

Original Article

Women in Perfusion: A Survey of North American Female Perfusionists

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Abstract: Perfusion as a career has long been dominated by men (American Board of Cardiovascular Perfusion, Booklet of information since 1975). Women represent 33.3% of the present workforce in North America (1187 certified women). In the 1900s, fewer than 20% of women participated in the labor force compared with 75% today and growing (1). In addition women make only 77 cents for every dollar that men earn and the more education a woman has, the greater the disparity in her wages (2). Only 53% of employers provide at least some replacement pay during periods of maternity leave (2). The purpose of this survey was to poll women in perfusion to evaluate concerns and opinions in their careers and to compare this with the female labor force. In October 2011, a 40-question survey (surveymonkey.com) was made available to all female perfusionists in North American by postcard mailing through the American Board of Cardiovascular Perfusion. There were 538 responses to the survey, which is 45% of all female certified perfusionists in North America. A total of

32.6% of the survey participants have been in perfusion for more than 20 years and 75% are staff perfusionists, working for a hospital (59.5%) rather than a contract group (36.7%). A total of 44.7% of women who had children during their employment were out on leave 10 weeks or less. A total of 95.9% feel they miss important family functions as a result of their work schedules and 63% consider themselves under moderate stress. Direct supervision of the participants by men occurred in 76.5% of cases, and 68.2% felt that they were treated with the same respect as male coworkers. Nonetheless, 50.9% felt discriminated against because of gender. This survey suggests that the female perfusionists in North America share the same difficulties as women in the labor force. The role of women in society in general is clearly changing. Female perfusionists will be part of that change. Seventy percent of those surveyed would recommend perfusion as a career to both men and women. **Keywords:** women, workforce, discrimination, perfusion. *JECT. 2013;45:173–177*

Currently, the American Board of Cardiovascular Perfusion (ABCP) certification rules and regulations require that to maintain certification, one must complete a clinical activity report every year and every third year complete a professional activity report. The clinical activity required includes a minimum of 40 cases annually. Although extensions can be granted, these are limited to 6 months and an individual will not be granted more than one extension during a 3-year time period (3). Reinstatement after loss of certification includes retaking one or both parts of the Perfusion Examination depending on the length of time

the perfusionist was not certified as well as a reinstatement fee. With these rules in place, the issues of maternity leave, medical disability, military leave, and child care are frequently discussed as concerns for perfusionists. We decided to determine and better understand the current feelings among female perfusionists and how they feel about perfusion as a career.

Women's participation in the labor force has increased from 43.3% to 60.0% from 1970 to 1999 (4). According to the 2010 U.S. Bureau of Labor Statistics, 53.6% of women over the age of 16 years are used compared with 71.2% of men (4). A total of 71.6% of mothers with children younger than 18 years were in the working force in 2009 (1). However, only 59.8% of married mothers with children younger than 3 years of age were in the labor force compared with 81.6% of unmarried or separated mothers with children in the age group of 6–17 years (1). The number of families with mothers acting as the primary breadwinner has increased over the years despite the gender gap

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in earnings to 39.3% (5). Overall, women are definitely increasing their power in the labor force yet still face surprising statistics; women make only 77.5 cents for every dollar that men earn, the more education a woman has the greater the disparity in her wages, only 53% of employers provide at least some replacement pay during periods of maternity leave, and women earned less than men in 99% of all occupations (2).

With this knowledge, we decided to poll the women in perfusion to determine their demographics including marital status, feelings toward perfusion as a career, how their career impacts family life and having children as well as concerns that come along with being a woman in this profession.

METHODS

In October 2011, a 40-question survey (surveymonkey.com) was made available to all female perfusionists in North America by postcard mailing through the ABCP. Two weeks after the mailing went out, the survey was also posted on Perlist (6) in an attempt to gain more responses. The survey was divided into four sections; demographics, being a mother and a perfusionist, lifestyle as a woman with a career in perfusion, and lastly certification/recertification.

RESULTS

There were 538 respondents to the survey, which represents 45% of all female certified perfusionists in North America. Of the women surveyed, 15.8% were between the ages of 20 and 29 years, 30.1% were between 30 and 39 years old, 25.3% were 40–49 years old, and 28.8% were 50 years or older.

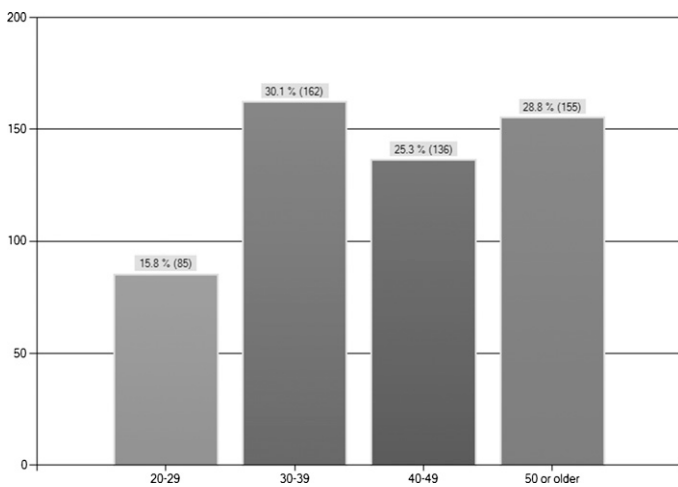


Figure 1. How old are you?

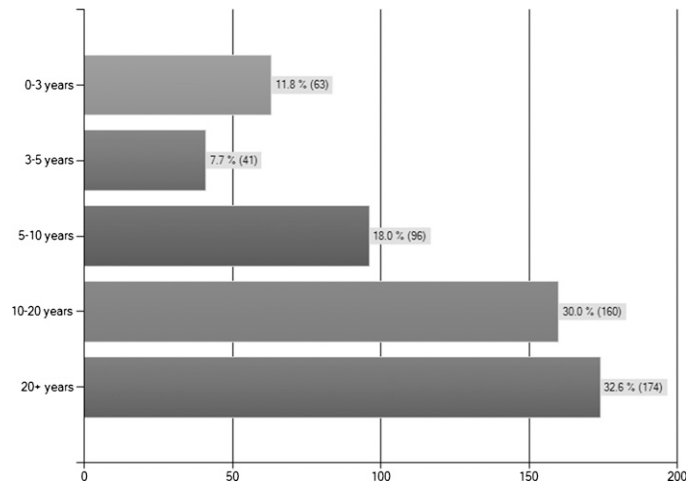


Figure 2. How long have you been a perfusionist?

As the Figure 1 shows, most of the perfusionists (32.6%) who responded had over 20 years of experience.

We also asked those surveyed about their race and ethnicity (Figures 2 and 3).

With whites comprising the vast majority of the female perfusion respondents (90.4%), this career for women is unusual compared with the current U.S. demographics in the labor force (68.1%) (4).

The average American earns \$47,000 according to a 2011–2012 salary survey (7). Women in perfusion make well above that national average with 87.7% making above \$75,000. In fact, 7.6% earn over \$150,000 per annum. Even with these high salaries, the highest level of education obtained by any of the respondents was a Master’s degree. Perfusion was the first professional career for 63.8% of the women surveyed; however, the remaining 36.2% held

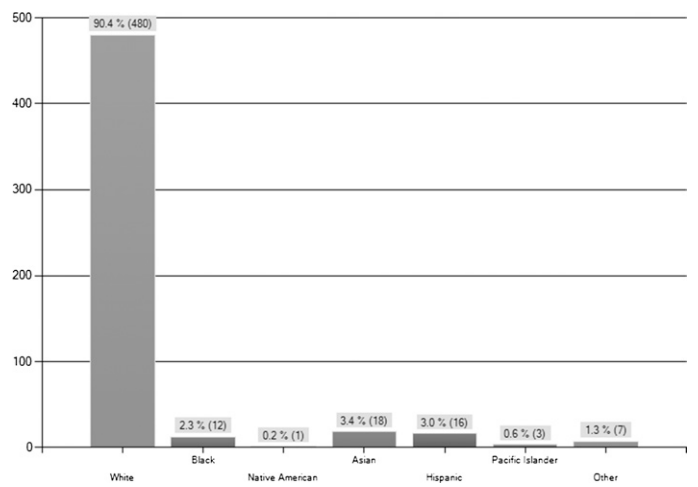


Figure 3. What is your race/ethnicity?

other medical careers such as respiratory therapists, nurses, emergency medical technicians, and perfusion assistants before becoming a perfusionist (Figure 4).

With only 18.3% of these women having Master's degrees, it is interesting to note that 19.3% of the individuals surveyed held chief perfusionist positions (Figure 5).

Of the women surveyed, 41.8% work less than 37 hours a week, 42% work an average of 37–45 hours a week, 11.6% work 45–55 hours, and 4.7% work more than 55 hours a week. The majority of perfusionists (95.7%) take call. Although 63.8% of the women were married, 11% were divorced, and the remaining 25.3% were single.

Of the 57.5% of women perfusionists surveyed who had children, we asked an additional nine questions pertaining to being a mother and a perfusionist. A total of 87.5% continued working as a perfusionist while

they were pregnant with 28.4% then taking a 6-week maternity leave. Of the remaining perfusionists, 16.3% took a 10-week leave, 3.5% took a 1-year leave, and 51.9% had other situations including switching to part-time hours to hold their jobs while raising their children (Figures 6–8).

These mothers have had and/or are currently having concerns and problems being a mother and a perfusionist including 75.5% feeling that they miss essential family functions as a result of their schedules and the majority relying on daycare or family to always be available when they are on-call. However, these powerful women, (61.6%) being the primary provider for the family rarely call out of work for family emergencies (Figure 9).

The biggest concerns most of the women shared in common were how the absence in their children's upbringing

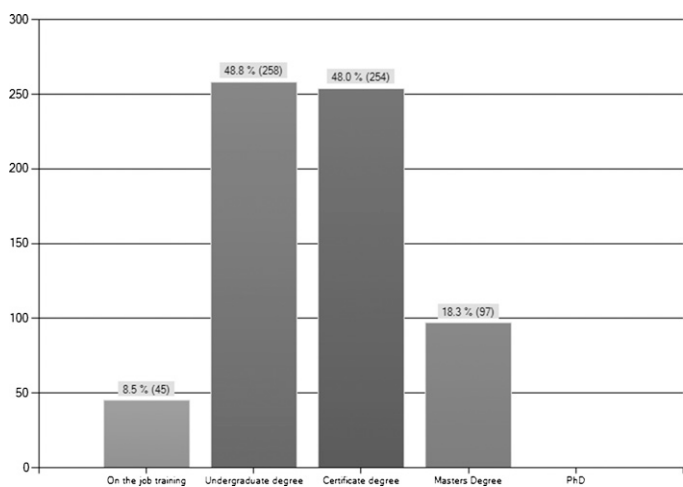


Figure 4. What level of perfusion education do you have?

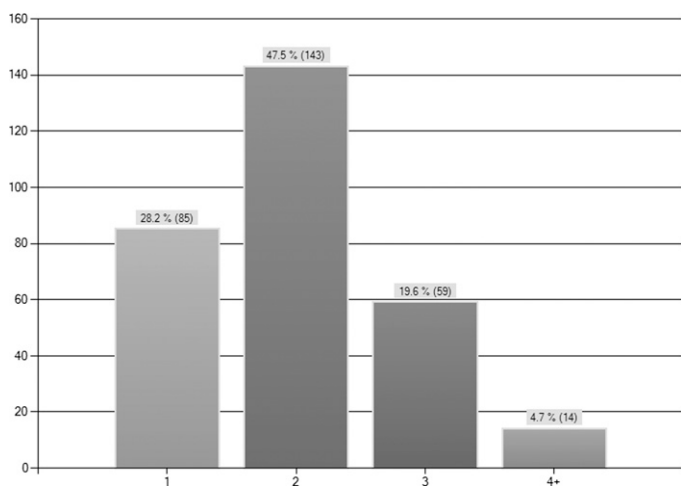


Figure 6. How many children do you have?

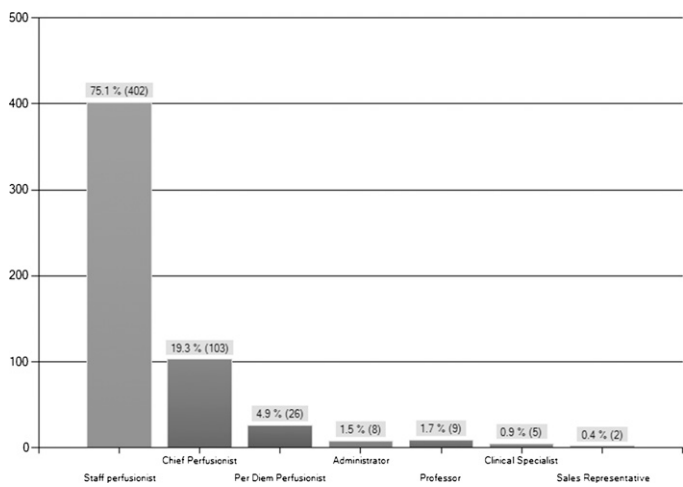


Figure 5. What is your current position?

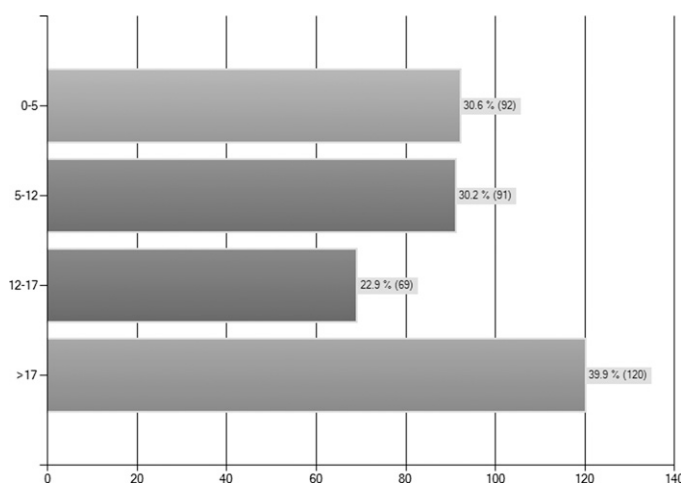


Figure 7. How old is/are your children?

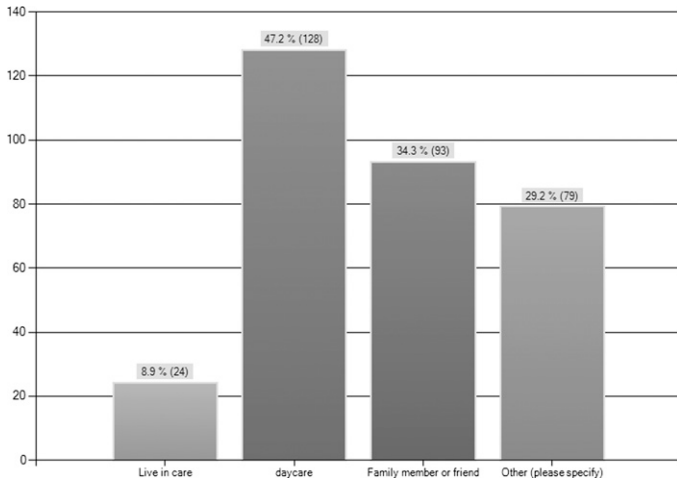


Figure 8. Do you utilize child care?

would later affect them and that they were unable to be a “dependable caregiver.”

All of the women surveyed were then asked 14 questions about the lifestyle of women with a career as a perfusionist. With 70.9% of women polled anticipating retirement between the ages of 55 and 60 years, only 45.1% love their career with only 0.4% completely disliking their career. A total of 90.5% of women in perfusion perceive their job to be moderate to highly stressful possibly accounting for the lack of enthusiasm toward the profession as a whole (Figures 10–11).

Perfusion as a career requires being responsible for heavy machinery. A total of 75.9% of respondents felt that their work environment was ergonomically safe. However, only 27.4% never need help moving this equipment with 45% rarely needing help. Of the remaining 27.6%, only 2.1% feel they require help moving equipment everyday.

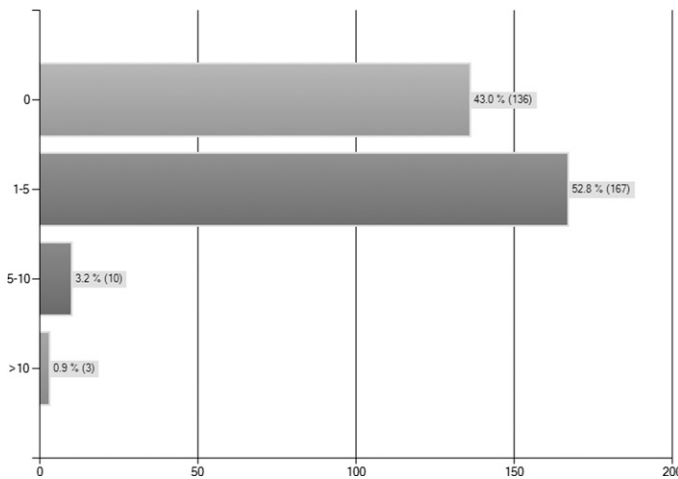


Figure 9. How many days a year do you need to call out of work for family emergencies?

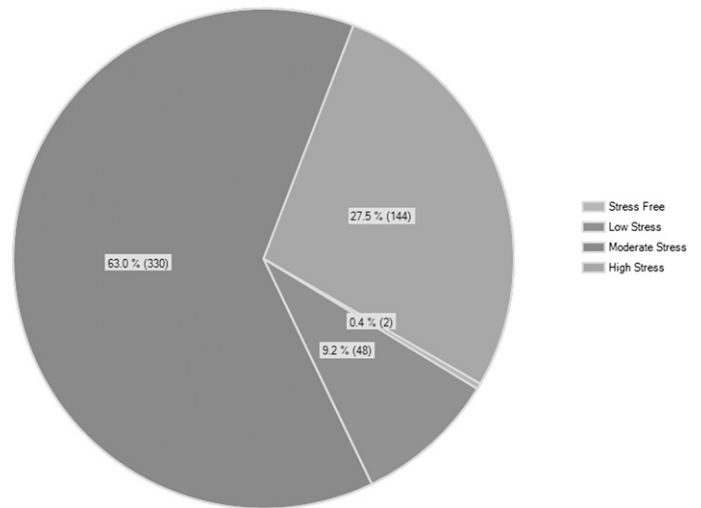


Figure 10. What do you consider the stress level of your job?

With women comprising 33.3% of the perfusion workforce, 68.2% of respondents felt that they were treated with the same amount of respect as their male coworkers. Four percent of the women surveyed actually felt they were treated with more respect because they were female. A total of 76.2% surveyed had a man as their direct supervisor compared with 25.1% with a female supervisor. With that said, a surprising 50.9% felt at some point in their career they had been discriminated against because they were a woman.

Lastly, respondents were asked about their experience with certification and recertification rules and regulations and the need to maintain a yearly clinical activity requirement. Most of the perfusionists (76.6%) pump more than 60 cases a year and therefore 88.2% never had an issue maintaining their certification. A total of 3.3% of the

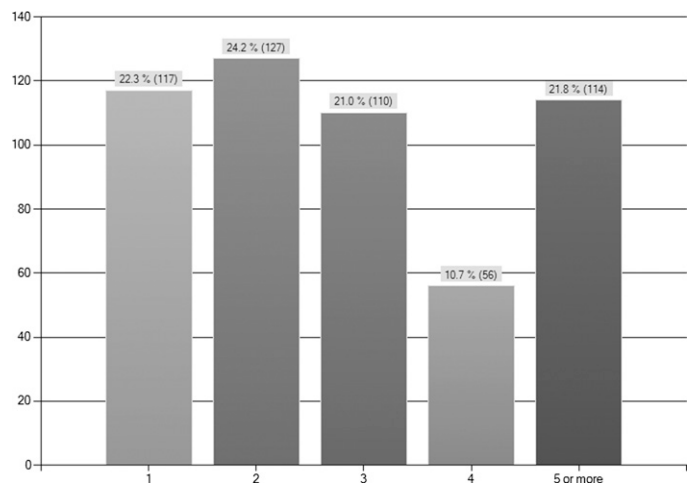


Figure 11. How many locations have you worked as a clinical perfusionist?

perfusionists pump less than 40 cases a year and 11.8% have required a leave of absence from work, which made it difficult to maintain certification. With that said, 76.1% of the women surveyed felt that certification rules should be changed to allow for medical, military, and/or personal leave of absence. Many indicated that if certification rules were amended, their jobs would have been less stressful at times.

DISCUSSION

Women have increased their presence within the workforce across the nation over the last century (4). Even with an increased education, women still face difficulties in the workplace. From the information we have obtained by polling these female perfusionists, it is clear that the field as a whole is one that comes with stressors and maintaining a balanced family life can be difficult at times. Women have come a long way in the workplace with 19.3% of the female perfusionists polled holding chief perfusionist positions. However, with the majority of women (50.9%) having felt discriminated against at the workplace, we still have a long way to go. Our survey respondents shared several personal experiences regarding discrimination that remain confidential.

With 76.1% of women polled agreeing that some change needs to be made to the certification rules, it is clear that there is great concern for maintaining certification in the context of life events and other stressors.

In the future it would be interesting to poll the male perfusionists to determine if some of the results we found were gender-related or job-related.

As an addendum, the ABCP has changed the requirement for leave of absences and qualifications for case requirement as of January 1, 2013. The elimination of probationary status has been removed and the term “conditional certification” applied, thereby enabling a perfusionist (male or female) to take a leave and not lose certification for at least 3 years. Reinstatement into the recertification process has given the hospital, in which that person works, the ability to deal with competency as they will be required to supervise the cases as part of the process.

REFERENCES

1. Women's Health USA 2011. Available at: <http://mchb.hrsa.gov/whusa11/popchar/pages/109wlf.html>. Accessed November 2011.
2. Job profiles. Available at: <http://collegetimes.us/10-surprising-statistics-on-women-in-the-workplace/>. Accessed November 2011.
3. American Board of Cardiovascular Perfusion. Available at: <http://abcp.org/recertification.htm>. Accessed November 2011.
4. U.S. Department of Labor, Bureau of Labor Statistics. Women in the Labor Force: A Databook (2010 Edition).
5. Boushey H. The New Breadwinners. The Shriver Report—A Study by Maria Shriver and the Center for American Progress. Available at: www.americanprogress.org/issues/2009/10/pdf/.../a_womans_nation.pdf.
6. American Society of Extracorporeal Technology. Available at: www.amsect.org/sections/perftopics/perflist/. Accessed November 2011.
7. Association of Research Libraries. Available at: www.arl.org/stats/annualsurveys/index.shtml. Accessed November 2011.