Balancing Family and Career

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Abstract. In essentially all countries, responsibilities for child care, cooking, cleaning, and other homemaking tasks fall predominantly on the wife and mother. In addition, the childbearing years come during the period when a physicist must study hard, work long hours on research, and take temporary positions, often abroad. Thus, balancing family and career has long been one of the major barriers to women’s participation in science and engineering fields, including physics. While many young women believe that they must choose between having children and having a science career, the fact is that the majority of women physicists in both developing and developed countries have successfully done both. This paper summarizes some ideas and recommendations raised in discussions, especially focused on easing the challenges of having children while in temporary jobs, returning to physics after a career break, the need for “family-friendly” working conditions, and the dual-career problem facing couples where both are scientists.

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In essentially all countries, responsibilities for child care, cooking, cleaning, and other homemaking tasks fall predominantly on the wife and mother. In addition, the prime childbearing years between age 20 and 35 come during the period when a physicist must launch her career by studying hard, working long hours on research, and taking temporary positions, often abroad. Moreover, women physicists who are married are much more likely to have spouses with scientific careers than are married men physicists. Thus, women physicists are not likely to have a “stay-at-home” spouse, and they need to overcome many obstacles when balancing family responsibilities with a career in science. These challenges are not unique to physics, but have been identified as creating serious difficulties in recruiting and retaining women in physics. Many of these difficulties had already been identified during the First IUPAP International Conference on Women in Physics (Paris, 2002) [1]. During this second conference we discussed some of them, presenting possible solutions and examples of successful strategies for balancing family and career.

The fact is that many women physicists, including several participating in these discussions, have successfully balanced their physics career with having and raising children. Their stories are inspirational and helpful to younger women contemplating a physics career. Frequently but not always, their husbands have been supportive and participated extensively in child care and home duties.

On the basis of our discussions, we elaborated a series of recommendations that apply to men and women and to disciplines other than physics. Thus our first recommendation is:

For IUPAP to collaborate with other international scientific unions to achieve progress on all of the recommendations that will help balance a scientific career with family responsibilities.

ISSUES AND POSSIBLE SOLUTIONS

Family Leave for People in Temporary Positions

Scientific careers usually involve a relatively long period of time, during graduate school and postdoctoral work, during which the person does not have a permanent job. This period usually coincides with the time during which women start to have children and build a family. It is important that at least one parent can take some paid parental leave when a child is born. In many cases, graduate student scholarships and postdoctoral positions are paid out of grants and have a limited duration. It is difficult to accommodate a paid parental leave within such situations. One possible way to overcome this problem would be to have the leave be paid by some national agency or institutional resource, and allow the term of the scholarship to be extended by an amount of time equal to the duration of the
leave. A similar type of leave should also be available for other family-related issues, such as eldercare or caring for a sick relative. Canada, UK, Norway, Denmark, Sweden, Finland, and Ghana have programs in place that can be used as examples. Another possibility would be to treat graduate students or postdocs as employees, as is done at some of the national laboratories in the U.S. and in Sweden. In these cases the postdocs and graduate students are subject to the same employment rules and benefits as people in permanent positions. Other ways to alleviate the burden of child bearing would be to allow some time off for nursing mothers or half day work schedules (part-time) for parents with babies less than 1 year old. Based on these discussions we requested:

For the national physical societies to lobby in their home countries for paid family leave to be provided for people in temporary positions and for the term of fellowships to be extended for the same amount of time as the leave (but not to include any increase in the fellowship funding).

Funding Sources to Restart a Scientific Career

A career in research or academia requires continuity. Some women take a career break of one or more years when they have babies. Some others advance much more slowly than people with no family obligations, and this hinders their career progression. Women, who either pause or slow down do devote attention to family matters, should not be forced to drop out, but deserve an opportunity to stay connected with their field and to restart their careers when the children are no longer infants. Free or low-cost professional society memberships during the career break could help reduce the professional isolation of these women (see the Conference Resolution at the beginning of these Proceedings). Fellowships and grants to help women physicists return to work may provide a solution to this type of problem. There are examples that are currently in place, such as the Sloan Foundation and the Hildred Blewett Scholarships in the U.S. and the Daphne Jackson Trust in the UK. Based on these discussions we requested:

For IUPAP to increase awareness of existing “back-to-career” funding sources and recommend that the physical societies in each country try to find funding for fellowships similar to the Sloan Foundation and the Hildred Blewett Scholarships in the U.S. or the Daphne Jackson Trust in the UK.

Respect for Family Obligations

At many workplaces, family obligations are perceived as a burden that reduces work efficiency. Many institutions, particularly private companies, request that people be available for work at almost any time of the day and night, without taking family obligations into account. It is important that institutions value and respect family obligations, by ensuring that employees can access and afford quality child-care facilities at or near the workplace. Possibilities include either providing quality child-care facilities or by helping cover child-care expenses when those facilities are not available at the workplace. It is also important that working schedules be respected or that flexible working hours be allowed whenever possible. These problems may be solved by means of negotiation with employers, so that one can have family-friendly meeting schedules and keep working hours within a specified time frame. Because workplaces do have legitimate needs for employees to be available at unusual times, an agreement on the amount of time and which specific day(s) an employee should be available to stay late, for example, would be very helpful to parents trying to balance their professional and family obligations.

Attending conferences and special summer-schools or programs is essential for career progress, yet it can be quite difficult to combine with family obligations. To this end we suggested that IUPAP or some other agency encourage “day-care grants,” similar to travel grants, to be made available for conference attendance. Another solution would be for conference organizers to provide quality day care at the conference or summer-school site (see Conference Resolution); however, this might be difficult to organize in some conference venues. Regarding day-care facilities or the alleviation of child-care expenses at the workplace, solutions could be rather specific to each country and workplace. For this reason, we could not arrive at a consensus on what to request. However, it would be helpful to know what solutions have been implemented elsewhere so that we could envisage ways to solve the problems we face at our own institutions. To this end, we requested:

For the national physical societies to make “family-friendly working conditions” part of their agenda with employers of physicists, including universities, schools, industries, and government.

For the IUPAP Working Group on Women in Physics to add to its existing website information on family-friendly workplace practices (including examples of day-care facilities, child-care support for conferences and travel, and flexible working hours).
The Dual-Career Problem

When both members of a couple pursue scientific careers, finding a permanent position for both within the same geographic region is a very difficult task. Because some institutions do not realize the importance of solving this problem in order to retain their employees, we concluded that disseminating information on the positive aspects of solving the dual-career problem would be most helpful. Regarding more specific solutions, we discussed the possibility of alternating working schedules or of using overhead money from the university for spouse hiring. Some participants felt that shared positions and shared salaries should be avoided, because they can be exploitive. In addition, women should not demean themselves by doing a job they are overqualified for, just to be employed. Others were more favorable, since a shared position could allow both members of a couple to proceed with their careers while also devoting significant time to their family responsibilities. Various national studies have analyzed the dual-career problem attempting to find solutions; however, these studies are hard to compare. On the other hand, there is no standardized study at the international level. To this end, we requested:

For IUPAP, through its Working Group on Women in Physics, to disseminate information on dual-career solutions by developing a standard survey template, asking the national physical societies to perform the surveys and report back the information, and posting information on dual-career hiring practices on its web site. The survey could be based on the L. McNeil and M. Sher study (http://physics.wm.edu/dualcareer.html). A report on the study should be presented at the next IUPAP International Conference on Women in Physics. For IUPAP to support studies that investigate the economic effectiveness of dual-career hiring and provide best practice examples.

“Guilty Feelings” of Working Mothers

In order to overcome this problem we must work on changing the stereotype for working mothers, providing successful stories of female scientists who advance in their careers and raise families at the same time. These role models should be provided to children, educating boys and girls, starting from an early age, about the role of women in society. Boys, in particular, must be educated to share family responsibilities and to expect women to pursue careers along with motherhood. There are other solutions that depend on the individual female scientists, which, most importantly, should also involve their partners. In order to change stereotypes, we requested:

For the national physical societies to provide a web-based network of successful stories of woman scientists with families.

CONCLUSION

Apart from these recommendations, a very important task relies on women scientists ourselves. We must lobby for changes to take place at the institutional level, but most importantly, we must show with our example that advancing in a scientific career and raising a family is possible. Because solutions vary among places and individuals, it is very important that we generate a network so that young women can talk to many senior scientists to learn some of the many ways successful women managed to balance family and career.

REFERENCE