

School of Nursing Faculty Salary Equity Report and Action Plan

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Overview:

In 2012, then UC President Mark Yudof charged each UC campus with completing a faculty salary equity study by January 2015. UCSF formed a faculty salary equity committee and the committee was charged with completing the study. The committee charge was met by that deadline and results showed (1) no evidence of a salary imbalance by under-represented minority status in salary (X+Y), the presence and amount of clinical incentives (Z), and no evidence of difference between URM and non-URM faculty in the presence of an accelerated advancement; (2) a statistically significant imbalance in salary (X+Y) with women receiving 3 percent lower salaries compared to men; (3) No statistically significant imbalance by gender in the presence or absence of a clinical Z payment; (4) Among those who received a Z payment, there was a statistically significant imbalance found in Z by gender, with women receiving 29% lower Z compared to men; (5) no statistically significant difference by gender with respect to the presence of accelerated academic advancements.

On February 2, 2015, Chancellor Hawgood charged each school at UCSF with replicating the campus-level faculty salary equity study, with a suggestion to draw on the same methodology and analysis used in the institutional level study. The Chancellor stated that implementation and action plans at the school-level are the most effective way to identify any inequities. The Chancellor made clear that the salary equity committee recommends the use of the term “imbalance” to describe a statistically significant difference in groups as one cannot define the imbalance as an inequity unless further analysis is done to determine the cause. If such differences cannot be explained by non-discriminatory organizational practices, then such a difference may be indicative of inequity.

UCSF SCHOOL OF NURSING-LEVEL FACULTY SALARY EQUITY REPORT

Purpose

The purpose of the analysis was to determine the presence and size of imbalance in faculty salary and accelerated academic advancement by race/ethnicity and gender within the School of Nursing.

Analysis Plan

The analysis of the School of Nursing (SON) data followed the analysis plan of the overall UCSF 2014 Faculty Salary Equity Review (FSER).

Race/ethnicity was recoded into a variable of underrepresented minority (URM) versus (vs) non-URM. URM was defined as those who identified as Black or African American, Hispanic, Native American/Alaskan Native, Filipino, or Hawaiian/Pacific Islander. Non-URM was defined as those who identified as White, Asian, or declined to state.

Gender was coded as female or male.

The data specific to the SON was provided by Office of Academic Affairs, UCSF Human Resources.

The SON had 75 faculty members (in the broader campus report, faculty members were included who were greater than or equal to 75% time-SON followed the definition used within the broader campus analysis) who were included in the overall UCSF FSER. Sixty-five (87%) were female and 10 (13%) were male. Nine (12%) were URM and 66 (88%) were Non-URM.

Annual salary rates (X+Y) were obtained on July 1, 2014. Salary amounts (X+Y or Z) were adjusted to full-time status by dividing by the percent effort of appointment. Salary amounts (X+Y or Z) were log transformed to reduce the possible influence of a very few high salaries and to provide interpretations in terms of percent differences in median salaries. Although there weren't any extreme salaries in the SON data, log transformed data were used in the SON analyses as well, in order to be comparable to the overall UCSF FSER analyses.

Z payment data represents the total Z payments received between July 1, 2013 and June 30, 2014. Z payments were analyzed by comparing the likelihood of receiving *any* Z payment between the genders and the two URM groups.

The primary analyses were carried out through regression approaches.

Multiple linear regression analyses were conducted to test for URM vs non-URM and female vs male imbalances in the log transformed salary amounts (X+Y). Coefficients from the regression analyses were back transformed to obtain a ratio interpretation. The results are reported with unadjusted estimates of the relative ratio (RR) with 95% confidence intervals (CI) and adjusted relative ratios (aRR) and 95% CI. The covariates that were included in the adjusted models were 1) Step, 2) Rank: Professor, Associate, or Assistant, 3) Doctorate type: Clinical, Research, Both, or Other, 4) Series: Ladder rank or in Residence, Clinical X or HS Clinical, or Adjunct, and 5) Department: Community Health Systems (CHS), Family Health Care Nursing (FHCN), Physiological Nursing (PN), and Social and Behavioral Sciences (SBS).

The presence of a Z payment or presence of an accelerated advancement was first examined with Chi-square test of proportions and the Fisher Exact test and then was modeled with binomial logistic regression if appropriate.

Although the acceleration data spanned two years and had two observations per faculty member in the overall UCSF FSER analyses, no SON faculty member was accelerated in more than one year. Consequently, acceleration (yes or no) was analyzed for the 75 independent observations.

Results

It should be noted that the relatively small total sample size of SON faculty (75) and the small percentage of males (13%) or URM (12%) does not provide much power to detect statistically significant ($p < .05$) differences between males and females or between URMs and non-URMs unless the effects were relatively large.

Salary and Acceleration by Gender Status

Both the unadjusted and the adjusted analyses controlling for step, rank, doctorate, series, and department did not indicate the presence of a statistically significant female vs male imbalance in X + Y salary (See Table 1).

The unadjusted female/male RR of median X+Y salaries was 1.10 (CI 0.92, 1.31). After adjustment, the aRR of median X + Y salaries was 0.97 (CI 0.89, 1.05). Although not statistically significant ($p = 0.42$), the sample ratio is the same as the ratio found in the overall FSER analyses. Only step and rank were statistically significant independent variables in the multiple linear regression analysis. As step went up salary went up. Assistant Professors made less salary than Associate Professors and Associate Professors made less salary than Full Professors.

None of the 10 male SON faculty members (0%) had a Z payment. Eleven of the 65 female faculty members (16.9%) had a Z payment. The difference between these two proportions was not statistically significant (two-tailed Fisher Exact $p = 0.34$). The lack of any males having a Z payment made the calculation of an odds ratio and using binomial logistic regression to get an adjusted ratio statistically inappropriate.

None of the 10 male SON faculty members (0%) had an accelerated merit or promotion. Eleven of the 65 female faculty members (16.9%) had an accelerated merit or promotion. The difference between these two proportions was not statistically significant (two-tailed Fisher Exact $p = 0.34$). The lack of any males having an accelerated merit or promotion made the calculation of an odds ratio and using binomial logistic regression to get an adjusted ratio statistically inappropriate.

Of the 11 female faculty members who had a Z payment, 6 (55%) also had an accelerated merit or promotion.

Table 1
Female/Male X+Y Pay Ratio

	Ratio	95% Confidence Interval
Unadjusted	1.10	(0.92, 1.31)
Fully Adjusted	0.97	(0.89, 1.05)

Salary and Acceleration by URM Status

Both the unadjusted and the adjusted analyses controlling for step, rank, doctorate, series, and department did not indicate the presence of a statistically significant URM vs Non-URM imbalance in X + Y salary (See Table 2).

The unadjusted URM/Non-URM RR of median X+Y salaries was 0.88 (CI 0.74, 1.06). After adjustment, the aRR of median X + Y salaries was 0.93 (CI 0.86, 1.01). Although not statistically significant ($p = 0.07$), the sample ratio is lower than the ratio found in the overall FSER analyses. Only step and rank were statistically significant independent variables in the multiple linear regression analysis. As step went up salary went up. Assistant Professors made less salary than Associate Professors and Associate Professors made less salary than Full Professors.

One of the 9 URM SON faculty members (11.1%) had a Z payment. Ten of the 66 Non-URM faculty members (15.2%) had a Z payment. The difference between these two proportions was not statistically significant (two-tailed Fisher Exact $p = 1.00$). The unadjusted odds ratio was 0.70 (CI 0.08, 6.22). After controlling for step, rank, doctorate, series, and department, the adjusted odds ratio was 1.19 (CI 0.10, 14.48). See Table 3.

The extremely small sample of 1 URM SON faculty member and 10 Non-URM SON faculty members who had any Z payment made comparison of the amount of Z pay between the two groups statistically inappropriate.

Two of the 9 URM SON faculty members (22.2%) had an accelerated merit or promotion. Nine of the 66 Non-URM faculty members (13.6%) had an accelerated merit or promotion. The difference between these two proportions was not statistically significant (two-tailed Fisher Exact $p = 0.61$). The unadjusted and adjusted odds ratios were not statistically significant ($p = 0.50$ and $p = 0.17$ respectively) The unadjusted odds ratio was 1.81 (CI 0.32, 10.12). After controlling for step, rank, doctorate, series, and department, the adjusted odds ratio was 4.84 (CI 0.50, 46.86). See Table 4.

Table 2
URM/Non-URM X+Y Pay Ratio

	Ratio	95% Confidence Interval
Unadjusted	0.88	(0.77, 1.06)
Fully Adjusted	0.93	(0.86, 1.01)

Table 3
URM/Non-URM Presence of Z

	Ratio	95% Confidence Interval
Unadjusted	0.70	(0.08, 6.22)
Fully Adjusted	1.19	(0.10, 14.48)

Table 4
URM/Non-URM Presence of Accelerated Merit or Promotion

	Ratio	95% Confidence Interval
Unadjusted	1.81	(0.32, 10.12)
Fully Adjusted	4.84	(0.50, 46.86)

Summary and Conclusions

In the School of Nursing, we found (1) no evidence of a salary imbalance by under-represented minority status in salary (X+Y), the presence and amount of clinical incentives (Z), and no evidence of difference between URM and non-URM faculty in the presence of an accelerated advancement. However, despite finding no statistically significant imbalance in salary (X+Y) between URM and non-URM, we found a trend whereby URM received 7% lower salaries compared to non-URM controlling for covariates (2) no statistically significant imbalance in salary (X+Y) by gender. However, despite finding no statistically significant imbalance, we found a trend whereby women received 3 percent lower salaries (X+Y) compared to men controlling for all covariates (this result is the same as the overall UCSF campus level analysis); (3) No statistically significant imbalance by gender in the presence or absence of a clinical Z payment; (4) no statistically significant difference by gender with respect to the presence of accelerated academic advancements.

Because males make up only 13% of the 75 faculty in this sample and URM constitute 12% of the faculty in this sample, we do not have adequate power to determine statistically significant differences between groups, unless the effects are relatively large.

Action Plans

1. The School of Nursing needs to invest in a Diversity Initiative in order to increase its critical mass of faculty of color, particularly from under-represented minority groups. We recognize that diversifying the faculty does not guarantee that they will be paid equitably and thus we are committed to monitoring salary equity in the School over time and making action plans to rectify any imbalances that are deemed inequitable.
2. Specifically, the School of Nursing will re-run the salary equity analysis every two years in order to ascertain whether the trends found above become statistically significant if the sample sizes increase to the point where we can detect differences between groups.
3. Should the SON find statistically significant imbalances in any of the outcomes in the previously run analyses once these are re-run in future years, a faculty sub-committee will be formed to determine the cause of the imbalance (e.g., workload differences, grantsmanship productivity, inequity in pay).
4. If future SON analyses and sub-committee reports uncover an inequity by gender or URM status, the School will determine a plan to rectify salary, acceleration, or Z payment imbalances.

Acknowledgments

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November 21, 2015 Update:

The UCSF-wide Faculty Salary Equity Committee (FSER) was reconvened by the Vice Provost's Office in the Fall of 2015. The purpose was to follow-up on all four of the school-level salary equity reports. Each Associate Dean for Academic Affairs (Medicine, Dentistry, Pharmacy, Nursing) presented their salary equity study findings to the FSER committee. Each Associate Dean received feedback about the adequacy of their FSER analysis and their school-level action plans. Most schools were asked to provide more analyses to ensure that each school carried out thorough research on why salary imbalances existed (these could be due to inequities or these could be due to "legitimate business practices" such as differences in grant money or APU workloads as defined in the HSCP (Health Sciences Compensation Plan)). The Vice Provost's Office noted that all schools must make their action plans and follow-up analyses transparent to all faculty but were asked to simultaneously protect faculty confidentiality and to do so without specifically identifying any individual faculty members in public.

Associate Dean Dworkin presented the SON FSER report in October, 2015 and the FSER committee asked for additional research to further explore the finding of 2 trends

in SON: the 7% difference in salary between URM and non-URM faculty-and the 3% difference in salary between men and women. The SON was asked to carry out a quantitative matched pair analysis and additional follow-up research was carried out in order to determine if the salary differences that existed in SON were due to legitimate business practices or inequities in pay. The follow-up analyses and additional research revealed that the salary differences were, in every case, due to regular business practices (i.e. grant money or differences in APU as defined by the comp plan) and not inequities in pay.

Associate Dean Dworkin presented the results of the new analyses to the FSER committee again in November and the committee was satisfied with the analyses and the school-level action plan. Associate Dean Dworkin presented these results to all SON faculty at the November 2015 Full Faculty meeting and sent an email message on December 17, 2015 to the faculty. In the all-faculty email, she highlighted this update and provided a link to the updated report and additional analyses which are available on the SON Faculty Council website.