



Biostatistics Courses in Postmaster Doctor of Nursing Practice Programs

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Background

The number of doctor of nursing practice (DNP) programs in the United States has increased dramatically in the past few years. However, few studies have been done to provide a comprehensive view of the program structure and curriculum offered by schools around the nation.

Method

This study used the method of quantitative content analysis to investigate the websites of all DNP programs listed on the American Association of Colleges of Nursing (ANCC) DNP directory. This study discussed regional differences on type of program offered, whether graduate level statistics was a prerequisite of admission, whether the program offered a Biostatistics course, and whether the Biostatistics course was offered by other department besides nursing.

Result

This study found, in the past three years, more schools have started to require a graduate level statistic course in their admission requirement and more schools offer Biostatistics course in their DNP curriculum. However, 25% of the schools still did not either require a graduate level statistics course prior to admission or offer a Biostatistics course for their DNP students.

Table 1: Type of program

| Type of program | Region | | | | |
|---------------------|------------------|--------------|----------------|------------|-----------|
| | All regions f(%) | Midwest f(%) | Northeast f(%) | South f(%) | West f(%) |
| BSN-DNP only | 5 (2.0) | 2 (2.7) | 1 (1.5) | 1 (1.1) | 1 (3.4) |
| MSN-DNP only | 125 (49.0) | 35 (46.7) | 33 (57.9) | 39 (44.3) | 18 (51.4) |
| BSN-DNP and MSN-DNP | 125 (49.0) | 38 (50.7) | 23 (40.4) | 48 (54.5) | 16 (45.7) |
| Total | 255 | 75 (29.4) | 57 (22.4) | 88 (34.5) | 35 (13.7) |

Table 2: Graduate level statistics as a prerequisite by region

| Prerequisite | Region | | | | |
|--------------|------------------|--------------|----------------|------------|-----------|
| | All regions f(%) | Midwest f(%) | Northeast f(%) | South f(%) | West f(%) |
| Yes | 75 (31.3) | 25 (34.2) | 22 (41.5) | 19 (23.8) | 9 (26.5) |
| No | 165 (68.8) | 48 (65.8) | 31 (58.5) | 61 (76.3) | 25 (73.5) |
| Total | 240 | 73 (30.4) | 53 (22.1) | 80 (33.3) | 34 (14.2) |

Table 3: Biostatistics course offering by region

| Offering Biostatistics | Region | | | | |
|------------------------|------------------|--------------|----------------|------------|-----------|
| | All regions f(%) | Midwest f(%) | Northeast f(%) | South f(%) | West f(%) |
| Yes | 136 (61.8) | 35 (52.2) | 36 (69.2) | 44 (62.9) | 21 (67.7) |
| No | 84 (38.2) | 32 (47.8) | 16 (30.8) | 26 (37.1) | 10 (32.3) |
| Total | 220 | 67 (30.5) | 52 (23.6) | 70 (31.8) | 31 (14.1) |

Table 4: Biostatistics course given by other than nursing department by region

| Offering Biostatistics | Region | | | | |
|------------------------|------------------|--------------|----------------|------------|-----------|
| | All regions f(%) | Midwest f(%) | Northeast f(%) | South f(%) | West f(%) |
| Yes | 16 (12.1) | 6 (17.1) | 3 (8.8) | 5 (11.4) | 2 (14.7) |
| No | 116 (87.9) | 29 (82.9) | 31 (91.2) | 39 (88.6) | 17 (89.5) |
| Total | 132 | 35 (26.9) | 34 (25.8) | 44 (33.3) | 19 (14.4) |

Table 5: Whether graduate level statistic course is a prerequisite by whether Biostatistics course offered by the program

| Graduate level statistics as a prerequisite | Offering Biostatistics | |
|---|------------------------|-----------|
| | Yes f(%) | No f(%) |
| Yes | 37 (28) | 30 (35.7) |
| No | 95 (72) | 54 (64.3) |
| Total | 132 | 84 |

Discussion

The core purpose of the DNP program is to train students to be able to translate existing research into practice. The Biostatistics skill is the key of the translation process. Beyond the graduate level quantitative analysis skill is critical for DNP students to master. If a program does not have graduate level statistics course as a prerequisite, it should at least offer a biostatistics course to its DNP students.