

Descriptive statistics of incidents and actions taken by Nurses Category A and B.

Table 1 Incidents reported by nurses category A and B, per technology (n=181)

| Incidents | Infusion therapy | | Parenteral nutrition | | Morphine pump | |
|--------------|------------------|-----------------|----------------------|-----------------|------------------|-----------------|
| | A | B | A | B | A | B |
| | n (%) | n (%) | n (%) | n (%) | n (%) | n (%) |
| 0 | 78 (69.0) | 63 (92.6) | 104 (92.0) | 66 (97.1) | 89 (78.8) | 60 (88.2) |
| 1 | 14 (12.4) | 4 (5.9) | 8 (7.1) | 2 (2.9) | 18 (15.9) | 8 (11.8) |
| 2 or more | 21 (18.6) | 1 (1.5) | 1 (0.9) | 0 (0.0) | 6 (5.3) | 0 (0.0) |
| Total | 113 (100) | 68 (100) | 113 (100) | 68 (100) | 113 (100) | 68 (100) |

Table 2 Types of incidents reported by nurses category A and B, per technology (n=129)

| Incidents mainly attributed to | Infusion therapy | | Parenteral nutrition | | Morphine pump | |
|--|------------------|-----------------|----------------------|-----------------|------------------|-----------------|
| | A | B | A | B | A | B |
| | n (%) | n (%) | n (%) | n (%) | n (%) | n (%) |
| Product | 32 (46.4) | 4 (57.1) | 6 (60.0) | 0 (0.0) | 10 (30.3) | 6 (75.0) |
| Technical defect in the device | 12 (17.4) | 2 (28.6) | 5 (50.0) | 0 (0.0) | 5 (15.2) | 5 (62.5) |
| Correct device not present or device component(s) missing | 10 (14.5) | 1 (14.3) | 0 (0.0) | 0 (0.0) | 2 (6.1) | 0 (0.0) |
| Manual unclear, incomplete, not available or unsuitable for the home situation | 0 (0.0) | 1 (14.3) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Device unsuitable for the home situation, because | 1 (1.4) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Incorrect medication preparation, administration or delivery | 5 (7.2) | 0 (0.0) | 1 (10.0) | 0 (0.0) | 3 (9.1) | 1 (12.5) |
| Other, namely | 4 (5.8) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Environment | 8 (11.6) | 2 (28.6) | 1 (10.0) | 0 (0.0) | 3 (9.1) | 0 (0.0) |
| Climate in the room (e.g. temperature, humidity, lighting, noise) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1 (3.0) | 0 (0.0) |
| Hygiene of the room | 1 (1.4) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Room too small | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Presence of children | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Presence of pets | 0 (0.0) | 0 (0.0) | 1 (10.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Power failure or interference with other electrical devices | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Incorrect use by patient and/or informal caregiver(s) | 6 (8.7) | 1 (14.3) | 0 (0.0) | 0 (0.0) | 1 (3.0) | 0 (0.0) |
| Other, namely | 1 (1.4) | 1 (14.3) | 0 (0.0) | 0 (0.0) | 1 (3.0) | 0 (0.0) |
| Organization of care | 19 (27.5) | 1 (14.3) | 3 (30.0) | 1 (50.0) | 11 (33.3) | 1 (12.5) |
| Unclear tasks, responsibilities and/or authorizations | 3 (4.3) | 0 (0.0) | 1 (10.0) | 1 (50.0) | 2 (6.1) | 0 (0.0) |
| Error or transfer error by a colleague or other healthcare professional | 13 (18.8) | 1 (14.3) | 2 (20.0) | 0 (0.0) | 8 (24.2) | 1 (12.5) |
| Poor maintenance of the device, including cleaning | 2 (2.9) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Other, namely | 1 (1.4) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1 (3.0) | 0 (0.0) |
| Human factors: Yourself as a user | 10 (14.5) | 0 (0.0) | 0 (0.0) | 1 (50.0) | 9 (27.3) | 1 (12.5) |
| Insufficient knowledge/skills regarding the use of the device | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1 (3.0) | 0 (0.0) |
| Stress or fatigue | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Inattention or error | 7 (10.1) | 0 (0.0) | 0 (0.0) | 1 (50.0) | 4 (12.1) | 1 (12.5) |
| Failure in situational awareness | 1 (1.4) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Incorrect calculation of medication | 1 (1.4) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 4 (12.1) | 0 (0.0) |
| Other, namely | 1 (1.4) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Total | 69 (100) | 7 (100) | 10 (100) | 2 (100) | 33 (100) | 8 (100) |

Table 3 Actions taken by nurses category A and B to discuss or reveal incidents, per technology (n=119, 10 missing)

| Actions taken | Infusion therapy | | Parenteral nutrition | | Morphine pump | |
|--|------------------|----------------|----------------------|----------------|-----------------|----------------|
| | A | B | A | B | A | B |
| | n (%) | n (%) | n (%) | n (%) | n (%) | n (%) |
| Yes | 56 (86.2) | 5 (83.3) | 8 (80.0) | 1 (100) | 28 (93.3) | 7 (100) |
| No | 9 (13.8) | 1 (16.7) | 2 (20.0) | 0 (0.0) | 2 (6.7) | 0 (0.0) |
| Total | 65 (100) | 6 (100) | 10 (100) | 1 (100) | 30 (100) | 7 (100) |
| Specification Yes (multiple answers possible) | | | | | | |
| Discussed it with colleagues in the team | 36 (64.3) | 5 (100) | 6 (75.0) | 0 (0.0) | 23 (82.1) | 5 (71.4) |
| Discussed it with the direct supervisor | 5 (8.9) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 2 (7.1) | 0 (0.0) |
| Discussed it with the patient and/or the informal caregiver(s) | 34 (60.7) | 2 (40.0) | 4 (50.0) | 1 (100) | 7 (25.0) | 2 (28.6) |
| Discussed it with the attending physician | 12 (21.4) | 1 (20.0) | 0 (0.0) | 0 (0.0) | 8 (28.6) | 0 (0.0) |
| Made a report according to the protocol of the organization | 12 (21.4) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 5 (17.9) | 1 (14.3) |
| Other, namely | 25 (44.6) | 1 (20.0) | 2 (25.0) | 0 (0.0) | 8 (28.6) | 6 (85.7) |
| Specification No (multiple answers possible) | | | | | | |
| Lack of time | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Don't know which action(s) I should take or how | 1 (11.1) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Don't know whether the event is worth reporting or discussing | 4 (44.4) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Don't know the potential consequences with regard to liability | 1 (11.1) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Fear of sanctions or punishment against me | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Other, namely | 5 (55.6) | 1 (100) | 2 (100) | 0 (0.0) | 2 (100) | 0 (0.0) |