|  |  |  |  |
| --- | --- | --- | --- |
| Title | *Determinants of knowledge and precautionary practices about nosocomial infection among fourth graded hospital workers in Bangladesh: A mathematical and statistical approach* | | |
| Author(s) Name | Jannatul Ferdosy, Md. Mortuza Ahmmed, Md. Ashraful Babu, M. Mostafizur Rahman | | |
| Contact Email(s) | babu@iubat.edu | | |
| Published Journal Name | Journal of Interdisciplinary Mathematics | | |
| Type of Publication | Journal | | |
| Volume | 25 | Issue | 7 |
| Publisher | Taylor & Francis | | |
| Publication Date | Dec 8, 2022 | | |
| ISSN | 2520 – 4890 | | |
| DOI | https://doi.org/10.1080/09720502.2022.2133230 | | |
| URL | https://www.tandfonline.com/doi/abs/10.1080/09720502.2022.2133230 | | |
| Other Related Info. | Page 2029 - 2038 | | |
|  | | | |

|  |  |
| --- | --- |
| Abstract |  |
| The goal of this study was to evaluate the determinants associated with knowledge level and precautionary practices concerning nosocomial infection among the fourth graded hospital workers in Bangladesh. A cross-sectional study based on 343 respondents selected through a convenience sampling method from two hospitals in the Dhaka city was carried out to meet the objective of the study. The outcomes of the chi-square test of association showed that education, types of organization, years of experience and participation in workshop or training on the infection control program had a highly significant association (p-value=0.000) with knowledge level while education, types of organization and participation in workshop or training on the infection control program had a highly significant association (p-value=0.000) with practice level. Besides, employment status had a significant association (p-value=0.033) with practice level as well. Almost analogous outcomes were observed in the binary logistic regression results for knowledge level and multinomial logistic regression results for practice level. The findings of the study also highlight that the fourth graded hospital workers in private hospitals had higher knowledge and performed better precautionary practices than their public hospital counterparts. This translates into the conclusion of paying more attention to the public hospital workers by giving them the opportunity of making themselves trained by engaging them with several workshops or training related to “Hospital Acquired Infection Control”. | |