



## Unveiling reproductive choices: Knowledge and practices of emergency contraceptive pills among the female factory workers in Sri Lanka

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### ARTICLE INFO

#### Keywords:

ECP  
Unintended pregnancies  
Unsafe abortions  
Export processing zone  
Digital health interventions

### ABSTRACT

**Background:** In Sri Lanka, the Emergency Contraceptive Pill (ECP) is categorized as a Schedule 2A medication, allowing it to be purchased over-the-counter without a prescription, but exclusively from licensed pharmacists. It is estimated that around 3 million ECPs are consumed by Sri Lankan women each year. This study aims to assess the knowledge and practices of Female Factory Workers (FFWs) on ECP and to unearth the association with unintended pregnancy and unsafe abortion.

**Methods:** After receiving written informed consent, a structured interview schedule was administered among 585 FFWs attached to eight factories in a selected Export Processing Zone (EPZ). Data analysis was performed using SPSS software.

**Results:** Only 26 % of FFWs were aware of the effective time period to take an ECP to prevent a pregnancy. Most (67 %) had the impression that a valid prescription is required to purchase ECP from the pharmacies. Around one-tenth of the FFWs (11.3 %, n = 66) had used ECP during their lifetime. Among the 65 respondents who reported having experienced unintended pregnancies, only 26.2 % (n = 17) had utilized ECPs. In contrast, among the 22 respondents who disclosed a history of abortion, only two women had ever employed ECPs.

**Conclusion:** The study highlights the low knowledge and use of ECP among FFWs in Sri Lanka, contributing to unintended pregnancy and unsafe abortion. Results call for targeted interventions to improve knowledge and access to ECP, helping to reduce unintended pregnancy and improve reproductive health outcomes.

### Background

Emergency contraception (EC) encompasses contraceptive methods designed to prevent pregnancy after sexual intercourse [1]. It is advisable to use these methods within a window of 5 days, with greater effectiveness observed when administered promptly following sexual intercourse. World Health Organization (WHO) recommends that all women and girls at risk of unintended pregnancy have the right to access EC, and these methods should be routinely included within all national family planning programmes. Nonetheless, frequent and recurrent use of EC may carry potential risks for women with specific medical conditions. Additionally, it can lead to heightened side effects, such as menstrual irregularities, although it is worth noting that repeated use of EC is not associated with known health hazards [1]. Therefore, correct knowledge and proper use of EC are important for all women of reproductive age. Four different methods of EC are available globally, which

include, Emergency Contraceptive Pills (ECP) containing levonorgestrel or ulipristal acetate, combined oral contraceptive pills and copper-bearing intrauterine devices [1]. ECP containing levonorgestrel is more popular among Sri Lankan women [2].

In a historic milestone for Sri Lanka, in April 1998, the Sri Lanka Consortium for Emergency Contraception, under the coordination of The Family Planning Association of Sri Lanka (FPASL), achieved the registration of levonorgestrel-containing Emergency Contraceptive Pills (Postinor-2) for sale in both the private and public sectors. By 2001, FPASL reported the sale of 120,109 packages of Postinor-2, an 80 per cent increase over the previous year's sales. Over 800 pharmacies were selling Postinor-2 [3]. By 2012, more than 1 million ECPs were distributed by the FPASL outlets per year, an almost a ten times increase [4]. In 2020, barring the challenges related to COVID-19, FPASL reported over 1.8 million sales of ECPs, nearly a two time increase during the past decade [5]. Population Service Lanka (PSL) also sells two

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the primary healthcare point of contact for the majority of ECP users in Sri Lanka, assuming the responsibility of both dispensing ECPs and offering essential information regarding their usage. Therefore, future SRH programs should prioritize training and capacity-building initiatives for community pharmacists, recognizing their pivotal role in promoting safe reproductive practices. Established in 1969, the Pharmaceutical Society of Sri Lanka (PSSL) stands as the professional body representing pharmacists across various categories in the country. In light of this, development agencies engaged in SRH initiatives may consider conducting training sessions for members of the PSSL, focusing on ECPs and enhancing their expertise in this critical area.

Previous studies on ECP conducted in Sri Lanka for women in general [27] and particularly among factory workers [20], identified misuse and overuse of ECPs as a family planning method. These studies highlighted that factory workers tend to use ECP regularly as it is difficult for them to negotiate with their partners to use condoms. Some incidences were reported of Sri Lankan women who had repeatedly taken EC within the index cycle and presented with ectopic pregnancies [32]. However, the current study did not replicate the same result. Repeat use of ECP as a family planning method is very low among the respondents in the current study. Although it is not evident in the current study, considering the historical findings, it is important for FFWs to be provided the correct message (i.e. ECP should not be taken frequently as a family planning method) to minimize misuse of ECP.

## Conclusion

The awareness of EC among FFWs is notably deficient, exposing them to the risk of unintended pregnancies and unsafe abortions. What's particularly concerning is that a significant number of FFWs who have endured unintended pregnancies and unsafe abortions have not availed themselves of ECPs in their lifetimes, possibly due to insufficient awareness and knowledge regarding these options. Even after encountering such situations, they have failed to acquire the essential, accurate knowledge, leaving them susceptible to recurring incidents. This raises questions about the effectiveness of existing SRH programs and the quality of post-abortion counseling in this restricted setting. Addressing this critical issue necessitates the implementation of focused and targeted interventions.

## Limitations of the study

The study was conducted in the KgePZ, in a semi-urban setting where the Sinhala Buddhist population is the majority (99.72%<sup>1</sup>) which cannot be generalized to other locations. The use of ECP, especially among unmarried youth, is highly stigmatized in Sri Lankan society. Therefore, respondents tend to provide socially desirable answers rather than truthful facts, especially in the factory setting [33]. Therefore, there is a possibility of underestimating the use of ECP. This study used an interviewer administered questionnaire schedule to collect information which may have additional implications on social desirability bias.

## External funding

It is funded by the Levisé project and The Family Planning Association of Sri Lanka, an accredited member of the International Planned Parenthood Federation.

## Implications

The study reveals the urgent need for improved family planning

<sup>1</sup> Percentage of Sinhalese residents in the Habaraduwa Divisional Secretariat Division (62,219 Sinhalese out of 62,389) Data Source: - Census of Population and Housing [34].

programmes that target FFWs, focusing on increasing knowledge and access to ECP to reduce unintended pregnancy and unsafe abortion. Digital health interventions with innovative ICT tools would be a feasible solution in factory settings.

## Clinical trial registration

Not applicable. No involvement of clinical trial.

## Ethical consideration and approval

Data was collected as per the ethical guidelines of the Ethical Review Committee of the Sri Lanka Medical Association. All the data was collected after receiving written informed consent. Ethical approval to conduct this research was granted by the Ethical Review Committee of the Sri Lanka Medical Association (Reference Number: - SLMA/ERC 21 – 013).

## Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Acknowledgements

Authors would like to acknowledge valuable contribution of the staff attached to the Board of Investment, Institute of Participatory Interaction in Development (IPID), SLMA-ERC, International Planned Parenthood Federation, Factory managers and HR managers of all the enterprises, Mr. M K D Lawrance, Mr. H S K Fernando, Mr. Piyatissa Godage, Ms. Natasha De Rosyro, Ms. Thushara Agus, Mr. Milinda Jayalath, Mr. Amal Bandara, Mr. Thivanka De Silva, Mr. Kasun Nishantha, Dr. Mallika Samaranyake, Mr. Amil Epa, Ms. Devini Tissaarachthy, Ms. Radhika Anuradhi, Ms. Udeshika Lumbini, Ms. Imasha Hiroshani, Dr. Lakshman Senanayake, Prof. Kalinga Tudor Silva, Prof. Indralal De Silva, Ms. Sonal Indravadan Mehta, Dr. Sreejit EM, Ms. Kusum de Silva, Mr. R.V.P Rajapakse, Dr. Nuzrath Nasoordeen, Ms. Nadika Fernandopulle, Mr. Nishantha Hettiarrachchi, Mr. Sanjeeva Chandrasekara and all the respondents who participated in the study.

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