Changes in unprofessional behaviour, teamwork and co-operation among hospital staff during the COVID-19 pandemic

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Abstract
A survey administered to staff at five hospitals investigated changes in unprofessional behaviour, teamwork and co-operation during the COVID-19 pandemic. From 1583 responses, 76.1% (95% confidence interval (CI): 74.0–78.2%) reported no change or a decrease in unprofessional behaviours. Across all professional groups, 43.6% (n = 579, 95% CI: 41.0–46.3%) reported improvements in teamwork and co-operation. Findings suggest that intensifying work demands, such as those resulting from the pandemic, are not a major trigger for unprofessional behaviour, and root causes lie elsewhere.

The 2021 Medical Training Survey results once again highlight the seemingly intractable problem of bullying, harassment and discrimination in our health system, with 35% of doctors in training reporting these behaviours. These findings were consistent with the survey responses from 5178 hospital staff across three Australian states in 2017/2018, which revealed 38.8% (95% confidence interval (CI): 37.5–40.1%) of staff reported experiencing unprofessional behaviours at least weekly in the previous 12 months.

The consequences of these behaviours on the well-being of individuals are substantial. Evidence is also emerging of the effects on quality of care and patient outcomes. Multiple simulation studies in different countries have shown that clinical teams and individuals exposed to unprofessional behaviours perform significantly worse on a range of metrics, from diagnostic performance to clinical vigilance. A US study of 202 surgeons and 13,653 patients showed that patients of surgeons with higher numbers of reports from coworkers about unprofessional behaviours were at significantly greater risk of post-operative complications than patients with surgeons who had fewer coworker complaints. A study of over 70,000 US trauma patients found those treated by clinical teams with a high proportion of physicians with patient/family complaints were at significantly greater risk of complications and death.

The imperative to address this issue must remain a priority. A key to designing effective interventions is understanding contributory factors. Organisational pressures of delivering care in complex, often resource-constrained, environments have been cited as potential contributors to, and sometimes an excuse for, unprofessional behaviour. The COVID-19 pandemic has placed hospital staff under extraordinary additional pressures. Staff have experienced high workloads, increased threats to their personal safety and that of their families, variable access to appropriate equipment and increased demands from often critically ill patients and those closest to them.

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Within this context, unprofessional behaviours might be expected to increase and organisational capacity to mitigate and respond to be limited. We surveyed staff in five hospitals about experiences of unprofessional staff behaviour and teamwork during the COVID-19 pandemic.

All clinical and non-clinical staff at one public and two private hospitals in Sydney and two private hospitals in Brisbane were invited to complete an anonymous survey between 25 October 2021 and 18 February 2022. Included hospitals were affected by the pandemic in multiple, but also different, ways (e.g. managing COVID-19 patients, staff shortages, shift to new modes of care such as telehealth, difficulty gaining access to personal protective equipment, job insecurity due to reduced elective surgery or reallocation to new roles). The rate of community and hospital transmission of COVID-19 was also different between the two cities.

An online version of the Longitudinal Investigation Of Negative behaviour (LION) survey, with additional COVID-19-related questions (Appendix S1, survey and response rates), was used. Unprofessional behaviour in the survey is defined by the experience of one or more of 26 behaviours (e.g. being shouted at, humiliated and spoken to rudely). Questions asked whether unprofessional behaviour and teamwork changed during the pandemic. An open-ended question invited staff to ‘Please elaborate on how the COVID-19 pandemic affected staff behaviour at this hospital’.

The multi-site study was approved by the Human Research Ethics Committee of St Vincent’s Hospital Melbourne (HREC/17/SVHM/237).

A minimum sample of 368 responses was required (population n = 8373, with 95% CIs, 5% error margin for 50% estimated proportion). Descriptive statistics with 95% CIs were calculated. A coding scheme for qualitative comments was developed through an iterative review of a sub-sample of responses. Codes were refined by consensus, and then coding was performed on the entire sample. Major themes were identified.

| Table 1 Perceptions of changes in unprofessional behaviour during the COVID-19 pandemic by respondent characteristics |
|--------------------|----------------|----------------|----------------|----------------|----------------|
|                    | Increased N (col %) | Did not change N (col %) | Decreased N (col %) | No response N (col %) | Total N (col %) |
| Total respondents (row %) | 318 (20.09) | 854 (53.95) | 156 (9.85) | 255 (16.11) | 1583 |
| Sex                  |                |                |                |                |                |
| Female               | 246 (77.36) | 666 (79.99) | 117 (75.00) | 193 (75.69) | 1222 (77.20) |
| Male                 | 59 (18.55)  | 170 (19.91) | 36 (23.08)  | 53 (20.78)  | 318 (20.09)  |
| Missing data*        | 13 (4.09)   | 18 (2.11)    | 3 (1.92)     | 9 (3.53)     | 43 (2.72)     |
| Age (years)          |                |                |                |                |                |
| 18–24                | 16 (5.03)    | 43 (5.04)     | (0)           | 29 (11.37)   | 88 (5.56)     |
| 25–34                | 89 (27.99)  | 222 (26)      | 37 (23.72)   | 79 (30.98)   | 427 (26.97)   |
| 35–44                | 81 (25.47)  | 207 (24.24)   | 41 (26.28)   | 59 (23.14)   | 388 (24.51)   |
| 45–54                | 73 (22.96)  | 193 (22.6)    | 40 (25.64)   | 46 (18.04)   | 352 (22.24)   |
| 55+                  | 44 (13.84)  | 169 (19.79)   | 35 (22.44)   | 35 (13.73)   | 283 (17.88)   |
| Missing data*        | 15 (4.72)   | 20 (2.34)     | 3 (1.92)     | 7 (2.75)     | 45 (2.84)     |
| Role                 |                |                |                |                |                |
| Nursing              | 154 (48.43) | 376 (44.03)   | 66 (42.31)   | 105 (41.18)  | 701 (44.28)   |
| Non-clinical services| 38 (11.95)  | 124 (14.52)   | 35 (22.44)   | 49 (19.22)   | 246 (15.54)   |
| Medical              | 11 (3.46)   | 52 (6.09)     | 9 (5.77)     | 21 (8.24)    | 93 (5.87)     |
| Management administrative | 60 (18.87) | 176 (20.61)   | 27 (17.31)   | 47 (18.43)   | 310 (19.58)   |
| Allied health and clinical services | 54 (16.98) | 125 (14.64) | 19 (12.18) | 33 (12.94) | 231 (14.59) |
| Missing data*        | 1 (0.31)    | 1 (0.12)      | (0)          | (0)          | 2 (0.13)      |
| Hospital              |                |                |                |                |                |
| Hospital 1            | 43 (13.52)  | 171 (20.02)   | 41 (26.28)   | 41 (16.08)   | 296 (18.7)    |
| Hospital 2            | 17 (5.35)   | 87 (10.19)    | 14 (8.97)    | 24 (9.41)    | 142 (8.97)    |
| Hospital 3            | 62 (19.5)   | 216 (25.29)   | 24 (15.38)   | 36 (14.12)   | 338 (21.35)   |
| Hospital 4            | 48 (15.09) | 93 (10.89)    | 16 (10.26)   | 40 (15.69)   | 197 (12.44)   |
| Hospital 5            | 148 (46.54) | 287 (33.61)   | 61 (39.1)    | 114 (44.71)  | 610 (38.53)   |

*Missing data includes no response or preferred not to answer.

Characteristics of the 1583 respondents are shown in Table 1. Overall, 54.0% (n = 854, 95% CI: 51.5–56.4%) of staff reported that unprofessional behaviour had not changed during the pandemic, 20.1% (n = 318, 95% CI: 18.1–22.1%) reported an increase, 9.9% (n = 156, 95% CI: 8.4–11.3%) reported a decrease, and 16.1% (n = 255, 95% CI: 14.3–17.9%) did not respond to this question. Thus, of those who responded, 76.1% (n = 1010, 95% CI: 74.0–78.2%) reported no change or a decrease in unprofessional behaviour (Table 1, Fig. 1).
Out of 1327 respondents who answered the questions on teamwork and cooperation, 43.6% \((n = 579, 95\%\ CI: 41.0–46.3\%)\) reported improvements during the pandemic; 25.5% no improvement \((n = 339, 95\%\ CI: 23.2–27.9\%)\), where 30.8% \((n = 409, 95\%\ CI: 28.3–33.3\%)\) were unsure. Responses by professional group were very similar (Fig. 1B).

In total, 552 (35%) respondents elaborated on how the COVID-19 pandemic affected staff behaviour at their hospital. Many reported increased work and emotional stress and raised issues about staff shortages, working in unfamiliar areas, disruptions to rosters and increased use of split shifts, increased workloads and perceived inequality in workload distribution. Some believed these factors contributed to increased bullying. However, many commented that these challenges drove increased feelings of team cohesion and cooperation (Table 2).

**Discussion**

The COVID-19 pandemic provided a unique natural experiment of what happens when hospital staff are put under
enormous and unpredictable work pressures over a defined period. Our findings provide little support for a hypothesis that these increased work demands triggered a marked or widespread increase in unprofessional behaviour. The majority (over 76%) of staff reported no change or a decrease in their experience of unprofessional behaviour during the pandemic.

Previous accounts demonstrated the substantial toll the pandemic took on the mental health of health workers. However, little has been reported about experiences of unprofessional behaviours. Ananda-Rajah et al. analysed responses from Australian doctors and nurses about their concerns regarding occupational safety between August and October 2020. They found a common theme around staff reporting being bullied, intimidated and censured, by colleagues and hospital management, for raising work safety concerns during the pandemic. Similar issues were not raised by staff in our survey conducted 12–18 months later.

The comments provided by over 500 staff illuminated the many ways in which the pandemic had impacted work and staff interactions. Many commented on the value of effective teamwork in managing these adverse circumstances. Across professional groups over 40% of staff reported an increase in teamwork and co-operation. Internationally, studies of healthcare workers have confirmed reactions of increased camaraderie and teamwork during the pandemic.

Rutger Bregman, in Human kind: A hopeful history, systematically tackles decades of research evidence and long-spouted truisms about individuals’ lack of inherent goodness and desire to help one’s fellow humans in times of crisis. From William Golding’s premise in Lord of the Flies and the experience of populations bombed in WWII to Stanley Milgram’s experiments, Bregman debunks them all and presents a convincing case for one of his central conclusions: ‘when in doubt, assume the best’ (p. 382). Viewed through this lens, our results, and the growing body of frontline accounts of health workers during the pandemic, add to the cumulative evidence that ‘It’s when crisis hits – when the bombs fall or the floodwaters rise – that we humans become our best selves’ (p. 4). The evidence suggests that in the midst of a sustained crisis, people come together.

Approximately 2 years prior to the pandemic, these five hospitals had implemented a professional accountability culture change programme, Ethos, which may have contributed to increased resilience of staff and influenced staff behaviours during the pandemic. The Ethos programme includes an emphasis on speaking-up skills and a system for delivering peer feedback to staff about behaviours for reflection and recognition. The likely contribution of the Ethos programme to our findings is not clear. Although such programmes used in US hospitals have demonstrated a decrease in repeat unprofessional behaviours by individuals, broad organisational effects have not yet been assessed.

This study had several limitations. Undertaking a survey during a pandemic affected response rates, and thus our findings may not be representative of all hospital workers. Around 16% of respondents did not answer the specific questions of interest. We hypothesise that this was because these questions fell at the end of a long survey. Table 1 shows the characteristics of these non-responders were similar to responders.
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Supporting Information

Additional supporting information may be found in the online version of this article at the publisher’s web-site:

Appendix S1. Supporting Information