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Factors
Affecting
Remediation
Outcomes



Report of Findings from the

Factors Affecting Remediation Outcomes

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National Council of State Boards of Nursing, Inc. (NCSBN®)

Mission Statement

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E.Z., K.K.

EXECUTIVE SUMMARY

The goal of the current report is to identify factors that place nurses at risk for disciplinary action. The characteristics of disciplined nurses and the influence of various environmental factors on remediation outcomes are described and analyzed.

Data on 531 nurses from seven state boards of nursing (BONs) (Arizona, Maryland, Massachusetts, Minnesota, Nebraska, North Carolina and Texas) who received probation for practice issues in 2001 were investigated. For each case, the five-year discipline record prior to 2001 (1996-2000) was reviewed to determine if any disciplinary actions were taken prior to probation. Data from the post-disciplinary period of 2001-2005 were examined to evaluate the remediation outcomes.

This study showed that the majority of the disciplined nurses (73.4%) successfully completed their probation without any additional violations during 2001-2005. However, more than one-quarter (26.6%) of the nurses committed a new violation while on probation or after completing their probation from 2001-2005.

Several factors seemed to affect remediation outcomes. One of these factors was whether or not the nurse had a prior legal history. Data showed 34.8% of disciplined nurses had a prior legal history. Nurses with a prior legal history recidivated more often compared to those without a prior legal history (56.4% versus 32.9%). Changing employers during probation was another putative factor that affected the remediation outcomes. There was a higher percentage of disciplined nurses who changed employers (41.5%) that recidivated than those who remained working with the same employer (14.5%). Furthermore, having committed multiple violations during the period 1996-2001 was associated with remediation outcomes. Nurses who committed multiple violations during the period 1996-2001 (52.1%) were more likely to recidivate compared to those who committed a single violation (24.0%).

In addition, nurses under the age of 40 were more likely to recidivate compared to those who were above 40 years old (36.7% versus 22.3%) and there was a higher percentage of male nurses that recidivated (36.5%) than female nurses (24.7%).

INTRODUCTION

Protecting the public from unsafe and incompetent practitioners is one of the major responsibilities of BONs. Therefore, when licensed nursing personnel fail to practice safely and competently, they are subject to disciplinary action by their jurisdiction's licensing board. Studies show that both the total number and the percentage of nurses being sanctioned by BONs have increased during the last decade.¹⁻³

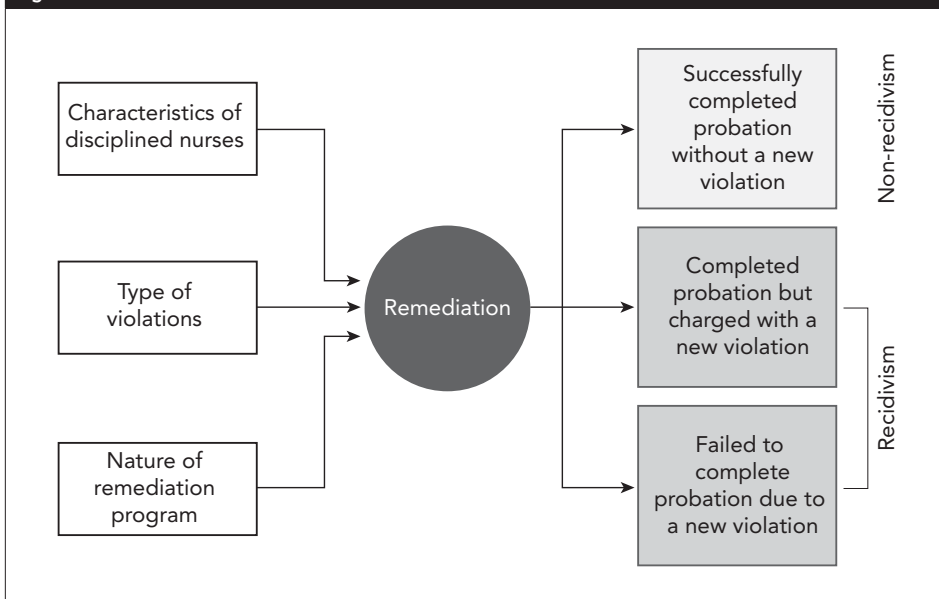
Although BONs sanction thousands of nurses each year for a variety of violations, the disciplinary process and its outcomes have been subject to little formal study. Further study of disciplined cases is necessary to identify nurses at high risk for violations and to develop more effective interventions to both prevent these violations and help the disciplined nurses eventually return to safe nursing practice. The NCSBN research department, working with seven BONs, initiated a series of studies

to explore probation issues in regulatory discipline. The purpose of the current study was to investigate the impact of characteristics of disciplined nurses and other related factors on remediation outcomes.

Research Model

There are a number of factors affecting remediation outcomes (e.g., the characteristics of disciplined nurses, the type of the violations and the nature of the remediation programs) (see *Figure 1*). In this study, a nurse who was put on probation could have one of two outcomes: non-recidivism or recidivism. Non-recidivism was defined as having the disciplined nurses complete the probation with no evidence of any additional disciplinary actions being taken against the nurses' licenses during 2001-2005. Recidivism was defined as having new violations during or after the probation from 2001 to 2005.

Figure 1. Research Model



METHODOLOGY

This is a retrospective study of cases in which nurses received probation in 2001. To gain a comprehensive view of the probationary process, a 10-year period of data was reviewed. Any disciplinary actions taken during the five-year period prior to 2001 were collected to examine the history of recidivism, as well as any potential factors that may lead to additional violations. To examine the outcomes of the remediation programs, a five-year window was chosen to see if the disciplined nurses were charged with any additional violations during the post-disciplinary period of 2001-2005.

Objectives

The current study addressed the following issues:

1. Characteristics of disciplined nurses;
2. Common grounds for discipline and probationary requirements;
3. Recidivism rate; and
4. Risk factors for recidivism.

Development of Data Collection Instrument

The data collection instrument was developed by the NCSBN research department through the BONs in close collaboration with experts in nursing discipline and practice across the country. Beginning in March 2006, the research department, working with 12 BONs, developed an outline of the research proposal.

A pilot study was conducted with six BONs. The staff at these BONs was asked to review the data collection instrument and randomly select three to five cases from their 2001 disciplinary records to test the instrument. Each BON provided an estimated number of cases that met the criteria of the study and the approximate time they would need to complete the data collection instrument. NCSBN also asked the BONs to provide related documents, such as comments/evaluations of employers during the probationary period, to gain a general perspective of the contents of the employer reports

that were commonly used as part of remediation requirements.

In June 2006, a refined data collection instrument consisting of 29 questions was finalized to gather information ranging from characteristics of disciplined nurses, employment settings and board actions to remediation outcomes (see *Appendix*).

Data Collection Procedure

The finalized data collection instrument was sent to seven BONs (Arizona, Maryland, Massachusetts, Minnesota, Nebraska, Texas and North Carolina). Each BON used the same data collection instrument and case selection criteria for the multistage data collection process. The current study reports on the 531 cases that met the selection criteria from those states.

Records of 491 nurses who held active licenses in 2001 and had never been disciplined by the BONs through 2005 were randomly retrieved from the licensure databases of five states (Arizona, Massachusetts, Minnesota, Nebraska and North Carolina) and used as a control to further explore the issues on the impacts of prior legal histories on nursing practice.

Case Selection Criteria

This study investigated disciplined nurses who received probation from BONs in 2001 for practice related issues. Cases solely involving drug or substance abuse which do not directly involve violations in patient care were excluded because those cases required different discipline and remediation procedures. Instructions were sent in a cover letter that accompanied the data collection instrument. The staff at the participating BONs was asked to retrieve data from their existing data archives for cases that met the following criteria: (1) the BON's disciplinary action was taken in the calendar year of 2001; and (2) each case must have resulted in a board probationary action. Excluded were prior complaints or reports where no action was taken or where screening committees took a remedial approach (e.g., letter of caution, reminder). Also excluded

were cases that were non-disciplinary or referred to an alternative program.^a Cases involving a BON's disciplinary action such as revocation, suspensions or voluntary surrender, which led to termination of an individual's license or prohibition to practice in 2001, were excluded as well. The current report was based on 531 probationary cases.

Statistical Analysis

Descriptive statistics were used to characterize the subjects of the study. In addition, chi-square analyses and t-tests were used for data analysis. Results with $P < .05$ were considered statistically significant.

Confidentiality

To protect the anonymity of the individuals, this study did not collect any identifiable personal information about the disciplined nurses who were the subjects of this study. The preassigned identification numbers were used in the data entry to keep track of the disciplined cases from the BONs. This report reveals data in aggregated form only.

a An alternative program is a voluntary alternative to traditional disciplinary action for a nurse whose competency may be impaired because of the use of drugs and/or alcohol.

SUBJECTS AND FINDINGS

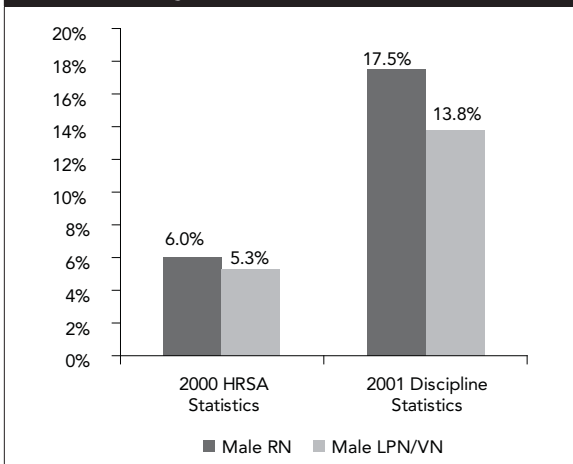
Demographic Information

A total of 531 valid cases were pulled from the 2001 disciplinary records by seven BONs. Table 1 represents the distribution of these cases by jurisdiction.

Table 1: Disciplined Nurses by Jurisdiction

Jurisdiction	N	Percent
Arizona State Board of Nursing	5	0.9
Maryland Board of Nursing	2	0.4
Massachusetts Board of Registration in Nursing	62	11.7
Minnesota Board of Nursing	51	9.6
Nebraska Board of Nursing	17	3.2
North Carolina Board of Nursing	70	13.2
Texas Board of Nursing	324	61.0
Total	531	100.0

Figure 2: Higher Percentage of Male Nurses Receiving Probation



Gender

The majority (84.0%) of the disciplined nurses were female and 16.0% were male. Males were disciplined at rates disproportionate to their representation in the nursing population. The Health Resources and Services Administration (HRSA) State Health Workforce Profiles reported that in the year 2000, 6.0% of registered nurses (RNs) and 5.3% of licensed practical/vocational nurses (LPN/VNs) were male in the U.S.⁴ (see *Figure 2*). Therefore, males are overrepresented among nurses who have been disciplined in that males make up only 6% of the nursing population, but represent 16% of the nurses who are disciplined. This is in line with two previous reports.^{5, 6}

Age

At the time of probation in 2001, the average age of the disciplined nurses in this study was 44.3 years (SD=8.96), with ages ranging from 20 to 71. About 30.0% of the disciplined nurses were under the age of 40, while 70.2% were 40 years old and above.

Ethnicity

More than two-thirds of disciplined nurses were White/Caucasian (68.5%); 15.9% were Black/African American; 8.1% were Hispanic; 5.8% were Asian/Pacific Islander; 0.6% were Native Americans; and the remaining 1.2% were specified as "other race" without additional explanation.

Educational Background

About 44.0% of the disciplined nurses held diplomas/certificates, 38.5% held associate degrees, and 17.9% obtained baccalaureate or higher educational degrees at the time of initial licensure. The majority of the disciplined nurses received their entry-level nursing education in the U.S. (94.4%).

Licensure Information

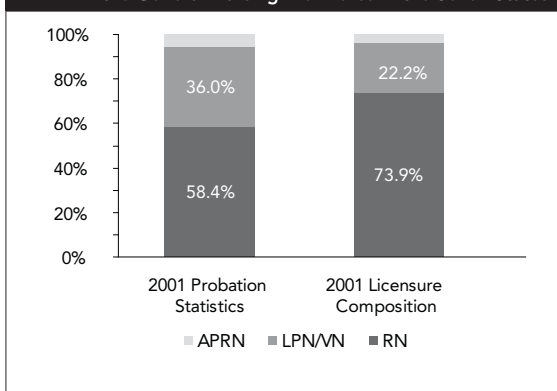
This study examined the type of license the disciplined nurses held at the time of probation and whether they were advanced practice nurses (see *Table 2*). At the time of the 2001 probation, 51.5% of the disciplined nurses had been licensed for 10 years or less.

Table 2: Type of License Held at the Time of 2001 Probation

License	N	Percent	
Registered Nurse (RN)	271	51.1	
Licensed Practical Nurse/Vocational Nurse (LPN/VN)	167	31.5	
Both RN and LPN/VN	66	12.5	
Advanced Practice Nurse	Nurse Practitioner (NP)	11	2.1
	Certified Registered Nurse Anesthetist (CRNA)	8	1.5
	Certified Nurse-midwife (CNM)	5	0.9
	Clinical Nurse Specialist (CNS)	2	0.4
Total	530	100.0	

Further analysis shows that the proportion of disciplined LPN/VNs was higher than the proportion of all LPN/VNs in the seven states: 36.0% of the disciplined nurses held LPN/VN licenses (excluding those with both RN and LPN/VN licenses), while the percentage of nurses who held LPN/VN licenses was 22.2% (see *Figure 3*).⁷ This finding is consistent with a previous report showing that LPN/VNs were at higher risk for being disciplined.⁸

Figure 3: Licensure Composition of Disciplined Nurses and the General Nursing Workforce in the Seven States



Employment Settings and Status

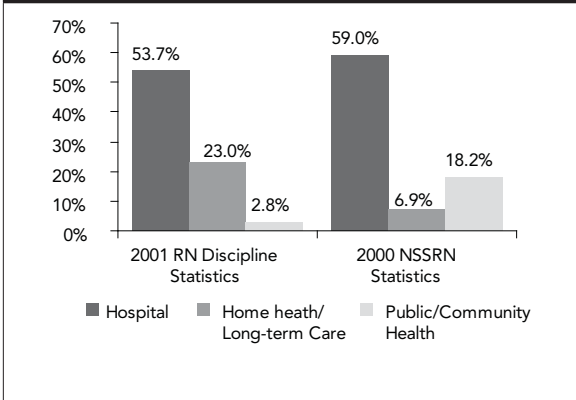
At the time when the incident resulting in the 2001 probation occurred, 40.2% of the disciplined nurses were employed in hospitals with 35.3% reporting employment in long-term care facilities. The other settings where the disciplined nurses worked included, but were not limited to, office settings (agency, physician office, nursing staff agency, temporary agency, telephone triage), correctional facilities (jail, prison, correctional facility, house of corrections), group (orphanage, group home) or one-on-one care (residential care) (see *Table 3*). The majority of the disciplined nurses (90.3%) worked full-time or full-time equivalent (FTE) hours when the incident resulting in the 2001 probation occurred.

Table 3. Employment Settings Where the Incident Occurred

Employment Settings	Frequency	Valid Percent
Hospital	205	40.2
Long-term care	180	35.3
Home health care	34	6.7
Public/community health	11	2.2
Ambulatory care	3	0.6
More than one setting	1	0.2
Other	76	14.9
Total	510	100.0

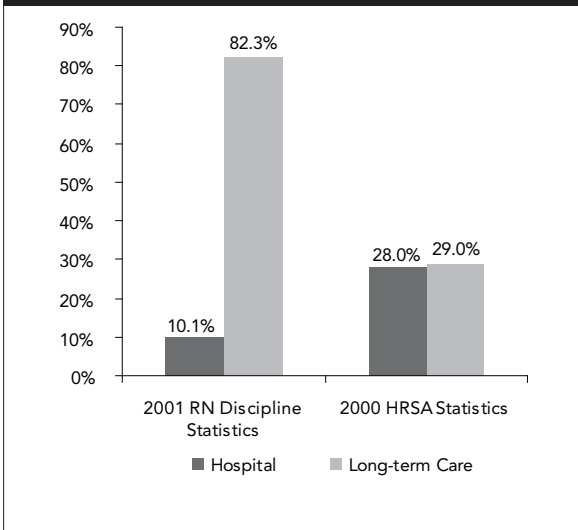
A comparison of the distribution of employment settings of the disciplined RNs to national statistics reported in the *2000 National Sample Survey of Registered Nurses (NSSRN)* showed that the proportion of disciplined nurses who worked in long-term care facilities or home health care (23.0%) were about three times higher than that of the national composition (6.9%). Interestingly, the proportion of the disciplined RNs working in public/community health (2.8%) was about seven times lower compared to national statistics (18.2%) (see *Figure 4*).⁹

Figure 4. Comparison of Distribution of Employment Settings for RNs



A similar trend was demonstrated in the LPN/VN workforce distribution: 10.1% of the disciplined LPN/VNs worked in hospitals, while 82.3% were employed by long-term care facilities. The national statistics showed that in 2000, about 28.0% of LPN/VNs worked in hospitals and 29.0% worked in long-term care facilities,⁴ indicating a disproportionately high discipline rate among those LPN/VNs working in long-term care facilities (see Figure 5).

Figure 5. Comparison of Distribution of Employment Settings for LPN/VNs



Type of Community

At the time when the incident resulting in the 2001 probation occurred, 69.4% of the disciplined nurses were employed in urban/metropolitan areas, 20.8% in rural areas, while the remaining 9.8% were distributed throughout suburban areas.

Characteristics of Disciplined Nurses

For the current study, personal records of the disciplined nurses were pulled to identify patterns of characteristics of disciplined nurses. Few disciplined nurses reported having any mental illnesses before probation (13.1%) or having received any nondisciplinary actions (3.8%) prior to the 2001 probation. Almost 26% (25.9%) of the disciplined nurses changed their home address and 20.9% changed employers during the probation period. For the majority of the disciplined nurses (82.9%), the disciplinary actions were taken by their original state of license. Table 4 summarizes the findings.

Table 4: Characteristics of Disciplined Nurses

Personal Record	Yes	No	Unknown
Reported mental illness before the 2001 probation	14	93	424
Changed home address during the 2001 probation	86	246	199
Changed employers during the 2001 probation	82	310	139
Action taken in the same state where license was issued	426	88	17
Received non-disciplinary action before the 2001 probation	17	428	86

The study also looked at the association between the prior legal history of the disciplined nurses and the discipline rate in comparison with that of non-disciplined nurses. Six states (Arizona, Massachusetts, Minnesota, Maryland, North Carolina and Nebraska) reported 34.8% of the disciplined nurses who had a prior legal history (conviction of a crime) was substantially higher compared to that of the nondisciplined control group (3.1%). The six BONs reported that prior legal history was unknown on 95 (45.9%) disciplined nurses. The Texas State Board of Nursing reported that none of the 232 disciplined nurses who held RN licenses had a prior legal

history and there were no prior legal history records available for the 92 disciplined LPN/VNs. Due to the unavailable and potentially aberrant data concerning the prior legal history records in Texas, this part of the report used data from the six states only.^b

2001 Disciplinary Grounds

This study adopted the standard discipline categories for nursing regulation defined by the Taxonomy of Error, Root Cause Analysis and Practice Responsibility (TERCAP[®]) instrument developed by NCSBN.¹¹⁻¹⁴ Table 5 presents the detailed disciplinary grounds for the 2001 probation.

Table 5: Disciplinary Grounds for 2001 Probation

2001 Disciplinary Grounds	Frequency	Percent
Drug/alcohol impairment/substance abuse related practice violations	48	9.0
Intentional misconduct or criminal behavior	55	10.4
Medication errors	64	12.1
Documentation errors	33	6.2
Inadequate attentiveness or surveillance	5	0.9
Inappropriate clinical reasoning	89	16.8
Lack of standard preventive measures	3	0.6
Missed or inadequate nursing intervention	10	1.9
Breakdown in professional responsibility	38	7.2
Multiple offenses (Different types of violations addressed under a single disciplinary action)	183	34.5
Violate board orders	3	0.6
Total	531	100.0

2001 Probationary Requirements

This study also examined the common probationary requirements imposed by the BONs. Reports from the employer (26.6%), having to complete specific education requirements (24.1%), allowing practice only under supervision (10.2%), and restricting the work setting (6.9%) were listed as the most commonly used requirements imposed by the BONs as part of the 2001 probation (see Table 6).

Table 6: 2001 Probationary Requirements Imposed by the BONs

2001 Probationary Requirements	Frequency	Percent
Reports from employer	380	26.6
Complete specific education requirements	344	24.1
Practice only under supervision	146	10.2
Restricted setting	99	6.9
Nurse available for interviews with board representative	73	5.1
Reports from self	44	3.1
Reports from others	34	2.4
Professional mental health evaluation/comply with treatment	28	2.0
Professional chemical dependency evaluation/comply with treatment	17	1.2
Restricted activities	16	1.1
Release of information (e.g., nurse employment records)	7	0.5
Diminished (or limited) scope of practice	5	0.3
Professional Evaluation of Functional Ability/comply with treatment	5	0.3
Practice audit	4	0.3
Other consultation	13	0.9
Other	214	15.0
Total	1,429	100.0

^b A WFAA-TV report showed that the Texas State Board of Nursing started criminal background checks on all nurses in 2007 and a partial review showed that more than 5.0% of licensed nurses in Texas have criminal records.¹⁰

REMEDICATION OUTCOMES

This study shows that 73.4% of the disciplined nurses successfully completed remediation programs without having additional violations and 26.6% recidivated: either committed a new violation while on probation (21.5%) or committed a new violation after completing probation (5.1%). The recidivism rate (26.6%) of the 531 disciplined nurses during 2001-2005 was much higher than the estimated maximum discipline rate (1.6%) among the whole nursing workforce in the seven states within the same five-year period (Nursys® Discipline Database,^c Kenward and Zhong, unpublished). The data shows that the nurses who received disciplinary

action in 2001 were more likely to commit additional, though not necessarily the same type of, violation(s).

Having Prior Legal History

In the current study, a prior legal history refers to conviction of a crime based on a court action before the 2001 probation. It could happen outside the work place or before the individual was licensed for nursing practice. The six states reported that the recidivism rate was 56.4% and 32.9% among the disciplined nurses with or without prior legal history respectively ($\chi^2=5.82$, $df=1$, $P=.014$) (see Table 7).

Table 7: Remediation Outcome by Prior Legal History

Prior Legal History		Recidivism	Non-recidivism	Total
With legal history	Count	22	17	39
	%	56.4	43.6	100.0
Without prior legal history	Count	24	49	73
	%	32.9	67.1	100.0
Total	Count	46	66	112
	%	41.1	58.9	100.0

Table 8: Remediation Outcome by Change of Employers

Changing Employers		Recidivism	Non-recidivism	Total
Change of employers	Count	34	48	82
	%	41.5	58.5	100.0
No change	Count	45	265	310
	%	14.5	85.5	100.0
Total	Count	79	313	392
	%	20.2	79.8	100.0

Table 9: Remediation Outcome by Number of Violations

Number of Violations		Recidivism	Non-recidivism	Total
Multiple violations	Count	25	23	48
	%	52.1	47.9	100.0
Single violation	Count	116	367	483
	%	24.0	76.0	100.0
Total	Count	141	390	531
	%	26.6	73.4	100.0

Changing Employers During Probation

Further analysis shows that those disciplined nurses who had changed employers during their probation were more likely to recidivate ($\chi^2=29.26$, $df=1$, $P<.001$) (see Table 8). Previous reports showed that nurses appeared most at risk of violating the nurse practice acts when they felt they were unprepared in their new position or practice setting.^{5,15}

Number of Violations

A review of the 1996-2001 disciplinary records showed that there was a higher percentage of nurses who had been disciplined more than once for violations during 1996-2001 (52.1%) that recidivated between 2001-2005, whereas 24.0% of the nurses who committed only a single violation between 1996-2001 recidivated ($\chi^2=17.64$, $df=1$, $P<.001$) (see Table 9).

^c Nursys® is an electronic information system hosted by NCSBN that contains nurse license and discipline data provided by member boards of nursing in the U.S. and its territories.

Age

Chi-square analysis showed that 36.7% of the disciplined nurses who were under the age of 40 recidivated and 22.3% of those who were above 40 years old recidivated ($\chi^2=11.89$, $df=1$, $P=.001$) (see Table 10). Eleven of the 290 nurses above 40 years of age and one out of 100 nurses under 40 successfully completed their full probation term, but no longer held an active license in 2005.

Gender

A statistically significant association was identified between the gender of disciplined nurses and their recidivism rate ($\chi^2=5.10$, $df=1$, $P=.019$). There was a higher percentage of male nurses (36.5%) than female nurses (24.7%) who recidivated (see Table 11).

Employment Settings

A comparison of national statistics revealed that there were a significantly higher percentage of nurses working in long-term care facilities who were disciplined compared to the national composition (see Figures 4 and 5). Therefore, further examination was undertaken to see if the employment settings had a significant

impact on the recidivism rate. Chi-square analysis reveals a higher percentage of recidivism rate among the nurses employed by the long-term care facilities (37.2%) than that of those who worked in hospitals (21.0%, $\chi^2=12.10$, $df=1$, $P<.001$) (see Table 12).

License Type

A statistically significant association was present in the recidivism rate and nursing licensees ($\chi^2=22.88$, $df=1$, $P<.001$). The percentage of LPN/VNs (41.3%) that recidivated was double than that of the RNs (20.5%) (see Table 13).

This study showed that 82.3% of LPN/VNs versus 15.0% of RNs worked in long-term care facilities whereas 10.1% of LPN/VNs versus 53.7% of RNs were employed in hospitals. Since the employment

Table 10: Remediation Outcome by Age

Age		Recidivism	Non-recidivism	Total
<40 years old	Count	58	100	158
	%	36.7	63.3	100.0
≥40 years old	Count	83	290	373
	%	22.3	77.7	100.0
Total	Count	141	390	531
	%	26.6	73.4	100.0

Table 11: Remediation Outcome by Gender

Gender		Recidivism	Non-recidivism	Total
Male	Count	31	54	85
	%	36.5	63.5	100.0
Female	Count	110	336	446
	%	24.7	75.3	100.0
Total	Count	141	390	531
	%	26.6	73.4	100.0

Table 12: Remediation Outcome by Employment Settings

Employment Setting		Recidivism	Non-recidivism	Total
Long-term care facilities	Count	67	113	180
	%	37.2	62.8	100.0
Hospital	Count	43	162	205
	%	21.0	79.0	100.0
Total	Count	110	275	385
	%	28.6	71.4	100.0

settings have significant impacts on the recidivism rate, and it is clear that there were a high percentage of disciplined LPN/VNs who worked in long-term care facilities, recidivism rates of LPN/VNs and RNs who were employed by long-term care facilities were compared. Further analysis revealed a comparatively higher recidivism rate for the LPN/VNs (40.0%) than that of the RNs (27.9%), but the difference was statistically insignificant ($\chi^2=2.03$, $df=1$, $P=.11$). This finding quantified a statement (Zhong, et al., 2009) that the strict violation reporting requirements among the long-term care facilities could affect the reported higher discipline and recidivism rates for LPN/VNs.¹⁶

Educational Level

This study also revealed an overall statistically significant association between recidivism rates and the highest educational degrees held by the disciplined nurses (diploma/certificate, associate degree, baccalaureate or higher degrees, $\chi^2=7.61$, $df=2$, $P=.022$) (see Table 14). Since employment settings have an impact on recidivism rates, the association between recidivism rates and educational degrees (controlling the employment settings) were re-examined. The data shows that for those who were employed

in long-term care facilities; 75.1% held diplomas or certificates; 19.5% held associate degrees; and 5.3% obtained baccalaureate or higher degrees. Examining the recidivism rate among disciplined nurses working in hospital settings revealed that there were a slightly higher percentage of the disciplined nurses who held diplomas/certificates (26.3%) that recidivated, compared to those with associate (18.4%) and baccalaureate or higher education degrees (20.0%). Again, these differences were statistically insignificant ($\chi^2=1.41$, $df=2$, $P=.50$).

Other Miscellaneous Factors

The length of probation terms are mainly determined by the type of violations and its consequences. This study revealed that 69.1% of the disciplined nurses who were put on probation in 2001 actually served a longer probation term than the term imposed by the BONs. There were two reasons for this; either the nurse failed to complete the proposed requirements on time or their probation was extended for committing new violations.

There was no statistically significant association between remediation outcome and whether the nurses obtained their nursing education in the U.S. ($\chi^2=1.39$, $df=1$, $P=.17$). The data points for ethnic background did not reach the minimum datapoints for further statistical analysis.

Table 13: Remediation Outcome by License Type

License Type		Recidivism	Non-recidivism	Total
LPN/VN	Count	69	98	167
	%	41.3	58.7	100.0
RN	Count	61	236	297
	%	20.5	79.5	100.0
Total	Count	130	334	464
	%	28.0	72.0	100.0

Table 14: Remediation Outcome by Educational Level

Educational Level		Recidivism	Non-recidivism	Total
Diploma/certificate	Count	69	153	222
	%	31.1	68.9	100.0
Associate degree	Count	42	154	196
	%	21.4	78.6	100.0
Baccalaureate and above	Count	17	74	91
	%	18.7	81.3	100.0
Total	Count	128	381	509
	%	25.1	74.9	100.0

LIMITATIONS

By design, this study only focused on probation cases. Nondisciplinary cases or the cases that were referred to alternative programs were excluded from the study. The analysis was based on the available data resources from seven BONs. It is possible that not every probation case that met the criteria was included as required.

The seven BONs have different board structures (e.g., independent boards, umbrella boards) and are spread throughout the geographic regions of the U.S. with different nursing populations. However, because data from other states were not available for a direct comparison, generalization of the current findings should be made with caution.

Data submitted by the Texas State Board of Nursing indicated that the prior legal history record was either “none” or “unknown” for all 324 disciplined nurses, which is lower than the prior legal history rate among the nondisciplined nurses in the other states (3.1%). Reasons for this discrepancy could not be clarified. Therefore, the current study has to separate Texas’ prior legal history data from other states.

Furthermore, the lack of standardized protocols for the remediation requirements and data archives maintained by individual BONs and the incomplete data records across the seven participating BONs prohibited further breakdown, as well as a direct comparison of the efficiency of the individual remediation programs.

DISCUSSION

This study shows that 34.8% of disciplined nurses had a prior legal history, while only 3.1% of the nondisciplined nurses had a prior legal history. Furthermore, the recidivism rate was 56.4% and 32.9% among the disciplined nurses with or without prior legal history. The knowledge of the prior legal histories of the nurses will allow BONs and employers to pay closer attention to this high-risk group and provide necessary support and supervision for those who need it. Conversely, lack of this information may increase the potential risk to the public health.

This study also shows that changing employers was another negative factor associated with recidivism. The reasons why 20.9% of the disciplined nurses changed employers during probation were unknown. One possibility could be that by being in a new work place, some disciplined nurses hoped that they could avoid any scrutiny or being a scapegoat. It is also possible that they were just looking for a fresh start or are trying to stay one step ahead of the employer taking action. However, changing employers during the probation terms may lead the disciplined nurses to face additional challenges of adapting to a new environment and discontinue the support and supervision from familiar sources. It has been reported that lacking awareness of the different state nurse practice acts, policies or procedures in the new work setting is one of the risk factors for violation.⁴ Therefore, nurses who are facing disciplinary sanctions should be warned about the negative impact of changing employers during probation. The disciplined nurses who decide to switch employers during probation should deliberately take advantage of the orientation and other supporting programs provided by the new employer. In case the disciplined nurses plan to move to a different state, they should also make themselves familiar with the nurse practice act of the new state. On the other hand, employers should provide the opportunity for disciplined nurses to continue to practice with them and provide the necessary support whenever it is possible.

Furthermore, the data indicate that nurses who committed multiple violations were more likely to commit additional, though not necessarily the same types of violations. Closer attention and proper supervision to these nurses is required.

This study also reveals a close link between age and recidivism. More than one-third (36.7%) of those who were under 40 years of age recidivated, while 22.3% of those who were 40 and above recidivated. It was reported that experienced nurses tended to develop a better way to manage errors.¹⁷ Some older nurses (over 40 years old) left the nursing practice after completing their probation, which may partially contribute to the lower recidivism rate in this age group.

In line with several previous reports, this study showed that male nurses were not only over-represented among disciplined nurses, but they also tended to recidivate more often. Though this phenomenon has been well documented,^{5,6} the underlying cause remains debatable. A previous study suggested that this could be caused by the fact that male nurses were more often placed in critical and acute care settings, which demand quicker response and greater efficiency. This intense nature of work may have put the male nurses at higher risk for disciplinary actions.² The current study did not address this issue.

Additionally, this study's data showed that in general, LPN/VNs and those who held diplomas or certificates were more likely to recidivate. However, the majority of the disciplined LPN/VNs (82.3%) were found working in long-term care facilities and 75.1% of the disciplined nurses employed by long-term care facilities held diplomas or certificates. Further analyses reveal that the employment settings have an impact on the recidivism rates. It was known that in long term-care facilities, reporting violations of state and/or federal regulations is mandatory (42 CFR 483).¹⁸ Thus, to keep track of the disciplinary history of each nurse accordingly, a unified reporting guideline to all nursing facilities is recommended.

Based on the findings of this study, it is suggested that the most effective way to reduce the rate of recidivism would be to: (1) carefully screen for prior legal histories of the disciplined nurses; (2) whenever possible, encourage the disciplined nurses to remain working with the same employer during probation; (3) pay closer attention to those who committed multiple violations and put them under closer supervision; and (4) pay more attention to those nurses who are under 40 years of age.

It is hopeful that the findings of the current study will further guide more detailed research in nursing discipline and serve as a platform for future development of more effective remediation programs that are playing an increasing role in building a safe health care system.

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APPENDIX: DATA COLLECTION INSTRUMENT



Data Requested from Boards: Remediation Outcome Study

The purpose of this study is to gather information on nurses who received a disciplinary board action that resulted in **probation in the year 2001**. Please exclude any cases that were non-disciplinary or referred to an alternative program. *Please put an X in the box next to the answer that best describes the situation and write your answer in the space provided.*

SECTION I. DISCIPLINED NURSE CHARACTERISTICS

1. ID _____
(an identification number assigned by the board to keep track of cases)

Nursing Employment Status at the Time of Probation in 2001

2. In what type of employment setting did the incident occur that resulted in probation in 2001?
- Hospital
 - Ambulatory care
 - Public/community health
 - Long-term care
 - Home health care
 - Unknown
 - Other (Please specify) _____
3. What was the employment status of the disciplined nurse at the setting where the probationary incident took place in 2001?
- Full-time (40 or more hours/week unless working 12-hour shifts at one primary job)
 - FTE (40 or more hours/week at more than one primary job)
 - Part-time (less than 40 hours/week at one primary job)
 - Part-time (less than 40 hours/week at more than one primary job)
 - Unknown
4. What type of community did the probationary incident take place in 2001?
- Urban/metropolitan area
 - Suburban area
 - Rural area
 - Not employed
 - Unknown

Personal Record of Disciplined Nurse

- | | Yes | No | Unknown |
|--|--------------------------|--------------------------|--------------------------|
| 5. Had the disciplined nurse ever reported any mental illness before probation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Did the disciplined nurse change their home address during the probationary period? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Did the disciplined nurse change employers during the probationary period? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Did the disciplined nurse have a prior legal history (arrest/conviction)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Was the action taken against the disciplined nurse in the same state in which their original state of license was issued? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Did the disciplined nurse receive any non-disciplinary action prior to the disciplinary one taken in 2001? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Please indicate the total number of Board actions for each of the following years. | | | |

SECTION II. BOARD ACTIONS

For questions 12-14

Include **any** board action, not just probations. Place only one *number* (including double digit numbers) in each box under the year the disciplinary action took place.

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
12. What were the grounds for disciplinary action?	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
13. What disciplinary action did the Board take?	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
14. What requirements did the Board impose? Please check all requirements included in the Board's discipline order.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. What were the dates the nurse was originally intended to be on probation in 2001?	<input type="text"/>		through		<input type="text"/>					
16. What were the actual dates the nurse was on probation in 2001?	<input type="text"/>		through		<input type="text"/>					

Use for **Question 12** only
Grounds for Disciplinary Action

1. Drug/alcohol impairment/substance abuse
2. Intentional misconduct or criminal behavior
Examples:
a. Unethical/immoral conduct
b. Patient abuse (mental, physical, verbal)
c. Fraud and/or deceit
3. Medication Error(s)
4. Documentation errors
5. Inadequate attentiveness or surveillance
6. Diagnosis discernment or reasoning
Examples:
a. Failure to recognize and/or misinterpretation of patient signs and symptoms and/or responses to therapy
b. Failure to assess
c. Improper delegation/supervision
d. Execution of inappropriate orders
e. Failure to follow universal/infection control precautions
7. Lack of standard preventive measures to prevent risks, hazards or complications due to illness or hospitalization
8. Missed or inadequate nursing intervention
9. Misinterpretation or lack of use of authorized provider orders
10. Breakdown in professional responsibility or patient advocacy
Examples:
a. Abandonment
b. Professional boundary violations, including sexual misconduct
c. Breach of confidentiality
d. Practice beyond scope

Use for **Question 13** only
Type of Discipline

1. **Stayed** – action is taken by a board, but is not implemented if criteria specified in order are met
2. **Deny** – to refuse to issue, renew or reinstate a license
3. **Fine** – to impose a monetary penalty for a violation
4. **Limit/restrict** – to reduce a licensee's legally authorized scope of practice
5. **Probation/condition** – to impose conditions and terms upon a license
6. **Reprimand/censure** – to issue an official statement of reproof for the nurse's behavior
7. **Revocation** – to involuntarily terminate an individual's license
8. **Summary suspension (also emergency, temporary suspension)** – to immediately prohibit, on an emergency basis and prior to a hearing, a licensee from practicing (followed by hearing as specified in laws and rules)
9. **Automatic suspension** – to immediately prohibit practice on the basis of court actions regarding the mental incompetence or other causes specified in state law. No further court action or board hearing is necessary.
10. **Suspension** – to prohibit a licensee from practicing for a period of time (definite or indefinite time period)
11. **Voluntary surrender** – to accept (either by board or authorized staff) an individual's offer to return license
12. **Other discipline** – other disciplinary actions used by jurisdictions, either specifically stated in laws and rules or interpretation of statutes and/or rule/regulation

Use for **Question 14** only
Probationary Requirements Imposed by the Board

1. Diminished (or limited) scope of practice
2. Practice only under supervision
3. Complete specific education requirements
4. Professional Mental Health evaluation/comply with treatment recommendations
5. Professional Chemical Dependency evaluation/comply with treatment recommendations
6. Professional Evaluation of Functional Ability/comply with treatment recommendations
7. Practice audit
8. Other consultation
9. Restricted setting
10. Restricted activities
11. Nurse available for interviews with board representative
12. Reports from employer
13. Reports from self
14. Reports from other
15. Release of information (e.g., nurse employment records)
16. Other (Please specify.)

SECTION III. PROBATION OUTCOMES

17. What were the outcomes of the probation in 2001? (*Check all that apply*)

- Completed full probationary period and returned to nursing practice
- Completed full probationary period but did not return to nursing practice
- Early termination of probation due to significant behavior improvements or having fulfilled the requirements at an earlier time
- Failed to complete probation
 - License was reprimanded while on probation
 - Voluntary surrender/License was revoked
 - Under new investigation
 - Other _____

SECTION IV. COMMENTS

18. Based on your experience, which components of your probation programs are MOST effective?

19. Based on your experience, which components of your probation programs are LEAST effective?

SECTION V. DEMOGRAPHIC INFORMATION

20. State in which the Board of Nursing is located _____

21. Gender: Male Female

22. Year of Birth

23. Racial/ethnic background:

- Hispanic
- Asian/Pacific Islander
- White/Caucasian
- Native American
- Black/African American
- Multi-racial
- Unknown
- Other, *please specify* _____

24. Marital Status at the time of Probation in 2001

- Married
- Divorced, separated, widowed
- Single

25. What was the highest level of education for the disciplined nurse at the **time of initial licensure**?

Degrees	Nursing	Non-nursing
Diploma	<input type="checkbox"/>	<input type="checkbox"/>
Associate	<input type="checkbox"/>	<input type="checkbox"/>
Baccalaureate	<input type="checkbox"/>	<input type="checkbox"/>
Master's	<input type="checkbox"/>	<input type="checkbox"/>
Doctorate	<input type="checkbox"/>	<input type="checkbox"/>
Unknown	<input type="checkbox"/>	<input type="checkbox"/>

26. Where did the disciplined nurse receive their entry-level nursing education?

- USA
- Foreign School
- Unknown

27. How was the disciplined nurse licensed?

- NCLEX Exam

Number of times failed the NCLEX: _____

Year in which nurse passed the NCLEX _____

Endorsement Year of endorsement _____

State Board Test Pool Year passed the exam _____

Licensure and Advanced Nursing Practice at the Time of Probation in 2001

28. At the time of probation in 2001, was the disciplined nurse an RN, LPN/VN, or an advanced practice nurse? *Please check all that apply and indicate how long they had been licensed in that role.*

- | | | |
|---|-------|-------------|
| <input type="checkbox"/> Registered Nurse (RN) | _____ | Year |
| <input type="checkbox"/> Licensed Practical Nurse/Vocational Nurse (LPN/VN) | _____ | |
| Advanced Practice Nurse (APN) | | |
| <input type="checkbox"/> Nurse Practitioner (NP) | _____ | |
| <input type="checkbox"/> Certified Registered Nurse Anesthetist (CRNA) | _____ | |
| <input type="checkbox"/> Certified Nurse Midwife (CNM) | _____ | |
| <input type="checkbox"/> Clinical Nurse Specialist (CNS) | _____ | |

29. How many licenses did the disciplined nurse hold at the time of probation in 2001?

- Single License
- Licensed in more than 1 state
- Unknown

Please mail or fax the completed questionnaires to: Elizabeth H. Zhong, PhD, Department of Research, National Council of State Boards of Nursing, 111 E. Wacker Drive, Suite 2900, Chicago, IL 60601-4277, E-mail: ezhong@ncsbn.org, or Fax: (312) 279-1032

NO LATER than July 31, 2006.

Thank you in advance for your time and participation!