

Title**Reusable sanitary towels: Promoting menstrual hygiene in post-earthquake Nepal**

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Abstract:

It is a normal human tendency to run for their life when an earthquake occurs. Adolescent girls and reproductive age women leave their homes with only the clothes they had on trying to save their own and their families' lives. Immediate disaster relief aid with its (unintentional) lack of gender sensitivity has little or no materials for the appropriate management of menstrual hygiene. The biological needs will not change for these women despite the dire need for basic food, shelter and security. Timely identification and preparation beforehand for appropriate and culturally sensitive techniques and locally available materials that are reusable can help introduce sustainable and acceptable means of management of menstrual hygiene in crisis. The use of reusable sanitary towels is well accepted for menstrual hygiene management in non-disaster situations and is appropriate in post-earthquake relief in Nepal.

Introduction

The heavy earthquake on April 25th 2015 with a magnitude of 7.8 left thousands of people homeless in Nepal. In the 14 hardest hit rural districts in Nepal more women (55.2%) were affected than men (44.8%). [1]

After the initial search, rescue and first aid more long-term issues came to the forefront. One of these essential needs for women centres on menstrual hygiene needs of the 2 million female survivors, but something which seemed low on the priority list.[2-3] Menstrual hygiene needs are most often overlooked in displaced populations.[4]

Menstruation as a taboo

Women's rights to reproductive health has been reaffirmed by the United Nations as an individual human right's issue.[5] Although various policies and programmes have been implemented with regard to menstrual hygiene, it is still regarded as a cultural taboo in Nepal. Today there are places where silence, shame and stigma surround menstruation and menstrual hygiene suggesting a need for social change and further attention at political level.[6]

Menstruation is considered as dirty by many Nepalese, resulting in women being isolated and prohibited from carrying out rituals (entering temples, attending auspicious occasion) and certain household tasks as they are not permitted to enter the kitchen. This discrimination of untouchability varies among ethnic groups, cultures and communities.[6] The most extreme example practiced in rural western Nepal includes the isolation of women and girls to rudimentary huts outside their homes for the duration of their menstrual cycle (an outlawed practice known as Chaupadi). A girl is kept under surveillance by society and regarded as untouchable from the second to the seventh day of her menses.[7] Since the introduction of a

law in 2004 on menstrual hygiene traditions such as Chaupadi are illegal and with the declaration of it as human rights violation by the Supreme Court, people have become more aware about the need for menstrual hygiene.[6] The earthquake has showed the vulnerability of affected women around menstrual hygiene and highlighted the taboo aspects. This taboo has silenced discussions about the topic in many cultures, as it is considered a strictly private matter that is shameful to discuss.[2]

Vulnerability of the menstruating women & adolescent girls

Menstruation-related problems are some of the issues suffered by women of reproductive age affected by disasters in addition to physical injuries, shortage of food, diseases, malnutrition, unemployment, harassment, crimes, lack of clothing, gender based violence, problem finding fuel wood, eviction from their homes and destruction of their houses.[8] Addressing the immediate needs of the affected people after the earthquake many internal and external development partners supported Nepal through the provision of food, tents, general supplies and medications.

Unfortunately the earthquake has not only dampened the hopes of improving education among females but has also resulted in a vicious cycle of decreased attendance at school during menstruation. Moreover, the earthquake has led to an economic crisis so most women and girls of rural areas do not have sufficient funds to buy pads and/or have access to sanitary products. Those who cannot afford to buy sanitary pads resort to reusing materials such as old rags, leaves and toilet paper. In some instances where these things are not available, they may not use anything at all.[9] Infections such as lower reproductive tract infection (RTIs), urinary tract

infections (UTIs) and adverse pregnancy outcomes can result from the use of unhygienic materials as the ties between menstrual hygiene and reproductive health are strong. [10]

With 82% of females residing in a patriarchal society, with its disparity in education, human rights, socioeconomic status, it reduces women's freedom to choose and decide about their basic needs making them more vulnerable to face challenges that are brought about by disasters.[11]

Women's Hygiene: Need of the Hour in Nepal

While the government had called for and provided various necessities such as like food, water, tents, and clothes, the biological needs of female survivors in earthquake-affected areas are under prioritized. Different International Non-Governmental Organisations (INGOs) and Non-Governmental Organisations (NGOs) working to improve reproductive health had been providing disposable sanitary pads. However, using disposable sanitary pads can be a financial and environmental burden especially when proper waste management is not in place.[12] During and immediately after disasters local waste management can a great challenge.

Studies have shown that more than half of adolescent school girls use cloth as menstrual pads in rural and peri-urban areas.[13] Due to increased accessibility and affordability more affluent urban women have switched to commercial sanitary pads.[14] A quarter (25%) of the Nepalese population lives below the poverty line. This highlights the need to focus on economic status during disaster as a packet of 10 pads costs on average US\$1.00 (NRs 60-140), which is more than the daily income of many adults, forcing poor women to resort to other means of protection during menstruation.[15] This is in agreement with a study reporting an overwhelming majority (97%) of women resort to re-usable materials, especially clothes for menstrual hygiene in low-income countries.[16]

At times of disaster (and otherwise as well) it seems reusable sanitary towels are an appropriate solution with materials getting scarce, disrupted market and limited resources. The reusable sanitary towel is appropriate for the displaced population, as it is user friendly, culturally acceptable, available and affordable.[4]

Reusable sanitary towels: Responsibility and Response go hand in hand

A group of academics working as volunteers in three cities: Kathmandu, Pokhara and Dharan, responded to the neglected need of women and adolescent girls, under a local initiative around Reusable Sanitary Pads (RSP). The local kit contains four pieces of cotton cloth, two undergarments, one bar of soap sealed in a biodegradable bag. Given the availability of water, these were expected to last for a year.[17]

Studies have shown that the reusable sanitary pads initiative has a positive effect on school attendance of adolescent girls and it is a preferred choice. [18] The use of reusable pads in post earthquake Nepal addresses relief needs from an equity angle using a targeted approach, use of local resources, opportunity for local volunteers to make a contribution local needs and minimal or no waste generated. While a sustainable plan is yet to be in place at national level, the reusable sanitary pads initiative addressed some of the immediate needs in a culturally sensitive, technologically appropriate way at a very minimal cost using local resources which is in line with the principle of primary health care.[19] The approaches are not new, however probably due to lack of preparedness the basic needs of women which can be addressed with simple solutions/items have been overlooked.[4] Further research is needed to ensure future disaster preparedness plans cover post-disaster menstrual hygiene.

Conclusion

Being prepared for natural disasters is the key for minimizing their often devastating effects. Nepal was poorly prepared for the 2015 earthquake despite years of disaster management planning, the post-disaster relief practice was relatively poor. After the immediate searching for survivors and first aid, more mundane issues need urgently addressing, such as issues around menstrual hygiene. Reusable sanitary towels have been recommended for use in displaced populations in the literature. The use of locally available, reusable and biodegradable materials is eco-friendly, empowering, as well as a sustainable and culturally appropriate method for menstrual hygiene management in emergency situations. The current experience in addressing the menstrual hygiene needs reflect that there is a gap in practice even for an intervention that may be readily available, economically viable, socially accepted and culturally appropriate.

Contributor ship statement:

Shyam Sundar Budhathoki contributed to the conception of the viewpoint, literature review, and writing of various drafts. Meika Bhattachan contributed to the conception, literature review, and editing various drafts. Madhurima Bhadra reviewed and edited various drafts. Paras K Pokharel contributed to conception and reviewed various drafts. Edwin van Teijlingen contributed to reviewed and edited various drafts. All authors approved the final manuscript to be submitted for publication.

Competing Interests

There are no competing interests to declare.

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