HSOPSC survey results in this study suggest that Jombang Islamic Hospital should have imperatives to calculate how many staffs that needed and recruit if the hospital is lacked because most of the respondents stated that there were not enough staff to do the job.

Hospital also needs to develop a non-punitive culture and an atmosphere which helps staffs to report any incident without being punished. This appear to be the same with previous study in Lebanon where non-punitive response to error composite received one of the lowest scores which reveal that Lebanese hospital employees are also not at ease when it comes to reporting errors [4]. Build an open communication environment particularly between staffs and top-middle hospital manager to alleviate the communication gap is important. Thus, employees should be encouraged to report any adverse events, errors, incidents or near misses so that lessons can be learnt [5]. In addition, Jombang Islamic Hospital also have to focus on patient transfer or transition through the different units or different shifts because there is high possibility of miscommunication that will endanger patient safety through the process.

Jombang Islamic Hospital has a strong teamwork within units and determination to learn and improve their patient safety culture. Previous study in Ethiopia also found that the dimension with the highest average percentage positive responses was teamwork within department [6]. This could be the organizational strength to improve their perception on safety and increase the frequency of event reporting. Specific consideration should be made to manage Pharmacy because the staffs need more support from hospital management in implementing patient safety culture as communication openness, non-punitive response to error and supervisor expectations and actions promoting patient safety got the lowest positive response among other units.
5. Conclusions

This study conclude that the staffs feel positively toward patient safety culture. It is important to give an intervention to hospital unit and dimension which received low percentage of positive response in order to achieve better healthcare service quality.

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