



GLOBAL JOURNAL OF HUMAN-SOCIAL SCIENCE: C
SOCIOLOGY & CULTURE
Volume 22 Issue 1 Version 1.0 Year 2022
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-460X & Print ISSN: 0975-587X

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GJHSS-C Classification: FOR Code: 899899



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Women's Perception of Air Pollution and Associated Health Hazard Aspects – A Study in Low-Income Urban Space in Bangladesh

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Abstract- This paper explores women's perception of air pollution and associated health hazards they experience in the low-income urban community of Bangladesh. Following the qualitative methodology, the research employs primary and secondary data to scrutinize the linkage between air pollution and women's health. Data analysis in both percentages and an interpretive thematic approach was supported by two focus group discussions and 15 in-depth interviews conducted in the Mridhabari area in Matuail – one of the environmentally vulnerable areas in urban Bangladesh. The findings show that poor women's comprehension of emissions of greenhouse gases and air pollutants is unsound and erroneous. Though women suffer from multiple physical, psychological, and reproductive health sicknesses due to their stay in a place with poor air quality, their apathetic outlook on health, reinforced by socially accepted gender norms, ignorance, misconception, and blind faith, contributes to avoiding seeking any medical treatment while getting sick. The sense of care and altruism drives them towards considering medical treatment for the dependent members of the household when they overlook the idea of spending on their health until and unless they suffer an illness with acute phase.

Keywords: air pollution, health hazards, low-income urban community, poor women, Bangladesh.

I. INTRODUCTION

In the present age, one of the environmental health hazards addressed globally is air pollution. Anthropogenic sources such as the burning of fossil fuels, agricultural activities, livestock farming, industrial processes in chemical and mining enterprises, solid waste generation, inept wastewater treatment, emissions from vehicles and factories (EEA, 2021, Giudice et al., 2021; Lando et al., 2021; Manuja et al., 2018) produce short-lived climate pollutants including black carbon, methane, tropospheric ozone, hydro fluorocarbons along with the most heat-trapping gas Carbon Dioxide, in large quantities (UNEP, 2019). Air pollution, notably, having the form of emissions of GHGs (Greenhouse gases), contributes to heat up the earth and consequently poses a threat to human health. Additionally, due to rapid urbanization and

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industrialization, artificial air pollution continues at an alarming rate and increases injuries to health and premature death. According to the estimation by WHO, 9 out of 10 people across the globe inhale highly contaminated air, and 7 million people die from outdoor and household air pollution each year (WHO, 2018). Indubitably, cities have more air pollution than rural areas because of the higher congregation of people, vehicles, and industries. Dhaka is no exception in this regard. Being ranked as the second most polluted capital city globally, it contains the worst quality of air. Apart from automobile pollution and industrial contamination, solid waste mismanagement and improper land filling practices pollute the air and grow the risk of adverse health effects. Women are considered more vulnerable to the effects of air pollution than men (American Psychological Society, 2017), and their health comparatively gets exposed to the development of maladies like "cancer, reproductive dysfunction, and immunologic and neurologic impairment" (Bryant, 1996). In a conventional patriarchal society like Bangladesh, where gender roles into public-private dichotomy are practiced as a well-built cultural norm, getting assigned by cooking, and in taking household air for women is an everyday routine. Besides, the mobility of urban working women corroborates the fact that career women cannot eschew inhaling outdoor air pollutants on a daily basis. Breathing of polluted air in two ways, both in the domestic and public domain denotes women face environmental victimization more than men though existing research did not shed sufficient light on it. This paper presented an interpretive thematic analysis along with percentages determined from both primary and secondary data to scrutinize the linkage between air pollution and women's health in an underprivileged urban setting. It examined the women's viewpoint about air pollution and their response to the health consequences that resulted from it.

II. LITERATURE REVIEW

Air pollution is a global health emergency that has a slow-poisoning impact on humankind everywhere, especially in the urban spheres (Rahman et al., 2006). According to a study by Bayram (2006, as cited in Türk and Kavraz, 2011), both ambient (outdoor) and indoor air pollution affect every human being similarly, regardless of which geographical location they belong.

Though both nature-based and anthropogenic sources contribute to air pollution, human activities are responsible for the deterioration of urban air quality and public health damage (Türk and Kavraz, 2011). Manisalidis et al. (2020) argued that the industrial revolution emerged as an indication of social and economic progress. However, industrial production has failed to stop emitting many pollutants into the air. Many survival practices such as food production, high-energy use, burning fossil fuel for heat and transportation, household fuel combustion along with sanitary landfill and open dumping of solid waste raise the level of greenhouse gases like carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) in the atmosphere which heightens air pollution expeditiously (Khan and Alom, 2016; Manuja et al., 2018; Haryanto, 2018; Hussain et al., 2021).

Air pollution is responsible for causing a wide range of adverse health outcomes, including wheezing, allergy, asthma attacks, coughing, chest pain, fatigue, irritation, high blood pressure, headaches, respiratory and cardiovascular distress, changes in lung function, and premature death from pulmonary and heart diseases (Seema, 2021; Marchwinska-Wyrwal et al., 2011; Rahman et al., 2006). Even exposure to low-level air pollution is associated with increasing the risk of dementia (Rigby, 2020). In their study, Balbus and Malina (2009) showed that the subpopulation susceptible to air pollution encompasses children, older adults, pregnant women, poverty-stricken individuals, people with chronic diseases, and outdoor workers. However, women are more likely to be susceptible to inflammatory lung diseases caused by air pollution and express detrimental pulmonary health crises than men (Cabello, 2015). Chen et al. (2005, as cited in Duncan, 2006) depicted that propensity of getting affected by air pollution for women is higher compared to men since women may deposit inhaled particles comprehensively in their lungs and become subjected to severe health hazards. The authors also speculated that women's sensitivity to airborne pollution lies in having fewer red blood cells than men, which leads to more sensitiveness of women to the toxicological domination of air pollutants. Moreover, women and children suffer much from indoor air pollution caused by hugely polluting fuels for cooking and heating, mostly in developing countries (GBD, 2017, and WECF, 2018, as cited in OECD, 2020). For instance, poorly ventilated kitchen environments in low-income urban households in Bangladesh infect women and children with severe respiratory illness (Haque et al., 2017).

Some research came up with the fact that there is a linkage between air pollution and psychological health, cognitive function, and aggressive attitude. A study conducted in the American and Indian urban communities showed that air pollution is responsible for

enhancing anxiety and provoking immoral behaviors among adults (Lu et al., 2019). Kioumourtzoglou et al. (2017, as cited in OECD, 2020) revealed that increased risk of depression in middle-aged and older women in the United States is the result of a long period of exposure to high levels of PM_{2.5} and ozone. Duncan (2006) has also claimed that women suffer both physically and psychologically during air pollution events. He further emphasized the fact that growing air temperatures victimize women with possible heat-related morbidity, psychological stress, and violence, and deteriorating air quality threatens the health of women and children who are already suffering from indoor air pollution. In addition, air pollution impacts working women's psychological health indirectly as they have to leave out their work to take care of the dependent members of their households (children and the elderly). The latter are comparatively sensitive to the health effects of air pollution (Montt, 2018). Another research (Merklinger-Gruchala et al., 2017) demonstrated that concentration of air pollutants influences women's hormonal function, and therefore affects their menstrual cycle pattern, conception, oocyte quality and increases the risk of miscarriage. Apart from affecting women's reproductive functions, fetal health, and fecundity, air pollutants, especially at ambient levels, bring about premature birth, intrauterine growth restriction, infant mortality, and male infertility crisis, as evidenced by epidemiological studies (Veras et al., 2010).

Exposure to air pollution in the capital city of Bangladesh, Dhaka, results in 15,000 early deaths and some millions of maladies each year (Faiz et al., 2004, as cited in Rahman et al., 2006). Haque et al. (2017) reported that emissions from motorized vehicles and different industrial sectors, activities in brick-kilns, smoke from traditional biomass fuels for cooking use, burning of coal, wood and municipal solid waste, etc. are the causes of air pollution in Dhaka city which leads to affecting health immunity, nervous system, respiratory and reproductive functions of human-being. The authors also revealed that respiratory illness and diarrheal disease caused by the poor condition of air is prevalently higher in Bangladesh compared to South East Asian Countries. Dasgupta et al. (2006) confirmed that in the Bangladeshi context, women's exposure to household air pollution is double that of men in their prime age, and older men's exposure is notably lower than their female counterparts. The authors further demonstrated that women's family income and academic qualification influence their cooking options, and hence the range of getting affected by air pollution. Additionally, their study found that the poorest individuals with the lowest education levels are twice as burdened by air pollution as well-educated adults in comparatively high-income households, and both the infants and low-educated females in poor families are four times more

exposed to this pollution than men in high-income households.

Although most of the existing literature manifested multiple health crises of women in different social, cultural, and geographical settings, assessing women's understanding of air pollution in an environmentally vulnerable urban location is an under-researched area. Moreover, enough attention was not paid in the previous studies to examine the medical help-seeking behavior of women with diseases caused by air pollution. Considering the subsisting health challenges of air pollution proved in literature, this research aimed at digging dip to discover women's perception of air pollution and their responses to air pollution diseases in a low-income urban community of Bangladesh.

III. METHODOLOGY

The study employed qualitative methodology to assemble an in-depth understanding of how people comprehend, respond and perform in a particular context. Since qualitative research embraces the "subjective, constructed, multiple and diverse" reality of each individual (Sarantakos, 2005), it helps the researchers to examine diverse viewpoints, thoughts, and insights of respondents on the specific subject matter. Taking the scope of the qualitative approach into account, this study adopted the research method to quest the multiple perceptions and experiences of women related to air pollution and health.

a) Study Setting

The study was conducted in the Mridhabari area in Matuail, one of the hotspots for methane emission in Bangladesh, located in Dhaka South City Corporation. Per hour methane emission from the sanitary landfill of Matuail can be compared to running almost 0.2 million automobiles ("Matuail landfill's per hour methane emission", 2021). In addition, industrial wastes generated from the machinery industries, electronic manufacturing companies, gas and chemical industries, and warehouses located in the study site,

along with fume from heavy transports, are increasing the levels of other greenhouse gases in the atmosphere and therefore contributing to a rising temperature that leads to human health hazards.

b) Selection of Samples

From the study location, the population had been selected through the non-probability purposive sampling technique. Sample for FGD (Focus group discussion) and IDI (In-depth-interview) were picked out conveniently using a locally pre-acquainted network from the study site. A sample of 21 women from different age groups was considered to conduct two FGD sessions. One FGD session consisted of 11 working women, and the another represented the participation of 10 homemakers.

Participants for face-to-face in-depth interviews were selected from the population of FGDs who showed a willingness to take part in IDI. A total sample of 15 women (N=15) from different age groups who belong to low-income urban households was used to gather data through IDI. Homogeneity in terms of socio-cultural status and lifestyle had been observed even though respondents' professional identities were not alike. The majority of the total population of IDI (n=10) had paid jobs outside the home, and the rest were (n=5) homemakers. The demographic characteristics of the women interviewed in-depth are outlined in Table 1.

The respondents of the study had been identified based on three variables – 1) respondents' occupation, 2) respondents' academic qualification, and 3) age range to which the respondents belong. The reason behind focusing on respondents' occupation is to detect the way (ambient/indoor air pollution) that affects their health. Academic qualification is an indicator to comprehend their perception about air pollution and its impacts as well as the range of their consciousness to combat health consequences derived from impure air. The last variable, age range, had been taken up for recognizing manifold physical and psychological health outcomes of the respondents and acquiring knowledge on how they cope with them.

Table 1: Demographic characteristics of the women interviewed in-depth (N=15)

Characteristic	Frequency (n)	Percentage (%)
a. Occupation		
Heavy industry worker	7	46.6%
Cook in hostel	1	6.6%
Professional beggar	1	6.6%
Animal husbandry worker	1	6.6%
Home-maker	5	33.3%
b. Age range		
(16-25)	7	46.6%
(26-35)	4	26.6%
(36-45)	2	13.3%
(46-55)	0	0
(56-65)	2	13.3%
c. Academic qualification		
Primary school	4	26.6%
Secondary school	5	33.3%
No formal education	6	40%

c) *Data collection, management, and analysis procedure*

This study used data, both from primary and secondary sources, to accumulate sufficient details for doing utmost justice to the research topic. Secondary data were collected to figure out the research trend and progress on the interrelation between air pollution and women's health in divergent geographical settings. The raw data helped to gain a deeper view from first-hand experience. The scholarly contributions from different national and international documents, articles in journals, book chapters, online mass media contents, organizations' reports, and fact sheets were secondary resources.

The study attempted to combine interview methods (FGD and IDI) with direct observations to capture the real picture of the impact of air pollution on respondents' well-being. The purpose of conducting FGDs was to amass the collective view of the participants by building a good rapport with them. FGDs guided the researcher to understand participants' awareness about air pollution and their health sufferings resulting from it at a deeper level. Each FGD was moderated through broad questions to elicit the responses and generate the utmost discussion within 90 minutes. Fifteen in-depth interviews, each running for approximately an hour with a semi-structured questionnaire, were operated. Considering the objective of the study, the questionnaire was developed in Bangla (respondents' native tongue) with ensured reliability, slightly modified based on the response from FGDs, and later translated into English. In-depth interviews were conducted during the observations to cross-check the soundness of the information given by the respondents. Transcription and translation of audio-recorded data, along with a compilation of observation notes, were done within two days, just after returning from the study site. Transcribed data were revised several times to create initial codes for further thematic analysis of the in-depth interviewed data. The themes were appeared from the narrations of the respondents and later became subject to manual analysis. Additionally, overall analysis for the data from FGDs was conducted to address the general understanding of the participants about what the research aims at.

d) *Ethical Considerations*

Before participation in the interview, participants were informed about the objective and the details of the study. Assurance of anonymity and confidentiality were ensured, along with the participant's right to withdrawal in the event of discomfort. The respondents who showed a willingness to participate were taken on board for an interview, and no incentive of any form was given to persuade the participants for engagement in the study.

IV. FINDINGS AND ANALYSIS

a) *Findings from FGDs (Focus group discussions) and analysis of data*

99% of the participants were found not to know about emissions of greenhouse gases and air pollutants. At the same time, the rest of the population manifested ignorance by conveying incorrect or slightly correct knowledge. Despite knowing about the poor quality of air in their locality, 90% of the participants were found living there just because of easy access to different workplaces and low living expenses. A number of the study population accused open dumping of household wastes, garbage mismanagement, and unplanned industrial growth as the sources of air pollution in the locality. They believe that proper administrative steps could change the current air quality. Nevertheless, 20% of the response regarding air quality reflected ignorance, indifference, and satisfaction about their living area. Taking pride in the current air quality of the locality was demonstrated in one of the participants' narration-

"We have the best air quality in our area. Air status of Gulshan and Banani (posh residential area in Dhaka, Bangladesh) is not good compared to ours."

The participants were spontaneous to share the physical and mental health effects resulting from air pollution. Nonetheless, they were shy to discuss their reproductive health experiences in a group. It was confirmed by 95% of the participants that they experience cold, cough, recurrent fever, burning and tingling in hands and feet, skin diseases, headaches, allergies, eye and throat irritations, and irritative mood. However, they take these diseases lightly and avoid seeking medical care. They think that they are used to having sickness and getting cured naturally. Some participants considered their survival in a polluted environment as a demonstration of immunity that developed over the years since they had started living in the study area. The very fact was explored in the words of a participant –

"20 years ago, when I came here as a resident and started working, I had experienced continual burning and tingling of hands and feet, fever and headache for more than two months that I could not bear. That time I had to take multiple medicines. I got used to the weather and environment gradually to the extent that the diseases could not attack me any further."

b) *Findings and analysis of in-depth interviewed data*

i. *Knowledge of the role of greenhouse gases in air pollution*

Except for one respondent, none of the interviewed population had any proper knowledge about greenhouse gases. 80% of the respondents stated, "I don't know", "I heard for the first time," "I had never heard about it" when they were asked about their basic

understanding of the greenhouse gases or their effect. They were not familiar with the names of greenhouse gases (e.g., carbon dioxide, methane, nitrous oxides.), even though more than half of them had received primary or secondary education. Two of the respondents delivered their misconceptions about the greenhouse gases that are briefly described below-

“Greenhouse gases are helpful for our health.” (Shirina, 32 years old respondent, received primary education)

“I know about greenhouse gases. These gases have different smells. We can't produce them now in our country, but I have hope to produce them in the future.” (Safia Bibi, 40 years old respondent, received primary education).

Only one among all respondents could provide accurate information about the greenhouse effect. Apart from mentioning some names of greenhouse gases, she stipulated her understanding of the rising of air temperature too.

ii. *Perception about the air quality of the surrounded area*

Respondents shared different perceptions about the air quality and disgusting smell in the air. According to 73% of respondents, the air of the locality is highly polluted because of garbage mismanagement, industrial emissions, transport-related fumes, and dust from industrial constructions. 27% of respondents who have been living in the area for six months to almost three years could not recognize chronological changes in the air quality. However, the rest 73% of respondents residing in the area for more than five years witnessed the massive transition in this regard. The reasons behind such transition of local air quality are the expansion of heavy industries, population growth, open dumping of waste, cutting down of trees, and careless attitude of the waste collectors in managing garbage properly, as identified by 20% of respondents. On the contrary, the rest of the population did not mention any reason behind poor air quality since they had no issue with the existing air quality or they were not concerned about the matter. 33% reported the improved air quality compared to previous years. Interestingly, some respondents delivered highly positive responses about the status of the air due to their ignorance or observational misapprehension about a particular event (e.g., the severity of Covid -19 in the study area). One of such responses is as follow-

“The air status of this area is too good. Here, no one has been affected by Corona. If you don't believe my words, check it by talking with other people.” (Safia Bibi, 40 years old respondent, received primary education).

iii. *Health effects of indoor air pollution*

The majority of the respondents marked cooking as the dominant source of indoor air pollution. Mud furnaces, LPG stoves, and gas stoves in shared kitchens were found getting used respectively by 7%, 13%, and 80% of the respondents. An elderly

respondent (dependent member of the household) who has a mud furnace at home confirmed her coughing problem due to kitchen air, even though she does not cook. On the contrary, the LPG stove users denied the fact of facing health issues due to indoor air pollution during cooking. One of the LPG stove users, a professional cook, providing services in hostels, did not have a minimum concern about heavy fume emitted from the stove placed in her bedroom. On the other hand, almost all the gas stove users in the shared kitchen indicated the health vulnerabilities resulting from the lack of ventilation in their shared kitchens. Exposure to kitchen air pollution makes them suffer from usual health problems, including eye and throat irritation, headache, coughing problem, and shortness of breath. However, very few of the gas stove users were found not having care about kitchen pollution and associated health hazards either.

iv. *Health effects of outdoor air pollution*

The perception of 2 categories of respondents (working woman and homemaker) about ambient air pollution has been heard to comprehend if the exposure to outdoor pollution causes identical health outcomes for both categories or not. All of the homemakers, except one, disclosed the health sufferings that are experienced due to outdoor air pollution. According to the respondents with “homemaker” status, ambient air pollution affects their health in the same way it causes harm to the health of working women, even though they are not used to going outside the home on a frequent or regular basis. The working women think that the landfill sites, roads used by motorized vehicles, and manufacturing factories near their houses affect their health. In contrast, the working women think that they get affected directly by the environment of the industries they work for. 80% of the respondents specified the physical, psychological, and reproductive health hazards because of air pollution. However, the rest, 20%, strongly acknowledged that they have never undergone any health crises. Moreover, they explained their well-being by believing perspectives. They think that God is pleased with them, and it is why they never get sick. Even sickness as a form of punishment has been detected in some of the respondents' words –

“By the grace of God, I never get sick, and I know that I won't suffer from any illness in the days to come. [...] God does not punish those with illness who rely only on Him.” (Kulsum, 32 years old respondent)

“God gives illness to those who have a fear of getting an illness.” (Yasmin, 25 years old respondent)

Diversified physical, psychological, and reproductive health consequences of air pollution such as headache, heat headache, stomach ache, eye irritation, skin irritation, cold, cough, shortness of breath, recurrent fever, desquamation of hand skin, burning and



tingling sensation in hands and feet, itching, prickly heat, irritative mood, and menstrual sickness were pointed out by the respondents of the study.

v. *Physical health problems*

Headache was the most common illness for 33% of the respondents when 27% of women responded regarding eye irritation. 47% of the respondents were identified with skin-related problems, including skin irritation, burning and tingling sensation in hands and feet, itching, prickly heat, and desquamation of hand skin. Both stomach ache and recurrent fever were found in 20% of the respondents, whereas 13% confirmed that they were affected by shortness of breath. Only one among all respondents was detected with severe cold and coughing problems all year round.

vi. *Psychological health problems*

"Irritable mood" as an indicator of poor mental health was found in 40% interviewed population. Emission of the pollutants into the air results in warming the environment. As a consequence, it impacts the mental health of people by increasing irritability, fatigue, and depression. Specifically, it becomes intolerable for aged women. This fact was uttered by one of the elderly respondents-

"I feel uncomfortable in hot, humid weather. It makes me get cranky." (Maleka Begum, 65 years old respondent)

Apart from affecting the mood and emotions, the rise in air temperature contributes to causing anger and stress illness which was demonstrated by the words of a respondent-

"In warm weather, I feel angry. Even any kind words or good talk bother me so much at this time." (Sanjida, 16 years old respondent)

Some psychological depressions in women are associated with the sickness of dependent members (e.g., children and elderly) of their households. The respondents mentioned that they undergo anxiety, stress, and frustration when the kids and elderly of the family suffer from illness-

"We are not well. Seeing my children suffering from cold, fever, rash, boil, pimples and allergy is depressing." (Safura, 23 years old respondent).

Another respondent pointed her finger at air pollution for causing the death of her beloved son. The unexpected loss had made her go through immense grief and trauma for a long time. Need to add, this case proved the fact that air pollution is one of the environmental risks for premature deaths.

vii. *Reproductive health problems*

The majority of the respondents ignored the reproductive health problems due to air pollution. Only 13% of the women interviewed in-depth brought the matter in front. It appeared from the respondents' observation that the shift from the previous location to the current one impacted their menstruation cycle

and period flow. Moreover, one of the respondents reported the complications that she faced during her pregnancy –

"I have two kids. I did not go through any complications during my first pregnancy when I was living in my village. After shifting to this present area, I endured persistent nausea and vomiting during my second pregnancy. I think the pollution of air is responsible for my such sickness." (Safura, 23 years old respondent)

viii. *Medical help-seeking behavior*

Different behaviors have been seen among the respondents regarding seeking medical treatment when they get sick. 60% of the respondents pay no heed to the health problems proceeding from air pollution and avoid going to the doctor. 20% of the respondents were found to have gone to a doctor once or more for the treatment of skin allergy, irritation, and severe itching. Only one of all respondents was detected with serious difficulty in breathing for what she had to take medicine and get admitted to hospital for half a week. 20% of the respondents received medical care for chronic health hazards, including diabetes and peptic ulcers. The respondents affected by peptic ulcers mentioned "in taking much oily food on a regular basis" was liable for their sickness. The patients of the chronic diseases had gone to the doctor and got admission to the hospital when their sickness emerged with severity. Though respondents were found to have a careless attitude towards seeking medical help during their illness, they had a concern about their children's health issues. 13% of the respondents confirmed that they avoid seeking medication during their health crises, but do not do the same for their children. Reliance on homeopathy treatments or medical treatment from the nearby health service centers was found among the respondents. However, only one respondent marked economic insolvency as the reason behind the avoidance of seeking medical treatment.

V. DISCUSSION

The poor urban residents in squatter settlements and nearby dumping grounds tend to be affected by air pollution more than other social classes. Among such populations, women and dependent members (e.g., children and elderly) suffer a great deal in terms of their health and well-being. Women living in the backward urban region are considered more vulnerable than their male counterparts to the impacts of divergent environmental crises, including air pollution. Sensibly, women in poor households with having no education is a common facet in urban impoverished communities of Bangladesh. Completion of primary or secondary level of education does not necessarily ensure that women get enlightened with environmental consciousness or sound knowledge relating to environmental crises. Survival in a polluted area and

getting used to it portrays women's accepted numbness by themselves just because of their position in a particular social class. On the other hand, employment opportunities, better earning, and livelihood options drive women to compromise on the living location with highly polluted air.

Air pollution in two forms (indoor and outdoor) affects women's physical, psychological and reproductive health in multiple ways. The health consequences of air pollution for both homemakers and working women are indistinguishable. Though homemakers have less outdoor involvement and limited mobility, emissions from heavy industries, motorized vehicles, and landfill sites nearby their living locations affect their health indirectly. Conversely, working women endure straight affliction by cooking without proper ventilation in the kitchen and staying in a workplace environment with pollution. The vast majority of women take no notice of the health problems caused by polluted air, even when the signs and symptoms are visibly present. For them, homeopathic treatment or health services from nearby government health centers can be covered by an affordable low budget. However, their ignorance, misconception, and blind faith lead to their avoidance of seeking help while getting sick. Most women feel the need to consult a doctor only when the disease reaches a severe phase. Lack of environmental and health awareness among women in low-income urban communities contributes to the growing indifferent mindset of women in terms of their well-being. Being groomed with socially accepted feminine traits, women care for the dependent members of their households during their sickness and prefer seeking medical care. Moreover, it is altruistic behavior that desists them from spending on their health and promotes expenses in medical care barely for other family members. Pertinently, attaining self-contentment by sacrificing such a way stem from the gender socialization process that guides women on how to live within the cultural locale.

VI. CONCLUSION

Leaking a huge amount of greenhouse gases into the atmosphere from potential anthropogenic sources gives rise to immense pollution in the air and health crises for humans. However, poor women's health suffering knows no bounds in this regard. Countless expedient means and actions are serving to keep air pollution in check. Yet, women's health damages of air pollution rarely call proper attention to executives. Promoting environmental awareness and health consciousness with particular emphasis on women's health through public health campaigns and media advertisement would be ineffectual without strong moves from the government to bring down conventional air pollution everywhere in urban space. Controlled disposition of waste, imposition of pollution control

regulation in industrial sectors, prohibition of unfit vehicles on the roads, and changes in production and consumption of energy are imperative essentials to improve air quality and health status as well. To conclude, this study signified the necessity of integrated policies, strategies, and implementations to be understood by planners and executors to ensure better health, productivity, and sustainability for women and all.

ACKNOWLEDGMENT

The authors received no financial support for the research, authorship, and publication of this article.

Conflict of interest: All authors have no conflict of interest to report.

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