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Transdisciplinary Approach in Women's Health Research: A Study on Urban Middle Class Women

S. Mukhopadhyay

ABSTRACT

The paper discusses the importance of adopting a transdisciplinary approach in women's health research and highlights the important issues relating to women's health. Specific health problems of women in developing countries have been outlined, and some findings of research on the relationship between working status and maternal health among the urban middle-class women of Calcutta are reported. They do not support the hypothesis that working women are under greater stress and hence suffer from ill health. The availability of hired domestic help and the support received from other family members may help mitigate the burden.

Transdisciplinary research

The post Second World War period evidenced a change in the direction of anthropological research – from descriptive studies of race towards studies on adaptation to various environments. Research at both the population and at the individual level studied the sources and causes of human variation, applying relevant concepts and methods of ecology, demography, epidemiology, nutritional science and many other disciplines. With the inception of International Biological Program (IBP), particularly its Human Adaptability (HA) section, during the early sixties, the need for multidisciplinary research came into sharp focus. »Investigators from several fields worked together on common research goals«[1,2]. The basis of all these multidisciplinary research is linked with the understanding of human behavior and biology in the perspectives of adaptation – at population and at individual levels[3,4]. The vast array of methodological perspectives often include a biomedical component and a concern with health and adaptability[5]. The area of intersection of different discipline in achieving the »common research goal« characterizes »transdisciplinarity«.

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Adaptation, well-being and transdisciplinarity

Research on health and adaptation/adaptability, in general, is based on different assumptions and naturally involved researchers with varied disciplinary back-grounds. It has been rightly stated by Baker[6] that, »the adjustments we have made to improve our adaptations to a given environment have produced a new environment which we, in turn, adapt in an ongoing process of new stress and new adaptation«.

In order to demonstrate adaptation, attempts were made to study a variety of human populations in contrasting environments as »natural experiment« designs. Natural experiments as the name suggests, are studies involving »individuals or groups whose living conditions approximate the conditions required by an experimental design«[6]. Such studies can be extensively used as baseline information on how populations respond to varied environmental conditions.

To comprehend holistically the interplay of forces tending to maintain physiological, behavioral and developmental homeostasis, in humans inhabiting diverse environments is too complex a phenomenon to be effectively handled by the concepts and methods of any single discipline; equally complex interactions of many disciplines cutting across their disciplinary boundaries, i.e. a trandisciplinary approach, seems to be the only effective one.

Background on »women's health and work in India«

For the last two decades, following the International Women's Year in 1975, the most crucial sector that receives highest priority in the international health agenda is the promotion of women's health care research.

The women's health domain includes the entire range of health problems affecting women (both during and after reproductive years). It usually focuses on conditions that are particularly prevalent or severe among women, and on aspects of prevention, diagnosis or treatment that are particularly relevant to women[7]. In developing countries, women's socioeconomic status and cultural position differ from those of men. Those differences influence their health risks on one hand and the options open to them to resolve their health needs, on the other.

»Each of the major social science disciplines: economics, sociology, anthropology and psychology has different and potentially useful theoretical paradigms and research methodologies (both quantitative and qualitative) to offer in search for most appropriate ways of ameliorating poor health among women in developing countries«[8].

Programs targeted toward women, like health, nutrition and family planning emphasize the biology of normal reproduction, problems related to conception, pregnancy, lactation and biological aspects of other health problems affecting women, and place less emphasis on aspects of women's lives. This results in ineffective design of health intervention along with under utilization of available services[9,10]. For example, programs like breast feeding promotion, screening and treatment of STDs, reduction in domestic violence against women, can be made more realistic using broader focus on women's lives.

Several non-maternal health issues have emerged as a result of women's health being viewed in a holistic way within the social, economic and political context of their life cycle[11]. These issues which go beyond national boundaries, comprise the predominant risk factors that contribute to morbidity and mortality in women of all ages, and reflect the

types of health problems that affect women at various stages of life[12].

The emergence of chronic diseases in developing countries was an untoward effect of their endeavor in fertility decline, increased life expectancy and control over infectious diseases. Of these chronic diseases, cancer and cardiovascular diseases are the leading cause of morbidity and mortality[13]. Women in most developing countries are at high risk of cervical cancer. Primary prevention of cervical cancer should be aimed at educating the young about safe sexual practices and to draw attention to the early symptoms of it.

In developing countries, prevalence of violence against women is growing[14], which has both physical and psychological effects thereby causing morbidity and mortality of women and children. In India a woman is characterized (depending on her status and prestige) as one who lacks courage and is submissive and docile. With this as background, she often becomes a viable target for violence in response to other stresses, strains and frustrations. The trauma and physical injury involved in such violence cause serious adverse consequences on their physical and mental health[15].

With modernization, family structures are changing from the traditional pattern of male bread winner and female homemaker to an alternative role and relationships. India is no exception to this change. In keeping with the global trend, large numbers of Indian women are joining the work force. Though the number of dual earner families is growing in the metropolitan and urban cities, the Indian society does not appear to be experiencing any turmoil in connection with this transition to the same extent as some developed countries. Study among a sample of dual earner couples working in various public and private sector organizations in Bombay[16], showed how the family support system along with environmental, work and non-work factors mitigate the strain resulting from managing both the worlds in and outside home among middle class dual earner couples.

Multidisciplinary project: an Indian example

In India among the multidisciplinary research projects that have been undertaken so far, the Human Adaptability Program (initiated in 1976) of the Indian Statistical Institute, Calcutta is one aimed at evaluating the status of health and well-being of various populations of eastern India in relation to their physical, biological and socioeconomic environments. Research on these projects are carried out basically adopting methodologies from several disciplines including anthropology. The researchers carrying out these projects, though basically trained in anthropology have had to equip themselves (depending on research requirements) with methodologies of other disciplines (e.g., nutrition, physiology, biochemistry, psychology etc.) along with involving investigators from these diverse fields in some projects.

Of the projects undertaken by ISI, »Women's Studies: Health and Well-being« is one under which a study conducted in Calcutta examined differences between groups of working and non-working mothers with respect to some selected social, physical and mental health traits, which are likely to be expected to be affected by their working status[17]. The working and non-working groups of mothers show very little differences in type and size of their families; major household tasks of both these groups were adequately taken care of by the hired domestic help employed by them. The working mothers show higher levels of both systolic and diastolic blood pressures, lower pulse rate and lower haemoglobin level than non-working mothers,

TABLE 1
TOTAL AND COMPONENT ANXIETY SCORES AMONG WORKING AND NON-WORKING MOTHERS

Anxiety components	Working mothers (N = 94)		Non-working mothers (N = 94)	
	$\bar{X}$	SD	$\bar{X}$	SD
Low self control	4.73	2.99	5.37	3.11
Emotional instability	4.20	2.40	4.71	2.21
Suspicion	5.14	1.73	5.00	1.58
Apprehension	11.06	4.19	11.30	4.09
Tension	8.24	4.37	8.68	3.91
Total score	33.44	12.15	35.14	11.09

Source: Mukhopadhyay et al.[19]

the differences were however, statistically non-significant. In accordance with the expectation, compared to the housewives, the working mothers in general, suffered from non-chronic and chronic diseases in higher frequencies, and the difference was statistically significant[18]. Contrary to expectation, the non-working mother revealed higher (though statistically non-significant) anxiety levels than their working counterparts[19] (Table 1). A follow up survey among a subsample of working mothers was done in 1992, to ascertain temporal change in anxiety score, if any, in them. The anxiety scores of the same group of working mothers measured at two time points with an interval of 5-years showed an increase (statistically non-significant) in mean values[20]. As a part of this project anxiety levels were studied also among two groups of women, one engaged in more demanding jobs (e. g. managers, executives and secretaries) in private sector organizations in Calcutta. The other group involved women engaged as government officials in a tiny mountain state of Sikkim in eastern Himalaya and were different, culturally and/or ethnically, from the groups studied earlier (Table 2). None of the factors, involvement in more demanding jobs or cultural/ethnic difference

TABLE 2
ANXIETY SCORES OF WORKING MOTHERS

Working mothers (WM)	n	Total anxiety scores	
		$\bar{X}$	SD
WM (teachers)	25*	30.28	10.47
WM (teachers)	25**	32.04	12.98
WM (executive)	60	33.83	10.73
WM (tribal Sikkimese)	43	33.53	10.36
WM (non-tribal Sikkimese)	48	33.23	9.26
WM (pooled Sikkimese)	91	33.37	9.78

* sub-sample of women studied in 1987
** sub-sample studied in 1992

seemed to have any impact on the anxiety levels of these women and therefore are important enough to show any statistically significant difference between the groups studied. These studies, however, do not support the hypothesis that working women are under greater stress and hence suffer from greater anxiety levels. The availability of hired help and the support given by other family members perhaps mitigate the burden of the working women.

In the initial phase of the study efforts had been made to identify indicators of physical and mental health in terms of quality of life. This is defined as »a composite measure of physical, mental and social well-being as it is experienced in such life concerns as health, family, work etc.«[21]. Out of eight theoretical areas of concerns, which were conceived as being related to, or parts of, subjective well-being, three areas like »family group support«, »social support« and »adequacy of social contacts« can be considered here as supportive to the findings of statistically non-significant difference in anxiety scores among the two groups of mothers. Comparisons were made between the two groups, working and non-working, with respect to each item (i. e. question) of a cluster representing the theoretical areas of concern, by using chi-square. It is observed that the factor »family group support« reflects positive feelings in both the groups, that derived from the perception of their general family as supportive, cohesive and emotionally attached. Items that reflect »social support« indicate perception of an overall supportive social environment, in general and in times of crisis, among both the groups. The factor »adequacy of social contacts« reflects positive feelings derived from a friendly surrounding outside the family. This substantiated the idea that the support received from the members of immediate family members as well as from the friendly surroundings outside, helped these women to feel less stressed.

To comprehend the overall impact of paid work on the health status of a group of women, the adopted research methodologies go beyond the boundaries of anthropology and included methodologies of other disciplines such as physiology, psychology and demography. A sense of well-being (both physical/physiological, mental and social) though difficult to measure and quantify, is undoubtedly important, since it is considered to be the outcome of an individual's levels of adaptation in a given environment.

The »natural experiment« situation provided by the middle class Indian women joining the work-force in recent decades may provide a rare opportunity to watch the process of adaptation in operation from a close range. In the present study it is observed that, the change in the way of life, that occurring as a result of joining the work-force outside home is possibly being adapted to through change in associated social/cultural ways of interaction. More research is needed, on the specifics of this process of adaptation to a new social/cultural/occupational niche being opened up to the middle class Indian women, to which they are not traditionally adapted.

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S. Mukhopadhyay

Indian Statistical Institute, Anthropology and Human Genetics Unit, 203 Barrackpore Trunk Road, Calcutta 700 035, India

TRANSDISCIPLINARNI PRISTUP PROUČAVANJU ZDRAVLJA ŽENA: STUDIJA ŽENA SREDNJE KLASE IZ URBANIH SREDINA

S A Ž E T A K

Ovaj rad raspravlja o važnosti usvajanja transdisciplinarnog pristupa u proučavanju zdravlja žena posebno ističući neka važna pitanja vezana uz zdravlje žena. Prikazani su specifični zdravstveni problemi žena u zemljama u razvoju, te su dani neki rezultati istraživanja odnosa između radnog statusa i zdravlja žena urbanog, srednjeg sloja Calcutte tijekom majčinstva. Rezultati ne podržavaju postavku da su radne žene pod većim stresom i da stoga pate od lošeg zdravlja. Taj teret ublažuje mogućnost plaćene radne snage u kućanstvu i podrška drugih članova obitelji.