Gender Equity:

DOING THAT JOB THAT MOMS DO FOR FREE

Workplace Hazards that Impact Reproductive Health and the International LAW Protecting Domestic Workers

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I. DOING THAT JOB THAT MOMS DO FOR FREE

Domestic Workers are disproportionately represented by women. Like all working women, they share important fundamental rights to health in their workplaces. And, the right to

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reproductive health is fundamental to reduced disease burden costs, improved maternal and infant mortality, thereby impacting the work, health survival and posterity of all civil society. Yet, reproductive health at work is a too often ignored under law. This presentation explores the right to reproductive health in the workplace as a tool for achieving UN MDGs concerning Gender Equity while “Doing that Job that Moms Do For Free”

“Domestic work” is defined according to the 4th edition of the ILO Encyclopaedia of Occupational Health and Safety as follows: “Domestic work is characterized by labour for another family within their home. The term domestic workers should not be confused with homemakers and housewives, who work in their own home, or housekeepers, who work in institutions such as a hospital or school. The position of employment within a home is a unique and often isolated work environment. The position of domestic worker is almost always considered menial or inferior to the family for which they are employed. Indeed in the past, domestic work was sometimes done by slaves or indentured or bonded servants. Some of the job titles today for domestic workers include: servant, maid, housekeeper, au pair and nanny. While domestic workers can be either female or male, female workers are both much more commonly employed and most often paid less than males.”

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2 The video “IS THERE GLOBAL GENDER APARTHEID?” produced for the course GENDER AND GLOBALISATION underscores the importance of rethinking the traditional model of occupational health, which excludes concerns about gender and about workplace health protecting reproduction.


4 Angela Babin, DOMESTIC WORKERS IN Jeanne Stellman 4th Edition ILO Encyclopaedia of Occupational Health and Safety ILO Geneva Switzerland 1995. “General Tasks Tasks for domestic workers can include: · Kitchen work: shopping for food, cooking and preparation of meals, waiting on the family and serving meals, cleaning up after mealtime and taking care of tableware · Housecleaning and housekeeping: care of furniture and bric-a-brac, washing dishes, polishing silver and cleaning the house including bathrooms, floors, walls, windows and sometimes annexes, such as guest houses, garages and sheds · Clothing care: washing, drying, ironing of clothing, sometimes mending of clothing or delivery/pick-up of clothing that is dry cleaned · Child and elder care: babysitting or childcare, changing diapers and other clothes, washing children, supervision of meals and activities and delivery to and from school. Domestic workers will sometimes be given tasks that revolve around elder care such as supervision, bathing, companionship tasks, delivery to and from doctor visits and light medical chores”.

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Domestic work is as old as childbirth and childcare itself, and often includes these tasks in the job description. Often characterized by unpaid work performed disproportionately by female members of households, domestic work is usually performed for pay by strangers only when the female household members are not present or indisposed due to illness or paying work that takes them away from home, death or, in some circumstances, the overwhelming enormity of the household itself. Neither the tasks to be performed nor the need to recognize such work as having an intrinsic economic value as paid work is new. Some tasks have changed, perhaps: ironing may be replaced by driving children to tutors or soccer games. Given the increased participation of women in the paid workforce and the persistence of a wage gap between working men and working women, however, it is not clear that every family that needs domestic workers can afford to provide a full salary while meeting the family’s needs. The presence of domestic workers as caretakers for elderly relatives, disabled wage-earners, or to fill the gap between household chores when a mother takes a job means that some domestic workers may perform vital work that is necessary to the life of marginal families, but their tasks are no longer described by an economic model that is characterized as exploitation by the very rich of the energy and time of the very poor.

1. Risk Mitigation

The term of art 'risk mitigation' is a result-oriented process designed to prevent, detect, report and correct potentially dangerous conditions that can result in harm to human health or the global environment. The degree of acceptable risk, the methods of risk assessment and the measures of effectiveness for the same or similar hazards change in different circumstances. Key building blocks for «risk mitigation» infrastructures include: (1) Managerial statements in writing that demonstrate the enterprise commitment to workplace safety and health and to protection of the global environment in order to reduce or stabilize the global disease burden; (2) Documentation of the components of the compliance infrastructure, using internal audits on a

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cyclical basis that can capture health disparities, isolate particular exposures that have heightened hazards and provide documentation of the best practices that were applied in response to potential harm; (3) in house communication to staff including interactive video training and web-based e-learning regarding the safe response to problematic conditions in the workplace (regardless whether chemical or circumstantial, and embracing emergency response); (4) two way communication that enables complaints about problems to be recorded with response in a timely manner, using hotlines in -house newsletters and intranet; (5) Documented ongoing interaction with regulators, insurers, consumers, suppliers, end-users and the general public.

2. UN Millennial Development Goals: GENDER EQUITY

In addition to adopting the Convention protecting the wages, hours, right to know and safety and health of Domestic Workers, the ILO is a signatory to the United Nations (UN) Millennium Development Goals ("MDGs", http://www.un.org/millenniumgoals. The UN MDGs reflect an organizationwide consensus of political will to correct antiquated working assumptions which in turn created long-standing systemic social problems. The UN itself has determined that such long-standing embedded problems are rooted in sexism, racism and economic inequalities. By definition, the UN MDGs embrace the needs of specific populations whose stakeholder rights were not fairly reflected in the first generation of UN documents in order to correct embedded systemic harms. Correcting such long established inequalities requires a deliberate conscious effort by each and every UN agency, every time a new programmatic effort is established. And, each program must prove it has met this test of consciously correcting historic inequalities in order to gain approval by the greater UN community. In this regard, WHO has undertaken to transfer technology not only concerning basic medical needs, applied research and primary health care, but also advancing transfer of State of the Art methods for understanding unquantified risk in any new technology, including nanotechnology.

3. UN Millennial Development Goals: Gender Equality Promoting Reproductive Health

According to UN WOMEN, the agency of the UN Charged with promoting gender equality, "Raising gender on the global development agenda", Posted on March 28 2012 the
established method for achieving integrated implementation of the MDGs requires application of "Four key principles" across the board in all UN programming and strategic planning, including the development of Guidelines for risk management of public health:

"1. **Equality**: the goals need to be framed from an equality perspective and address biases and discrimination based on gender, class, race, ethnicity, among other factors in order to reach those that need it the most. 2. **Holistic and integrated**: This requires strong multi-sectoral approaches and forms of collaboration among actors in the social, economic and environment fields. 3. **Participatory and inclusive**: the goals need to emerge from strong participation and ownership at all levels: local, national, regional and global levels. Only when the process is in the hands of the people—both women and men—and their decision-makers, will there be true ownership and accountability for the required progress and results.…. and 4. **Implementation**: aligned with existing declarations and normative frameworks“.

Goal 8, for example, which mandates development support for low and medium income countries, also can only happen after a deliberate effort has been made for conquering long standing inadequacies in the health system. This includes research for areas of public health that have traditionally been neglected in the workplace, such as reproductive health, asking also about transplacental transfer of nanoparticles whether by happenstance or as a deliberate nanomedicine. Overall, the result of integrating these principles into the Guidelines consistent with UN accountability will not be a "one size fits all" standard. Instead, the Guidelines can embrace these goals within the framework for compliance, by including specific criteria that will capture the data pertaining to emerging health disparities from exposures and contextual workplace conditions. This approach is accepted methods under international law in the text of International Labour Organization (ILO) ILO Convention 187, the promotional framework for occupational health management.

The sunset of the UN MDGs in 2015 does not end this endeavor under international law, however. The Sustainability goals also include many of the unfinished tasks of the UNMDGs in their rubric and therefore the UNMDGs remain an invaluable resource for understanding the conceptual underpinnings and legal principles in the equity and justice rubric of UN international legal instruments in the public realm.
II. Occupational Health Risks Associated With Domestic Work

“Ultimately, justice for child domestic workers rests upon changes in the very fabric of society, specifically in its valuation of children, of women, and of domestic work”7

A. Specific Known health hazards associated with Domestic Work

“At the international level the Governing Body of the ILO at its 301st session approved a decision to include a standard setting item on domestic work on the agenda for the 99th Session of the International Labour Conference 2010. In short, the ILO is moving towards creating an International Labour Convention or a Recommendation on domestic work in 2010. This development indicates the growing concern worldwide over rights and working conditions of domestic workers as well as the commitment of ILO member States to extend recognition to one of the largest yet unprotected segments of the labour force”8

Regarding Indonesia, a different report continues with great continuity paralleling the efforts in India: “Although the protection of migrant workers has been identified as a priority in successive national development plans of Indonesia, the actions of the Indonesian Government have proved insufficient to protect migrant domestic workers, who remain one of the population groups most susceptible to abuse and exploitation. In the main destination countries for migrant domestic workers in South East Asia and the Middle East, policies and administrative practices generate and compound the vulnerabilities of migrant domestic workers, and they are indeed the main cause of the massive and growing incidence of trafficking and forced labour practices against migrant domestic workers throughout the migration process. “The ILO’s Decent Work Country Programme for Indonesia has as one of its priority objectives to Stop Exploitation at Work, which specifically includes combating forced labour and trafficking of migrant domestic workers. This objective is also reflected in the United Nations Development Assistance Framework for Indonesia, and ILO is the sector leader of the UN system because of its lead

8 India report noted Source: BACKGROUND NOTE DECENT WORK FOR DOMESTIC WORKERS COMMUNICATION STRATEGY National Skills Development Initiative for Domestic Work
mandate and comprehensive programme in this area. Combating forced labour and trafficking in migrant domestic workers is recognized by the ILO constituents as a priority, for which they have requested comprehensive ILO assistance”.  

According to an ILO staff report in 1970, “it would be inadmissible from the standpoint of social policy, to ignore the problems of the group of domestic workers in private households and to permit this to remain a forgotten sector. This category of workers merits a claim in the public conscience”. That report synthesized sixty-eight substantive responses to a questionnaire sent to member governments following and International Labour Conference Resolution in 1965 that “drew attention the urgent need to provide domestic workers with the basic elements of protection .a minimum standard of living,.”. The ILO Secretariat reported in 1970: “it must be pointed out at the beginning that any study of domestic service is fraught with great difficulty because of the special and intimate nature of the employment relationship and because of the lack of data about the employment conditions”. The 1970 report outlined some major problems in data collection and methodology, some of which remain constant one generation later. “it is difficult to gain a very clear impression of the extent and nature of domestic employment, … For the most part, statistical data relating to the employment of domestic workers in private households .. are of dubious accuracy and validity…” although the numbers of people employed in domestic work based on census figures was available and may therefore serve as a benchmark for subsequent research across time. It was true then and now, however, that the population performing domestic work is overwhelmingly female, ranging over

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9 INTERNATIONAL LABOUR ORGANIZATION (ILO) MULTI-BILATERAL PROGRAMME OF TECHNICAL COOPERATION PROGRESS REPORT Project Number: INS/06/M10/NOR Project Title: Combating Forced Labour and Trafficking of Indonesian Migrant Workers Period Covered: 01 May – 30 September 2007 Total Budget: US$ 1.4 million Starting Date: 01 September 2006 End Date: 31 August 2008 Evaluation Date: Mid-Term Evaluation November-December 2007. Final Evaluation to be decided jointly between the ILO and the Norwegian Ministry of Foreign Affairs. Implemented by: ILO Jakarta Office

10 International Labour Organisation THE EMPLOYMENT AND CONDITIONS OF DOMESTIC WORKERS IN PRIVATE HOUSEHOLDS, 70B09_88_engl D.11 (1970), Conclusions, p. 64

ninety per cent in many of the 68 nations that replied to the questionnaire that was authorized in 1965 and analysed in 1970. 12

One generation later, in 2008, the ILO Governing Body has authorized a revisiting of these issues. Three significant social and demographic changes are noteworthy: First, there is now a large body of reliable data documenting the conditions faced by domestic workers, collected by governments, non profit organizations such as Human Rights Watch 13 from Philippines, Asia 14 South Africa15 and in the USA Domestic Workers United16. Three significant changes must be noted: First the demise of the socialist nations which considered domestic workers as engaged in economically “unproductive” work; second the development of documentation that can be used to benchmark important subjects such as health and safety,

13 Domestic Work is Work! Women's Work is Work! Building an Asian Migrant Domestic Workers' Regional Alliance and Strategic Action Agenda” 17-18 June 2007; Manila, Philippines Migrant Forum in Asia, together with the Coalition for Migrants Rights (CMR), Asian Migrant Centre (AMC), Alliance of Progressive Labour (APL) and Human Rights Watch (HRW), co-organized the Asian Domestic Workers Assembly (ADWA) on 17-18 June 2007 in Manila, Philippines.
15 Shireen Ally Caring about Care Workers: Organising in the Female Shadow of Globalisation University of the Witwatersrand, South Africa, Center for Global Justice webpage
16 Domestic Workers United, Valentine Avenue, Bronx New York “We have a dream that one day, all work will be valued equally. Founded in 2000, Domestic Workers United [DWU] is an organization of Caribbean, Latina and African nannies, housekeepers, and elderly caregivers in New York, organizing for power, respect, fair labor standards and to help build a movement to end exploitation and oppression for all.”
migration, and the size of the domestic worker population, and third, a major shift in the nature of the legal status of domestic workers. Significantly, the report in 1970 noted that most household servants were nationals of the country in which they worked and their tasks were shaped by culture and class, “not specialized in occupation”, with “no need for special rules”\textsuperscript{17}

By contrast, in 2008 cheap and accessible international travel has transformed migration patterns: domestic workers in the 21\textsuperscript{st} century frequently leave their home country in search of work and are therefore not granted the same protections as citizens.\textsuperscript{18} This underscores the need to address the rights of domestic workers as a matter of international concern\textsuperscript{19}. It must also be noted, however, that documentation activities have focussed on important issues of human trafficking, low wages and legal status associated with migration, and sometimes maternity benefits, but have only tangentially touched matters of occupational safety and health insofar as questions of long hours of work and the absence of social security and health insurance have an

\textsuperscript{17} International Labour Organisation \textit{THE EMPLOYMENT AND CONDITIONS OF DOMESTIC WORKERS IN PRIVATE HOUSEHOLDS, 70B09_88_engl D.11 (1970).}

\textsuperscript{18} See generally: INTERNATIONAL LABOUR ORGANIZATION (ILO) MULTI-BILATERAL PROGRAMME OF TECHNICAL COOPERATION PROGRESS REPORT Project Number: INS/06/M10/NOR Project Title: Combating Forced Labour and Trafficking of Indonesian Migrant Workers Period Covered: \textit{01 May – 30 September 2007} Mid-Term Evaluation November-December 2007. Final Evaluation to be decided jointly between the ILO and the Norwegian Ministry of Foreign Affairs. Implemented by: ILO Jakarta Office “Strategic Component 3: Outreach, Protection, Livelihood Activities and Reintegration Services for Migrant Domestic Workers and Their Families. The project enables national and local partners to provide outreach protection, livelihood and reintegration services to migrant domestic workers in source and destination countries. The main activities under this component entail providing technical assistance and building capacity in national and local government counterparts, recruitment agencies associations, trade unions, migrant workers associations and NGO networks to provide the above-listed services. Through a variety of activities in communities in Greater Jakarta, including awareness-raising and advocacy for Catholic Church structures and Parishes, the project supports outreach and assistance to domestic workers, and raising awareness in employers for minimum work standards for migrant workers by the NGO Mitra ImaDei.”

\textsuperscript{19} Blackett, Adelle. Making domestic work visible : the case for specific regulation International Labour Office. Industrial Relations and Labour Administration Dept. Labour Law and Labour Relations Branch. Geneva : ILO, 1998. Legislative measures are needed, contextualized to the domestic employment relationship. Consists of two parts. The text provides an overview of the internationally recognized rights and protections to which domestic workers should be entitled. The second part examines the initiatives of France, Spain and Zimbabwe to regulate domestic workers'conditions of employment in a comprehensive way.

impact on health and overall well-being. The ILO’s 1970 report and subsequent reports by non-governmental organizations have not addressed: exposure to indoor cleaning chemicals, exposure to infectious and communicable disease, lifting and psycho-social stressors and occupational epidemiology of domestic work, which does exist in the occupational health literature, is conspicuously absent from the discussion of population, wages and social security.

**Hazards and Precautions**

Under many national laws, employers’ responsibilities for the health of the workforce includes prevention or control of infectious diseases among employees. This includes identification, isolation and appropriate treatment of individuals with infections and steps to prevent the spread of disease to co-workers. In the decade since AIDS awakened concerns about bloodborne pathogens in the workplace, it also involves education and appropriate protection of employees who may encounter infectious diseases while at work or in the community.\(^\text{20}\)

**Physical hazards**

Some physical hazards include: long working hours, insufficient rest time and sometimes insufficient food, exposures to hot and cold water, exposure to hot kitchen environments, musculoskeletal problems, especially back and spinal pain, from lifting children and furniture, and kneeling to clean floors. “Housemaid’s knee” has been likened to “carpet layer’s knee”. Electronic floor-polishing and waxing processes has resulted in less stress on knees, but with attendant discomfort and ergonomic issues, as well as greater demands for productivity. (Tanaka et al. 1982; Turnbull et al. 1992). Precautions include limitations of working hours, adequate rest and food breaks, gloves for dishwashing, training in proper lifting techniques, mechanized carpet cleaners and floor polishers to minimize the time spent on the knees and provision of knee pads for occasional tasks.

**Chemical hazards**

Domestic workers can be exposed to a wide variety of acids, alkalis, solvents and other chemicals in household cleaning products which can cause dermatitis or are are known allergens,

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and many of these products are known carcinogens with potential reproductive health impacts. Here, domestic workers are found at a unique crossroads: they use large quantities of dangerous substances that are typically tested and approved for use in consumer quantities. Indeed, they purchase and use consumer sized quantities themselves, but their actual work experience results in a greater cumulative effect than the presumed consumer does. This is a major gap in existing research, and an area of strategic value to occupational health, if one places the needs of domestic workers at the core of consumers and families and then looks at their health and work experience as essential to understanding the greater disease burden in all civil society. Filling this void in research and the regulatory framework would be a vital first step in developing a maternalistic view of reproductive health in the workplace, destined to protect all society. Similarly, dermatitis can often be exacerbated by the immersion of hands in hot or cold water (Scolari and Gardenghi 1966). Domestic workers may not know enough about the materials they use or how to use these products safely because of inadequate training in chemical handling or hazard communication. For example, a severe poisoning case in a servant who was using cadmium carbonate silver-cleaning powder involved a worker who used the product for one-and-a-half days, and suffered abdominal cramps, tightness of the throat, vomiting and low pulse. Recovery took 24 days (Sovet 1958). Natural rubber protective gloves, house plants, waxes and polishes, detergents, hand creams, antiseptics and impurities in detergents and whiteners can also cause harm when used in the wrong hands. Irritant dermatitis may be a precursor to allergic contact dermatitis in housekeepers, and often starts with the development of erythema patches on the backs of hands (Foussereau et al. 1982). Inhalation of solvents, household pesticides, dusts, moulds and so on can cause respiratory problems. Precautions include: using the least toxic household cleaning products possible, training in materials handling and safety of the various detergents and cleaning fluids, as well as the use of unscented protective creams and gloves.

**Biological hazards**

Domestic workers with responsibility for the care of young children or extremely disabled adults are particularly at risk of becoming infected with illnesses, associated with changing diapers, cleanup after biological problems, and exposure to contaminated water. Precautions include washing hands carefully, proper disposal of soiled items and proper access to protective clothing, an expense in many households.
Psychological and stress hazards

Psychological and stress hazards range from isolation from family and community to fatigue from lack of paid vacation and sick or maternity leave; inadequate protection of wages. At the extreme and hopefully rare cases, rape, physical and mental abuse; over-extended working hours; and general lack of benefits can cause additional harms. It is believed that live-in domestic workers face greater danger from hazards including violence, harassment, physical and mental abuse and rape (Anderson 1993). During a six-month period in 1990, there were eight deaths - six suicides and two murders - of Filipino domestic helpers recounted in a report filed by the Philippine Embassy in Singapore. Suicide is under-reported and not well documented; however, there were as many as 40 suicides reported to the Philippine Embassy in one time period (Gulati 1993). An Ohio (United States) study that looked at workers’ compensation claims filed for sexual assault from 1983 to 1985, 14% of the rapes occurred in motel maids and housekeepers (Seligman et al. 1987).

Health Effects and Disease Patterns

One study of mortality data of 1,382 female domestic workers in British Columbia (Canada) showed higher mortality than expected from cirrhosis of the liver, accidental death due to exposure, homicides and accidents of all types combined. Also, deaths due to pneumonia and rectal and eye cancer were higher than anticipated. The authors suggest that a major factor in the elevated deaths due to liver cirrhosis is because many domestic workers in British Columbia are from the Philippines, where hepatitis B is endemic (McDougal et al. 1992). Other studies point to alcoholism as a factor. In a review of a California (United States) mortality study, it was noted that the following occupations were associated with increased cirrhosis mortality rates in women: private housecleaner and servant; waitress; and nursing aide, orderly and attendant. The authors conclude that the study supports an association between occupation and cirrhosis mortality and, furthermore, that the greatest cirrhosis mortality is associated with low-status employment and jobs where alcohol is easily available (Harford and Brooks 1992). In their 1989 study of occupational skin disease, the British Association of Dermatologists found that of 2,861 reported cases (of which 96% were contact dermatitis), the occupation of “cleaners and domestics” was the second-highest category of work listed for women (8.4%) (Cherry, Beck and Owen-Smith...
1994). Similarly, in positive responses to dermatological patch tests performed on 6,818 patients, the most common professions of women studied were housekeeper, office worker, cleaner, needleworker and cosmetologist. Housework accounted for 943 of the positive responses to the patch tests (Dooms-Goossens 1986). Other research has pointed to respiratory allergy and disease. Organic chemical-induced occupational allergic lung diseases were reviewed, and the category of domestic workers was noted as one occupation particularly affected by respiratory allergens (Pepys 1986). A Swedish study on mortality due to asthma looked at women who reported employment in the 1960 National Census. Smoking-adjusted standardized mortality ratios were calculated for each occupation. Increased mortality due to asthma was seen in caretakers, maids, waitresses and housekeepers (Horte and Toren 1993).

B. Problems With the Traditional Model
Two important principles have been falsely painted as at odds with each other, as they traverse cultures, geographic boundaries of nations and civilizations through time: women need to work, to nurture and support their families, and babies need a healthy environment in which to gestate, develop and thrive. Yet, some policymakers erroneously overlook the inescapable reality that risk and danger attend pregnant women anywhere they go. Those policymakers incorrectly pretend that women who work at home or in charitable volunteer services without a salary are somehow different from paid pregnant workers, even though they too may lift heavy objects, have exposure to illness and disease during day care of young children, require medical care, face dangers from toxins in ordinary household tasks such as cleaning and laundering, and confront potentially lethal or debilitating dangers while driving young children on family errands. As a result, a false dichotomy in policymaking artificially paints mothers who engage in paying work as in some peculiar conflict with the fetus even when their work is designed to provide the family with economic support and, more importantly, neither mother nor unborn child would necessarily enjoy a safer, more protected environment at home. Thus, the law is mystified and unclear regarding the rights and obligations of pregnant workers. The law is also

uncharacteristically silent regarding the maternal rights to protection at work or at home, from the time of conception to birth of a child.

This dilemma places occupational physicians and health care workers who are responsible for pregnant patients in an awkward position, often unable to determine whether information should be disclosed and if so, unclear about the professional obligation to follow-up care for pregnant workers who continue their jobs. Therefore ethical policies and laws governing the care of pregnant workers need to focus on the maternal needs beyond the rhetoric, by listening to the patient. This means more than simply implementing kinder, gentler paternalistic mores regarding pregnant workers. A maternalistic view ethically addresses the need for information about risks long before conception, taking a close candid look at risks and assets in the life of each potential parent, and then relating that information back to the workplace.

Several statutes apply to health and working conditions, and a representative example of the laws comes from the USA. For the purposes of understanding how the rubber meets the road for implementation of health protections to pregnant workers, however, the two most important federal laws are: Section 5(a)(1) “General Duties” of employers under the Occupational Safety and Health Act of 1970 (OSH Act) and the civil rights legislation under the Americans With Disabilities Act (ADA). This new area of potential personal liability for occupational health professionals is not rooted in the common law of negligence or malpractice, but in ADA’s clear statutory mandate to prevent acts of discrimination against the disabled. And, consistent with the civil rights legislation upon whose success ADA is modeled, any individual can be held liable for acts of discrimination. Further, determination of responsibility for discrimination under law looks to the practical adverse effects of an act of discrimination, without regard to the actor's possible good intentions.

Curiously, however, pregnancy is not considered to be a disability within the plain meaning of the terms of ADA. This is confusing for two important legal reasons. First, pregnancy can be very disabling and even the healthiest woman can become high risk for unanticipated harms during pregnancy; even so, she and her unborn child are not legally accorded the protections consistent with members of the general population who have experienced other forms of disability. This cluster of impairments is not directly
protected by the ADA. Second, according to the U.S. Supreme Court in *Bragdon v. Abbott*, the ability to reproduce, having a healthy child, is considered a “major life activity” whose impairment can be protected by the ADA. Thus the current law in the United States provides the anomalous situation that women who cannot have children are potentially protected as disabled in the workplace, while pregnant workers do not enjoy special rights or protections under United States law. It is nonetheless consistent with ADA’s overall social purposes that pregnancy might be treated as a disability for the purposes of bestowing reasonable accommodations upon pregnant workers or pregnant women in general as a matter of law in the future. For women who confront reproductive health hazards in the workplace, especially pregnant workers, another layer of analysis is required in order to align the pragmatic resolution of difficult health rights questions with the existing interpretations of the law. This can be achieved without extending the rights to the unborn, by simply extending the autonomous rights that already exist under law for potential parents and pregnant women. This will take a re-adjustment of old attitudes. Those old attitudes unrealistically limit the realm of occupational health protections to a narrow segment of the working population, presently treated as a box within several other boxes of occupational health care and therefore limited in scope to a small, unrepresentative population, who enjoy precious few limited protections for reproductive health at work. In-house corporate compliance programs can go beyond the inadequacies of existing laws, however, by offering reasonable accommodations to pregnant workers as if they were protected by ADA. This approach, focused on the health and well-being of the pregnant worker has the additional benefit of resolving ethical dilemmas despite a void in the current law.

Prior to the arrival of nanotechnology in workplaces around the world, there has been far too little public discussion about the relationship between the human right to health, the role of health in promoting work and the role of work in society in relation the reproductive health of workers and unborn human generations. On the micro scale, reproductive health issues are

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intensely personal and science policy issues about reproductive health rapidly become intensely evidence specific and problematic.\(^{22}\)

Too often, issues about the impact of workplace exposures that can alter the ability to reproduce or can harm the reproductive system at any age (for example, by promoting breast cancer regardless of the worker’s age) are quickly mixed up with the debates about the “choice” to be a parent and whether offspring should be planned. Questions about government funding for contraception and abortion remain very sticky and hotly contested in any nation, but such problems should not prevent cleaning up the workplace. Those religious questions are a matter of individual preference or legislative policy judgment. Yet, the impact of reproductive health hazards in the workplace upon populations impacts all posterity, because: “endocrine effects are not usually investigated when a new chemical is tested prior to use so the possibility exists that familiar materials may be influencing human reproductive functions. The situation is complicated by the chance of interactions between different materials which may magnify or counteract the effects of each other.”\(^{23}\)

Many administrative agencies have taken affirmative steps to limit exposure to known or suspected reproductive health hazards, but such steps have not been widely enforced.\(^{24}\) Compounding workplace exposure are traditional demands at home, with potential synergistic effect of the combined workplace exposure and environmental exposure. Furthermore, it is unclear what benchmark to apply in order to determine which outcomes are "healthy" and which


are less than adequate to requiring governmental intervention and oversight. Maternal mortality, also impacting child health, is a major problem targeted by the UNMDGs.

Blocking public discourse about reproductive health hazards at work has not prevented their negative impact upon the population. Maternal mortality during childbirth or pregnancy remains high on the list of horrible but poorly understood public health problems. The public health crisis surrounding exposures in the workplace is an important factor in the UNMDGs attention for reproductive health and reducing maternal mortality during pregnancy, and the ILO program for Safe Maternity. Markowitz believes that unrecognized reproductive health hazards in the workplace may be linked to the unexplained rise in autism at the end of the 20th century.

If so, such effects are expensive, increasing the disease burden in society whether the problem is recognized and treated--or not. Nanotechnology applications to workplaces offer the opportunity to change the working assumptions about reproductive health impacts, and the paradigms for recognizing and treating reproductive health problems.

1. International Convention on the Elimination of All Forms of Discrimination Against Women

The Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), Part III, Article 11(a) states that States Parties undertake to ensure the equality of men and women regarding: "The right to work as an inalienable right of all human beings". CEDAW Article 11.(f) states: "The right of protection of health and to safety in working conditions, including the safeguarding of the function of reproduction."

The harm to children whose parents are debilitated by occupational disease, or to the baby who may suffer personal injury due to the effects of a parent's workplace exposure to mutagens has not been calculated by occupational health data sources. Yet, the significance of this dimension of the human right to health protection may be incalculable------- calling into question the health rights for all humanity.

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26 Dan Markowitz, “Oh Baby! OSHA Standards Protecting the Unborn Child” American Society of Safety Engineers (ASSE) June 2013, co-presenter with Ilise L Feitshans
a. Rights to Family and Parental Leave

Article 11.(2) a prohibits "sanctions, [or] dismissal on the grounds of maternity leave," a subject of profound contemporary and historical conflict and a violation of international human rights, under many legal systems of UN Member States. For pregnant women and other people who work, these important issues remain unresolved in the jurisprudence of pregnancy. Thus, Article 11(2) is unquestionably geared to overturning generations of ingrained institutional sexism under law, which were an outgrowth of mistaken values regarding women's presumed infirmity during pregnancy or while raising a family, yet the precepts in this article lacks any guidelines for effective implementation. This concern is also expressed in the International Labour Office Convention, Number 156 (AC.156”), 27

b. Role of Special Protections: Protective Reassignment or Prohibited Exclusion?

Although CEDAW views, "the right to work as an inalienable right of all human beings" and Article 11.(f) states: "The right of protection of health and to safety in working conditions, including the safeguarding of the function of reproduction," implementation of these provisions is open to a variety of interpretations. There has been extensive misuse of “Scientific» findings by employers to persuade courts that women should be excluded from certain occupations on the one hand, and yet, not enough is known about the true nature of reproductive health hazards in the workplace that can cause functional impairment of reproductive health; special risks to working mothers during pregnancy; or workplace exposures that can have a negative impact on fetal health 28. Although a stellar victory for women's economic rights in the workplace, the US Supreme Court in IUAW v Johnson Controls offered no guidelines of risk assessment, nor did it suggest whether there are any instances wherein a woman has the right to refuse hazardous work in order to protect her reproductive health or the health of her fetus, with full protection of seniority, promotion, maternity leave and other employment rights. Furthermore, CEDAW’s

27 Convention Concerning the Equal Opportunities and Equal Treatment for Men and Women Workers: Workers With Family Responsibilities, (1981) Article 8 “Family responsibilities shall not, as such, constitute a valid reason for termination of employment,», with particular reference in Article 1 .13. to«dependent child» and other members of the immediate family».

28 IUAW v. Johnson Controls, 499 US 187 (1991) US Supreme Court held that so-called Fetal Protection Policies were unconstitutional.
text is unclear, what standard of proof is required to necessitate "special protection", or which aspects of such protection are unacceptable. Without knowing the scope of an acceptable protective mechanism it is also impossible to gage when "special protection" crosses the line to encourage systemic discrimination or genocide, violating international human rights to health. Article 11.3 does not solve this dilemma, but it attempts to place a practical limit upon the reach of "special protections" by clearly stating that implementation of occupational safety and health protections must be solidly based in scientific evidence, rather than bottomed on vague or misconceived social values. Article 11.3 states: "Protective legislation relating to matters covered in this article shall be reviewed periodically in the light of scientific and technological knowledge and shall be revised, repealed or extended as necessary." Methods for oversight and appropriate risk assessment also need to be spelled out, in order to ensure that improper exclusionary policies, such as forced sterilizations to retain or obtain employment, will be viewed as constituting gross violations of international human rights.

2. Platform for Action and the Beijing Declaration on the Rights of Women

Equal access to health services and efforts to eliminate all forms of violence against women are two of the eight points for Action in the Beijing Declaration, which functions as an outline for the detailed Platform for Action. Both documents were adopted unanimously as a part of a comprehensive plan of action to enhance the social, economic and political empowerment of women. Not surprisingly, Strategic Objective C, A Women and Health, and Strategic Objective D, Violence Against Women, comprises Actions 89 through 123. This represents about 15% of the agenda for Strategic objectives and Action for Implementation paragraphs in the final document, and implicitly reflects a new, strong, and potentially enforceable international priority for issues concerning occupational health. The difficult effort to muster political will for including women's health on the Beijing agenda was documented by Haselgrave.

Platform of Action and the Beijing Declaration, UN Department of Public Information, New York, 1996.
and Havard and came to fruition in part through the efforts of the Global Alliance for Women's Health. Action 100 states: “Occupational health issues are also growing in importance, as a large number of women work in low-paid jobs in either the formal or informal labor market under tedious and unhealthy conditions and the number is rising”. The Platform document's weak understanding of occupational health understates the magnitude of risk from diseases and toxins and understates the reach of these hazards, which harm women in every class, across the workforce. Nonetheless, such a statement in international human rights documents is a major step towards achieving meaningful occupational safety and health protections for women, through government action on international, national, and local levels. Bunch noted, acknowledgment of women's vital and energetic contributions to the international strategies of implementing health protections were clearly evinced in the Vienna Declaration and Plan of Action from the 1993 World Conference on Human Rights.

3. Position Statement on Safe Motherhood and Reproductive Health at Work

The Conference "Medical and Ecological Problems of Workers' Reproductive Health" was held December 9-10, 1998, in Moscow, Russia. Reprinted below as Appendix One. Consistent with the data expressed at the Conference and the sentiments evoked in response to the collective wisdom of the experts assembled, it was the Committee's view that such urgent legal issues of toxic exposures in the workplace have an important impact upon pregnant workers and women's reproductive health.


32 Declaration Position Statement And Proposed Plan of Action for Period Up To 2000 and in the 21st Century, Workers’ Reproductive Health Protection. Adopted by the International Conference Medical and Ecological Problems of Workers Reproductive Health, 9, 10 December 1998, Moscow Russian Federation. According to the data presented at the conference, alarming changes in vital statistics regarding increased miscarriage, infertility, death from infectious diseases, pregnancy anemia, and complications from pregnancy undermines the health of pregnant workers and challenges the viability of humanity for posterity. In areas of ecological catastrophe, reported data indicate that the death rate has increased while birth rates declined.
In a satellite meeting on December 11, 1998, the Committee of Experts on Reproductive Health at Work (COERHW) unanimously adopted "Declaration: Position Statement and Proposed Plan of Action for Period up to 2000 and in 21st Century on Workers' Reproductive Health Protection" sent to then- WHO Director General Dr. G.H Brundtland, as part of WHO's agenda on occupational health for all. Recognizing the extensive body of international, national and European laws that make piecemeal attempts to protect reproductive health, the Declaration calls for a Plan of Action by the UN, several international governmental agencies, and national governments to provide primary care and to prohibit or reduce harmful occupational and environmental exposures by: research into the environmental and occupational factors affecting reproductive health; implementation of primary care; prohibition of highly-dangerous exposures for any workers contemplating parenting; legal analysis of existing foreign and international laws to protect reproductive health; and a new international convention to specifically address reproductive health in the workplace.

The Declaration incorporates by reference the International Convention on Populations and Development, Chapter VII, defining “reproductive health” using the WHO Constitutional definition of “health” as its base. COERHW noted that occupational health is a human right, according to international human rights documents. Although theoretical support for the right to health, occupational health and reproductive health is quite strong under existing international treaties, conventions and other multilateral instruments, no single document, however, codifies the right to reproductive health at work. Thus, even though many conventions provide the conceptual underpinnings for a rights-based analysis, and the empirical data points to a need to address these issues, no single international instrument sets forth a coherent framework to address the issues of reproductive health at work. Nor does any instrument ensure access to information and risk communication for people who confront reproductive health hazards at work, even under the Global Harmonization programs for chemicals.

COERHW therefore viewed codification of the best practices, including scientific criteria into risk communication as an appropriate subject for a subsequent international instrument, as the next step after the Declaration. Members of the Committee agreed that continuing the process begun at the Moscow Conference is an integral part of efforts to improve conditions for pregnant workers, for all women workers and their mates, and for the next generation. They re-affirmed dedication to sharing their findings with colleagues, to networking to publicize the Declaration as a tool for educating the scientific community, opinion leaders and the general public. Finding that vital issues of reproductive health in the workplace have a disproportionate adverse impact on the health of working women, the Committee of experts asked the Legal Advisor to prepare additional information about jurisprudence on this topic, including a survey of the laws, regulations and treaties at the local, national and international level. Areas of particular concern for further standardization activity included: availability of health services for pregnant workers on the national level of many nations; delivery of health care to pregnant workers in occupational health services settings, especially those provided by employers and those health service centers in rural areas where alternative health care delivery services are unavailable; minimum standards for reproductive health training among occupational physicians and occupational health nurses and their staff; efforts to provide meaningful implementation for job security and paid leave of absence for maternity leave immediately before and immediately after the birth or adoption of a child consistent with ILO Conventions C 155 and C 168 Article 5(4)(h) and ILO “Safe Maternity” policies. The importance of instituting these protections is underscored by developments in nanotechnology, whereby “the placenta is likely to come into contact with novel nanoparticles, either accidentally through exposure to these materials, or intentionally in the case of nanomedical applications”


The International Convention on Population and Development (ICPD) raises, for the first time in the history of international human rights to health, the notion that health embraces reproductive health, in several respects. Chapter VII, regarding reproductive health, offers a

34 Tina Buerki-Thurnherr,Ursula von Mandach and Peter Winch, “Knocking at the door of the unborn child: engineered nanoparticles at the human placental barrier” Swiss Med Wkly 5 April 2012 142: w13559
definition that is several pages long, recalling the WHO Constitution by stating, “Reproductive Health is a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity.”

This language precedes a broad mandate for health professionals to research and provide prevention strategies for the problems of adolescent sexuality, occupational exposure to reproductive health hazards in the workplace; HIV/AIDS prevention, the elimination of other sexually transmissible diseases, maternal and child health, family planning and a wide range of other topics concerning human development. Curiously, ICPD does not address the issue of whose reproductive health is involved: and is therefore inconsistent with documents that afford childrens health human rights protections, and also draws no attention to disproportionate negative health impacts that fall upon women. The document does not make clear when a mass of human genetic material in cells become a human life; vested with the right to reproductive health. There is no reference in ICPD to the Convention on the Rights of the Child, and little guidance whether these provisions dovetail with childrens’ health protections or with CEDAW. The text does not make clear whether reproductive health begins at birth, or during gestation, such as need for prenatal care for maternal and child health.

Or, in the alternative, do rights exist in any mass of human genetic material, including frozen embryos, frozen eggs, and donor sperm? A narrow view of occupational health would depict such protections as sharply limited in scope. Reproductive health at work under this narrow construct, applies only to the on-going health and well-being of parents, perhaps the monitoring of workers who are exposed to teratogens and hazard communication about possible reproductive health effects of some known teratogens. A practical, broader view of reproductive health at work recognizes that harms to the reproductive system of any worker can occur without regardless of age, thus also including possible increased risk of breast or cervical cancer or testicular cancer within the scope of their research definitions for reproductive epidemiology and occupational medicine. These issues will be brought to the fore rapidly by nanotechnologies that will drive nanoparticles down the transplacental superhighway.
III. Conclusions: A Proposed Rethinking of the Traditional Model to Reflect a Maternalistic View, Protecting Reproductive Health for All

The walls of the false dichotomy between mother and child must crumble and disappear, in order to adequately confront these ancient and unresolved conundrums. A maternalistic view ethically addresses the need for information about risks long before conception, taking a close and candid look at the risks and assets in the life of each potential parent, and then relating that information back to the workplace. Part of this expanded definition of occupational health would place the field at the forefront of protections for healthy children; relying on practical information and ethical norms where the law is needed, but does not yet go. Therefore ethical policies and laws governing the care of pregnant workers need to focus on the maternal needs beyond the rhetoric, by listening to the patient. This means more than simply implementing kinder and gentler paternalistic mores regarding pregnant workers, whether in the office as secretaries, in the gold mines of South Africa or the Coal Mines of West Virginia, or on an airplane bound to a high level meeting of diplomats, kings, princes, Presidents and Queens.

To be effective, programs that address reproductive health issues at work therefore must focus on pragmatic daily health concerns. This requires rejecting the false distinction between the jurisprudential basis for right to life claims against abortion that do not reach issues of health care during the natural term of pregnancy, in order to address pragmatic realities of post-conception choices about medical care. Exposure to toxins in the workplace, environmental and occupational exposures that remain beyond parental control, and society's need for healthy offspring may soon require legislatures and courts to create post-conception reproductive health

35 Unfortunately, the law of reproductive health has become so bogged down in the quagmire of rhetoric surrounding reproductive “choice” regarding the autonomous decision whether or not to have an abortion, that few if any laws specifically address, much less support, the needs of any mother to have health care and adequate access to social support mechanisms or nutrition, if she “chooses” not to have an abortion. Although the law fancifully skirts around the issue of rights and health of the unborn in the workplace and in several other situations, there is virtually no legal doctrine to assist future mothers in the time frame between conception and birth or natural end of pregnancy, other than the laws that support termination through abortion. This problem is exemplified by U.S. Supreme Court case law that correctly struck down fetal protection policies as sex-based discrimination, but that did so without suggesting criteria for risk assessment.
law, so that protection will be even-handed and protect also the interests of civilization

A maternalistic view ethically addresses the need for information about risks long before conception, taking a close and candid look at the risks and assets in the life of each potential parent, and then relating that information back to the workplace. Part of this expanded definition of occupational health would place the field at the forefront of protections for healthy children; relying on practical information and ethical norms where the law is needed, but does not yet go. Therefore ethical policies and laws governing the care of pregnant workers need to focus on the maternal needs beyond the rhetoric, by listening to the patient. This means more than simply implementing kinder and gentler paternalistic mores regarding pregnant workers.

APPENDIX ONE
DECLARATION_POSITION STATEMENT
AND PROPOSED PLAN OF ACTION
FOR PERIOD UP TO 2000 AND IN 21ST CENTURY: ON WORKERS’ REPRODUCTIVE HEALTH PROTECTION
(Adopted by the International Conference _ Medical and Ecological Problems of Workers’ Reproductive Health, 9_10 December 1998, Moscow, and refined by the Informal International Consulting Meeting of Experts on Reproductive Health Protection, 11th December 1998, Moscow, Russian Federation)

To insure optimum reproductive health protection worldwide, the Members of the International conference and Informal meeting of experts believe that there is an urgent need for elaboration of international consensus statements as well as the Plan of Action.

BACKGROUND INFORMATION:
As satellite venture to the Conference on 11 December 1998 the Informal International Consulting Meeting of Experts on Reproductive Health Protection was held organized by the Initiative group (Dr. O.Sivochalova, Dr. E.Denisov, Prof. I. Figa_Talamanca, Dr. T.Vergieva, and Prof. I. Feitshans as Member and Legal Advisor).

In the Consulting Meeting 21 specialists have participated from Belarus, Kazakhstan, Poland, Russia, Tajikistan, USA as Attending experts and 4 specialists from Bulgaria, Canada, Italy and Ukraine as Ex Officio experts (contributing by fax and e-mail correspondence). Chairpersons of the Meeting were Prof N. Izmerov, Director of the RAMS Institute of occupational health and Dr. O.Sivochalova, Head of the Centre of Medical and Ecological Problems of Workers, Reproductive Health of this Institute.

Declaration_Position Statement and Proposed Plan of Action for Period up to 2000 and in 21st Century on Workers’ Reproductive Health Protection have been unanimously adopted by the Committee of Experts.

INTRODUCTION
As recently called for by His Excellence, Mr. Kofi Annan, Secretary_General of the United Nations, the International Organizations, such as the ILO and the WHO and the national governments throughout the world should give occupational health and safety higher priority of their agendas. This would be necessary to respond effectively to the
Recognizing the urgent need for improved primary care, protection of mothers, working parents and their children for the benefit of the family and the urgency attached to the problem of understanding the interaction between workplace exposures, environmental factors and preventing worker exposures that jeopardize familial health and human reproductive health, the Committee of Experts hereby calls upon the Director-General of WHO to use her good offices to foster further understanding, research and international cooperation in the following areas to prevent and reduce known or expected hazards to reproductive health AND

RECOGNIZING THAT many conventions that suggest there is an international need and obligation to address these issues, but no single comprehensive international instrument about reproductive health in the workplace addresses these issues directly nor does any such instrument adequately ensure access to information and risk communication for all people who confront reproductive health hazards at work;

The following proposals are based on updated principles and practices and should be considered as background for better reproductive health protection for every worker.

2. GENERAL STATEMENTS

According to the UN definition, AReproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and its functions and processes... reproductive health care is defined as the constellation of methods, techniques and services that contribute to reproductive health and well-being by preventing and solving reproductive health problems...@ (Cairo, 1994).

The Committee of Experts,


RECOGNIZING First that preserving any and every wageearner's health and ability to enjoy reproductive health is essential to family life; to preserving the family; and protecting the next generation for posterity and

RECALLING the WHO view that health is tied to the prevention of impairments and the ability to participate in all life activities, and that the WHO should endorse a Plan of Action in this Declaration to address this urgent problem the Committee of Experts hereby
**FINDS AND DECLARES:**

At present experts in many countries express serious anxiety about unsatisfactory health status of population especially of reproductive health as well as of children’s health due to influence of hazardous occupational and environmental factors (physical, chemical, biological agents, physic loads and nervous stresses). In some countries on the background of social and economical problems a critical situation in population reproduction have formed which threatens their sustainable development, especially for countries with transitional economies. Many pregnant workers have been denied access to primary care in occupational health services or in the health care delivery systems of the different nations and this grave situation causes further deterioration of maternal and child health and the well_being of all society.

The International Conference on Population and Development (Cairo, 1994) and the Fourth World Conference on Women (Beijing, 1995) have together focused on the need for all countries to examine policies and practices related to broader health concerns, bringing in both a human rights and a gender perspective. According to modern approach adopted ILO and WHO reproductive health of both genders (men and women) should be protected and promoted as part of general health. Women in some periods of reproductive life (women of fertile age, pregnant, recently delivered and breast_feeding) as well as children and adolescents should be considered as vulnerable groups i.e. high risk groups and need supplementary protection.

In fundamental medical sciences by mutual efforts of professional community the concept of reproductive health is emerging as topic of the highest medical and social priority. The Meeting of Experts was an extension of other actions in the field namely Expert meeting @Women at work@, 10-12 November 1997, Helsinki, Finland where it was suggested to develop an International legal document on the health protection of women at work, including pregnant women.

3. ISSUES 3.1. Priorities in research and for primary health care system and occupational safety and health service

Notwithstanding the progress in maternal and child health and in reproductive pathologies, some problems persist, and are even in the increase. A high proportion of conceptuses is lost prematurely, manifested as sub_fecundity and infertility, the rate of spontaneous abortion seems unchanged, congenital defects are a continuous problem, while childhood cancers are increasing. According to some, but not all studies, fertility and sperm quality are decreasing.

Although research efforts have considerably increased in this area in recent years, there are still many open questions. Some examples are the following:

- Is there a differential susceptibility of the female versus the male organism to exposures of chemical and physical agents in the work environment.
- How justifiable are differential standards and limits of exposure for the two genders, are present day work exposure limits sufficiently low to protect the reproductive health of men and women.
- Is there a true reduction in human fertility (and sperm quality), in the industrialized countries, and what may be the risk factors involved.
- How do factors previously neglected such as stress, shift work, work with new technologies, affect reproductive health.
- Are the known reproductive risks under control, and how can this be accomplished?

Particular attention must be paid to the health of working women, a subject that has been neglected in both developed and developing countries. To fill this gap, it is important that the following steps be undertaken by governments and international organizations:

- Studies in the production sectors which employ predominantly female workers. These include both paid and unpaid (invisible) work in agriculture, in domestic labor, in garment, textile and food industry, in the health care sector.
- Identify reproductive risks for both men and women in these settings, and prevent exposures of those more vulnerable.
3. Take account in studies of the double load of women workers, and of family and other stresses.
3. Most reproductive hazards are dangerous to both males and females. Research should examine both. Selective overprotection of women may compromise employment opportunities of women, condemning them to poverty.
3. Document the many forms of exploitation and illicit labor in developing countries, especially among adolescent girls and child laborers. These phenomena, although macroscopic are not sufficiently documented, and are often tolerated by local authorities.
3. Document the deprivation and reproductive risks of migrant workers, who seek employment and survival in western countries. For them too, documentation and intervention programs are deplorably scarce.

**3.2. Considerations for the need of specific approach in studying reproductive health at work**

A number of chemicals are with a short half-life in the organism and a certain endpoint (as for example a birth defect) might arise only after exposure in the respective sensitive period of gestation, the necessity of studying a range of endpoints including sensitive ones and subtle changes as minor birth defects and postnatal functional deficits.

Investigation directed to reveal dose-effect and dose-response relationship for proven and/or suspected reproductive and developmental hazards.

Examination of additional and eventually new endpoints for reproductive toxicity.

Studies on contribution of combined exposures.

Exploration of potential reproductive hazards of new technologies, for newly introduced occupational chemicals and other agents as well as in branches of industry which have not been considered yet.

Development of study protocols and statistical approach to deal with the problem of small numbers of employees in specific occupational settings and being exposed to specific hazards.

Implementation of models for monitoring reproductive health of workers and subsequent use of these data for epidemiological studies. Further refinement of the protocols with inclusion of individual exposure data relevant for the respective endpoint period in case-control studies nested in a follow-up cohort.

Encouraging occupational health services in reporting eventual clusters of mis-events in reproductive health and with the help of other specialists organizing at spot of follow-up studies.

**3.3 Proposed Action to fill the gaps in existing international and state laws**

Regarding the role of workplace exposures in shaping reproductive health outcomes:

The Committee of Experts Notes that there are many conventions that suggest there is an international need and obligation to address these issues, but

No single comprehensive international instrument about reproductive health in the workplace addresses these issues directly nor does any such instrument adequately ensure access to information and risk communication for all people who confront reproductive health hazards at work.

An initial survey of international laws demonstrates that many of the treaties and conventions and international human rights instruments that provide jurisdiction for the protection of reproductive health are important but inadequate; they form only a patchwork of indirect efforts to protect people from reproductive health hazards in their workplace.

Further international legal research is needed in this area, comparing and harmonizing local, national and international laws and codes of practices from corporations regarding reproductive health hazards from occupational exposures.
In addition to further legal research harmonizing international and state laws and analyzing the jurisprudence of pregnancy and of related health laws and laws governing the delivery of primary care at local, national regional and international levels,

The Committee of Experts strongly urges the development of an international instrument (Such as an ILO Convention, WHO Recommendation, ISO Standard, treaty or other multilateral document) that will directly address these problems,

Combined with a strong legislative awareness effort that will educate legislators, members of the international governmental community, regulators, scientists and the general public regarding the urgency and the visible means of preventing foreseeable reproductive health hazards in the workplace and preventing their adverse consequences.

4. PROPOSED PLAN OF ACTION
4.1. Request for Urgent Priority to this matter from the Director General of the WHO and of the ILO and related International Organizations.

4.2. Implementation of international consensus statements on reproductive health protection (UN Task Force on Reproductive Health, WHO, ICOH, ILO, Council of Europe=s CDEG etc).

4.3. Development of agreed terminology on reproductive hazards and reproductive health risks as well as standard definitions for describing and monitoring legislation, policies, services provision and use and reproductive health outcomes (UN Task Force on Reproductive Health, WHO, ICOH, ILO, Council of Europe=s CDEG, WHO Collaborating centers on Occupational Health) for the purposes of the implementation of an enabling International Instrument.

4.4. Elaboration of the Guide (or Code of practice) ARisk assessment and risk management for pregnant female workers and health monitoring@ (WHO, ILO, ICOH,).

4.5. International Co-ordination of efforts and exchange of experience gained between National centers on reproductive health protection of WHO Collaborating centers on Occupational Health (coordinating meeting with participation of WHO and ILO) and methodological support of the WHO Safe Motherhood Campaign up to 2000 (WHO Collaborating centers on Occupational Health) regarding risk assessment, management and communication, research regarding the interaction of occupational exposures and environmental factors, and related matters of reproductive health of workers.

4.6. Preparation of an International Instrument (e.g. ILO Convention supplemented by WHO/ILO _Joint Committee activity or the specialized branches of WHO; or criteria such other documentation as appropriate) on safe motherhood, reproductive health protection for mothers, fathers, and the next generation whose reproductive health may be impaired by the harms we study today, but who will not experience the effects of those harms until they also reach reproductive age; and health promotion of female workers (ad_hoc group).

RECOMMENDATION

Therefore the Committee of Experts on Reproductive Health in the Workplace Meeting in Moscow December 11, 1998 hereby Declares and recommends that definitions of occupational health, reproductive health and environmental health impacting on the vitality of the family and the next generation include but are not limited to the effects of dangerous or potentially dangerous exposures to adults in any workplace and shall be considered as a fundamental component of assessing each individual’s health status and well_being.
Therefore this Committee further Recommends that there shall be an international meeting to follow up this meeting on regular basis, under the auspices of WHO and related international governmental organizations, and that the results of such meetings shall be the production and adoption of an International Instrument for the protection of reproductive health of people at work.

6.A. REFERENCES (official)


WHO revised policy document Health for All in 21st Century* (to be issued later)

6.B. REFERENCES (scientific)


4. Langard S. Partitioning of causal weights of work and environment related diseases based on epidemiologic results (Norwegian, abstract in English)/Nor. J. Epidemiol. _1994._ v.4,N 1, P. 26 31


10. Sivochalova O.V., Kozhin A.A. Protecting the reproductive health of the family.//Reproductive Toxicology._1994._Vol. 8, N 1, _P.5_9.


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