# The Imposter Phenomenon in Physician Assistant Graduates

John Prata, MS, PA-C; Jonathon W. Gietzen, MS, PA-C Pacific University, Oregon

Graduate schools and medical residency programs have identified a subgroup of individuals who tend to doubt their competency to excel in their chosen career paths. The imposter phenomenon (IP) implies the strong feeling of "intellectual phoniness" that is experienced among some "high-achieving" individuals. These individuals live in fear of "being found out," and forced to abandon their professions. Results from a pilot study identified a high percentage of students to have feelings of imposture. Our study suggests IP may be a transient phenomenon. Further national studies involving the physician assistant profession are needed.

Perfection does not exist. To understand this is the triumph of human intelligence; to expect to possess it, is the most dangerous kind of madness.

 Playwright and Poet Alfred de Musset

#### INTRODUCTION

Many professions, including medicine, nursing, engineering, law, and education, have identified a subgroup of individuals who tend to doubt their competency to excel in their chosen career path.1-4 These individuals may do well on exams and receive good evaluations, and by all external standards of competence be high achievers, but internally they may be wracked with feelings of imposture and inadequacy. Rather than crediting their own intelligence and aptitude, they ascribe their success to luck, charm, mistakes in grading on the part of faculty or the feeling that they have somehow fooled everyone and will soon be discovered as charlatans. 1,5,6,7 Generally they feel their success is a sham and deem themselves to be imposters. These individuals live in trepidation that

they will discovered and forced to abandon their line of work or course of study.

To describe this phenomenon, the term "imposter phenomenon" (IP) was coined in 1978 by Clance and Imes in their study of high achievers. The term implies the strong feeling of "intellectual phoniness" that is experienced among some high achieving individuals.5 The researchers initially considered IP a primarily female phenomenon and their initial study involved only female subjects. However, in recent years, more research has dispelled the gender stereotype and IP has been shown to be equally prevalent in males. 8,9 Individuals with IP syndrome are characterized by low selfesteem, near intolerance to evaluation or appraisal, depression, and anxiety. 1-6 However, while these characteristics correlate with IP. IP has been found to be a discernible and separate concept.10

In 1985, the Clance Imposter Phenomenon Scale (CIPS) was developed to evaluate the phenomenon. The CIPS test explores a wide range of situations that may provoke feelings of discomfort in those who

# **BRIEF REPORT**

#### **Feature Editor's Note:**

The Imposter Phenomenon or Syndrome, the doubting and discrediting of one's abilities and achievements, while not an officially recognized psychological disorder, has been the subject of a number of books and articles by psychologists and educators. Individuals experiencing this syndrome seem unable to internalize their accomplishments. Regardless of the success they may have achieved in their chosen fields, they remain convinced that they do not deserve it and are, in fact, frauds. Evidence of success is dismissed as due to luck, timing, or their own ability to deceive others into thinking they are more intelligent and competent than they believe themselves to be. Examples are abundant in many professions and the PA profession appears to be no exception.

- Roderick S. Hooker, PhD, PA

John Prata can be reached at jpcrean25@yahoo.com.

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Roderick S. Hooker, PhD, PA
Department of Veterans Affairs
Dallas VA Medical Center
Email: roderick.hooker@med.va.gov

exhibit IP.<sup>2,11,12</sup> The test consists of 20 items with a 5-point Likert scale response range.<sup>7,10</sup> The scoring range for the CIPS is between 20 and 1001, and a score of 62 and over has been considered to have identified IP in an individual.<sup>3,11</sup> The CIPS has been proven in its ability to discriminate those with IP from those without.<sup>10,11</sup>

## **PURPOSE OF STUDY**

While the CIPS has been used in studies of subjects ranging from family medicine residents to university professors and has been cited in occupations ranging from teachers to marketing managers to actors, it has not been studied in the physician assistant (PA) population. <sup>3,6,10,12-14</sup> We undertook a pilot study to see what the prevalence of IP was in a convenience sample of PA students.

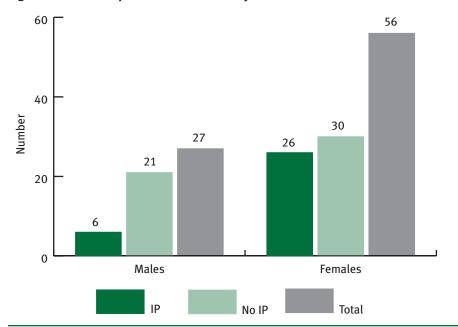
#### **METHODS**

A Clance Imposter survey was emailed to all graduates and students of the Pacific University School of Physician Assistant Studies (years 2001 through 2006). All responses were anonymous. The study was approved by the Pacific University Institutional Review Board. The Fisher exact test was used to analyze the subpopulations of the data. The responses of those who graduated before 2004 were compared to those who graduated in 2004 and after. These results were further divided by gender. Finally the data for all female participants was compared with the data for the male participants.

## **RESULTS**

Eighty-three students and past graduates (56 females and 27 males) out of 194 total subjects responded, for a 43% response rate. Overall, 46% of females and 22% of males scored in the accepted range for IP giving a total of 39% of the sample who met the criteria for IP. As Figure 1 shows,

Figure 1. Rate of Imposter Phenomenon by Gender



males had a significantly lower mean IP score than females (p = 0.028).

When scores for 2001-2003 graduates were compared with those for 2004-2006 graduates, those from the earlier group were significantly lower (p = 0.005). The lowest percentage was in 2002, when only 7.7% of respondents had scores in the IP range. For females in these same groups, a significant difference was identified (p = 0.006) while there was no significant difference in the males for these same groups (Figure 2).

The 2006 group had the highest percentage of IP at 62%, with 18 of 29 respondents scoring 62 or above. For individuals aged 29 and younger results were divided fairly evenly among those demonstrating IP and those who were not. Most of those aged 29 and younger were in the more recent graduating classes — 2005 and 2006. Figure 3 shows that the rate of IP decreases rapidly with age and with years since graduation.

#### **DISCUSSION**

IP appears to be prevalent among the graduates of one PA program. The

findings in total are consistent with a study performed in 2004 that found 41% of female medical residents and 24% of male residents scored in the range for IP.<sup>3</sup>

They are also similar with the Henning study of health professions students that revealed 38% of females and 22% of men scoring above the threshold for IP. These findings suggest that females in the health professions may have a greater likelihood of having thoughts of imposture or are more susceptible to imposter feelings than men. The proportions of IP based on gender are approximately the same in our study as has been reported in other studies on this topic from other professions.

Our results demonstrate that IP declines after the first year in professional practice and by four years after graduation a significant decrease had emerged (p < 0.005). On-the-job learning, reinforcement from tasks done well, and continued study may help to decrease the feelings of "masquerading" as a health professional. These findings are at odds with Clance and Imes's assertion of "the

Figure 2. Rate of Imposter Phenomenon by Year of Graduation

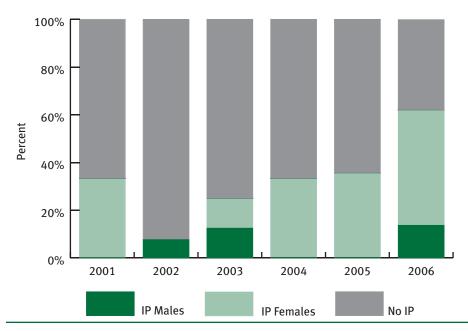
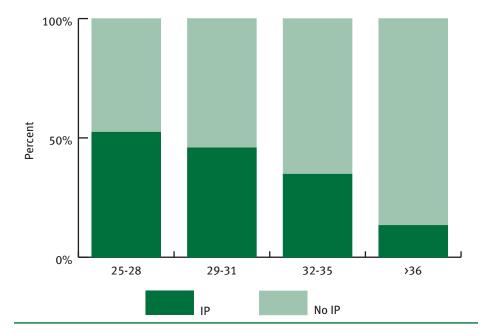


Figure 3. Rate of Imposter Phenomenon by Age Group



self-perpetuating nature of IP."<sup>5</sup> They asserted that their subjects persistently discounted their own abilities and maintained a heightened sense of failure even in light of success.<sup>5</sup>

The person's age does seem to factor into the rate of IP. The older individual may be less prone to IP than those who come into the profession with just the minimum amount of prerequisites and life experiences. Our data are not sufficient to draw further conclusions about this finding.

One possibility is that there are two types of IP. There may be what

might be called True IP and also a lesser, more temporary form called Transient IP. True IP would be the form that persists in spite of continued success and where no amount of positive reinforcement or experience can diminish the feelings of imposture. Transient IP would be a temporary form in which IP feelings would lessen as a person gradually attained self-confidence in his or her abilities over time. Other authors seem to touch on this when they describe IP as having "remissions and exacerbations."9,15 Arena and Page, for example, state that the more familiar the health professional becomes in his or her role and the more experience he or she attains, the fewer the exacerbations of IP that will occur. 15 If those students in the 2006 group who scored above the IP threshold were followed and resurveyed two or three years from now and were found to have scores below the IP threshold, they could be said to have Transient IP. Perhaps it is experience and not age that is more significant in lessening IP scores over time.

Although Shaw found that IP does not appear to be so psychologically distressing as to cripple the careers of these professionals, he did find that IP feelings cause individuals to have difficulty "with their ability to enjoy success."4 PAs who continue to struggle with thoughts of IP should be advised that they are not alone. Professional isolation seems to be a common thread felt by individuals who cope with this feeling.<sup>15</sup> Identification of this phenomenon in PAs may help lessen the embarrassment these feelings cause and could reduce the isolation these individuals experience. Clance<sup>9</sup> recommends a three-point exercise for those who recognize that they have impostor traits:

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- 1. Document both positive feedback and your doubts about its authenticity. This exercise "will demonstrate how you discount the opinions of other people."
- 2. Examine the messages that you may have received about yourself from your family and others.

  Understanding where your negative self-image comes from can empower you to break free.
- Imagine telling your peers and superiors how you have fooled them. Realize how ridiculous you would sound.

## Limitations

The limitations of this pilot study were the small number of subjects, the low response rate, and the fact that it represents only one PA program's experience. However, the findings reveal both consistency with postgraduate medical trainees and a newly documented phenomenon — the transient nature of IP in PAs as they gain experience after graduation. A larger national study has been undertaken to help explore this phenomenon farther.

## CONCLUSIONS

Given the amount of information that the PA student must process in a short time, it is no wonder that such a high percentage of students were found to have feelings of imposture. Fortunately, this study reveals that IP may be a transient phenomenon. We suggest considerably larger studies are

needed to see if this phenomenon stands the test of time and validation.

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