

# Exploring the Barriers for Decrease Uptake of LARC: A Kap Study of Paramedics of Different Hospitals in Lahore

RIZWANA NASREEN<sup>1</sup>, NADEEM SHAHZAD<sup>2</sup>, MOHAMMAD SHAHBAZ AMIN<sup>3</sup>, ZAIN TARIQ<sup>4</sup>, TAHIRA RIAZ<sup>5</sup>

## ABSTRACT

**AIM:** To find out the knowledge, attitude and practices of paramedics for counseling the patients having desire for uptake of long acting reversible contraceptive methods and to explore the barriers for decrease uptake of LARC.

**Methods:** In this cross sectional study, paramedics i.e. Midwives and Nurses were inducted by using convenient sampling technique. A structured questionnaire with closed ended questions was used to collect data which was analyzed by using SPSS version 20. Chi-Square test was applied to find association between demographic variables.

**Results:** The paramedics demonstrated a good knowledge on different aspects of LARC yet they were having high false perceptions about its side effects despite having a positive attitude for the role of LARCs as effective option in reducing unintended pregnancies.

**Conclusion:** Paramedics are considered as part of our basic infrastructure to provide health care services to majority of our population. In spite of having good knowledge and positive attitude, its the need of hour to strengthen their knowledge by addressing their false perceptions by different strategies.

**Keywords:** LARC, Contraception, paramedics.

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## INTRODUCTION

It has been estimated that approximately 28,000 women die annually in Pakistan due to preventable pregnancy related complications<sup>1</sup>. Not only maternal mortality is high but antenatal coverage is far less, 27% of pregnant female still receive no antenatal care and 40% do not receive postnatal care after delivery<sup>2</sup>. Pakistan is a signatory to the international conference on population and development (ICPD)<sup>3</sup>. To achieve Pakistan's commitment to the global MDGs<sup>4</sup>, and hence to decrease maternal and child mortality, the Government of Pakistan is trying best to increase contraceptive prevalence rate by different projects. Pakistan is still having second highest fertility rate of 3.8 in South East Asia after Afghanistan<sup>4</sup>.

Family planning has been our burning issue for decades. Pakistan is among one of the legend countries of the South East Asia who has launched family planning program in early 1960s<sup>4,5</sup>. Even though FP services are offered free in public sector, utilization of these services is extremely low due to multiple factors. Different NGOs are working with Pakistan for improving maternal and reproductive health by increasing uptake of modern contraceptive methods especially long acting reversible contraceptives whose use is negligible<sup>6</sup>. In Pakistan approximately 35% of married women practice some form of contraception and out of them, only less than 20 % use modern methods<sup>5,6</sup>. Among modern methods, female sterilization is the most common method but chosen too late i.e., usually after 4 or more children. Short term methods are commonly used, resulting in large proportion of unwanted, unplanned pregnancies<sup>7</sup> and hence increasing the pregnancy and birth related health risk to the pregnant female<sup>2</sup>.

Long acting reversible contraceptives (LARC) are the family planning method that prevents unwanted, unplanned pregnancies by its proper usage and when removed, return of fertility is prompt<sup>8</sup>. It includes intrauterine contraceptive devices and implants. Effective contraceptive could prevent as many as 1:3 maternal deaths by allowing women to delay motherhood and avoid unintended pregnancies and abortions by healthy timing and spacing of pregnancy (HTSP)<sup>9</sup>. Generally LARC are more effective and cover all the advantages and eliminate the disadvantages of other type of contraceptive methods. It can free a woman from using injectable contraceptive every three month, daily pills, or condoms with every act of intercourse during the intended birth intervals. Most people and even healthcare professionals excluding doctors have limited knowledge, poor attitude (perception of poor efficacy and perception of high side effects) and low practice of it<sup>10,19</sup>. Lack of LARC knowledge demonstrated by both user and health care professional is a major barrier for its decrease uptake<sup>11</sup>. Moreover religious opposition and misinterpretation of family planning also hinder the adoption of contraceptives even among those who desperately want to space their children<sup>12</sup>.

Despite the large Governmental infrastructure of primary, secondary and tertiary health care facility in many areas of country ,along with services of LHW, LHV and midwives, still unmet need for contraception is high<sup>1,13</sup>. Majority of population has no direct access to doctors<sup>6</sup> and so they rely on their local source of information like dai, LHW, LHV, Midwives and Nurse. Initially after getting some response for any favorable method for them, they make their mind and seek advice for family planning, keeping in mind the preference for the method advocated by their first line health practitioner/ advisor.

This study was aimed to explore the knowledge, attitude and practices of the paramedics about LARC and hence to identify the barriers leading to less motivation and deterring the adoption of specific family planning method like LARC, as they are most effective in reducing the burden of unintended pregnancies and septic miscarriages-related maternal morbidity and mortality<sup>14</sup>.

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<sup>1</sup>PAF Hospital Lahore/ National University of Medical sciences.

<sup>2</sup>Professor/Head of Obs& Gyne Sialkot Medical College Sialkot.

<sup>3</sup>Associate Professor, Lahore Medical & Dental College, Lahore

<sup>4</sup>Resident Obs and Gynae, Sir Ganga Ram hospital Lahore.

<sup>5</sup>CMH Peshawar/ National University of Medical sciences

Correspondence to Dr Rizwana Nasreen

E mail. cheemakashi777@gmail.com, Cell:03216840880

**MATERIAL AND METHODS**

This cross sectional study was conducted during period of July to August 2018 at Mayo Hospital Lahore and Sir Ganga Ram Hospital Lahore after permission of the ethical committee. Simple convenience sampling technique was employed, a total of 250 paramedics (LHV, Midwives and Nurses) were interviewed by using a pretested, comprehensive, structured questionnaires having likert type rating scale. The questionnaire was translated to Urdu Language for the ease of participants and retranslated to English for data coding. The questionnaires included 04 sections; demographic data, knowledge , attitude and practices of paramedics for uptake of LARC, consisting of total 26 close ended questions which comprised of tick boxes to indicate the specific response of Yes , No and Don't know.

Verbal informed consent was obtained from each participants and requested to express their own opinion freely as questionnaire was not asking the identity of the participants and reassuring that it will be kept confidential. The collected data was analyzed using SPSS version 20 and presented as tables and graphs, Chi-Square test was used to find association between demographic variable and P value was found statistically significant, P<0.001.

**RESULT**

Total of 250 paramedics participated in the study including midwives and nurses with either general nurses or BS nursing as their qualification. Table 1 shows demographic characteristics of the participants. Among them majority (42.4%) was 26-30 years of age and still significant number (36.8%) were more than 30 years age, the remainder (20.8%) were less than 26 years age. Considering their

years of service, most of them (47.2%) were having experience between 04 to 10 years while 30.4% were having less than 03 year service. 70.4% of total participants were holding B.sc nursing diploma or above as their basic qualification and 9.6% were midwife diploma only. The reminders (20%) were having general nursing.

Regarding knowledge and awareness 98.8% of the participants have heard of LARC while 86% know that its mechanism of action is to prevent pregnancy by creating endometrial reaction and 12.8% answered "NO" for it. Almost all were aware of its availability / service free of cost at Govt. hospitals. 80.4% were of the opinion that they are effective for usually 05 years while 19.6% differ to its duration. Almost 2/3 of the participants were aware of its removal and insertion procedures and 1/3 were not (Table 2 & Fig.1). As far as attitude of the participants was concerned, 61.6% perceive that it's over all safe for user but 38.4% don't feel so.

Table 1: Demographic characteristics of participants (n=250)

Variables	Frequency	Percentage
<b>Age (Years)</b>		
<26	52	20.8
26-30	106	42.4
>30	92	36.8
<b>Year of Service</b>		
Upto 03 years	76	30.4
4-5 Years	54	21.6
6-10 Years	64	25.6
>10 years	56	22.4
<b>Education</b>		
Midwife	24	9.6
General Nursing	50	20
B.sc Nursing or Above	176	70.4

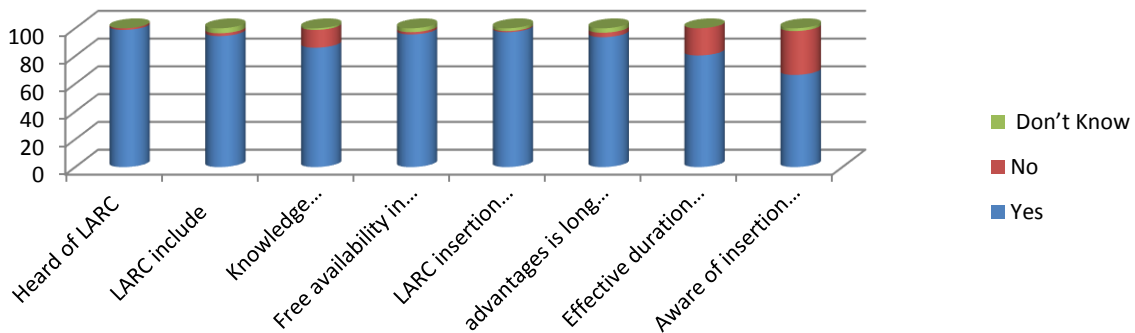


Fig.1: Knowledge of Paramedics for LARC

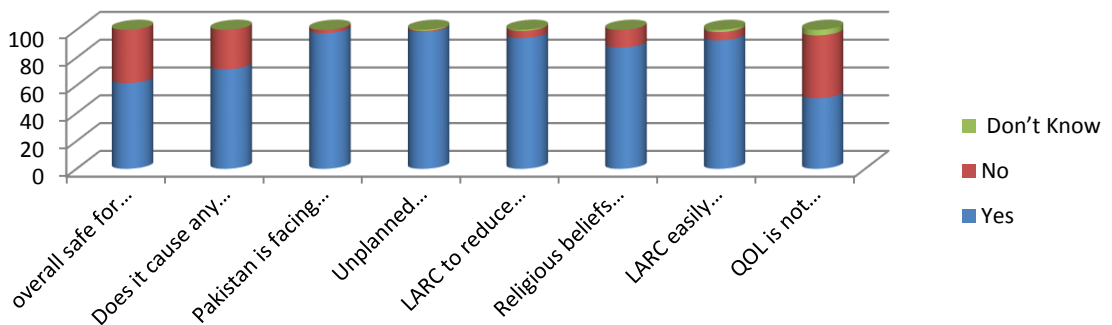


Fig. 1: Practices of Paramedics for LARC

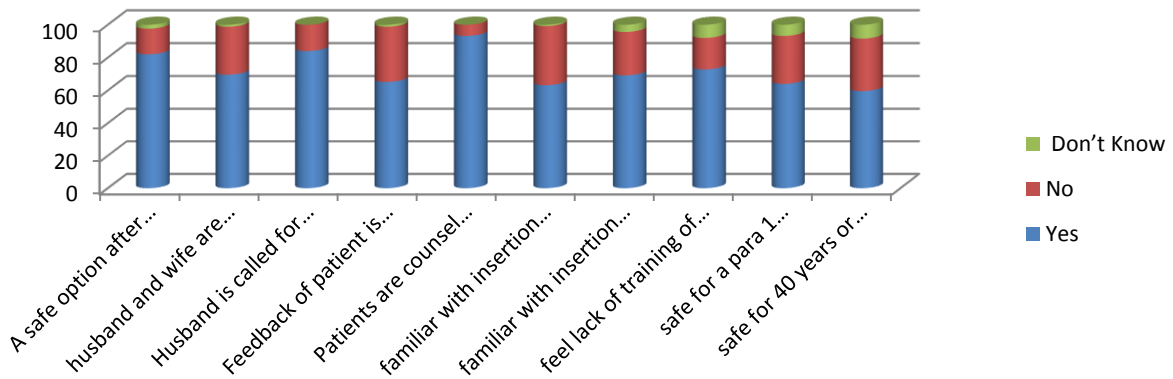


Table 2: Knowledge, attitude and practices of LARC of paramedics (n=250) in Lahore, Pakistan 2018

Questionnaire	Yes	No	Don't know
<b>Knowledge</b>			
Heard of LARC (Long Active reversible contraceptives)	247(98.8%)	3(1.2%)	0
LARC include Implants, CU-T /Multiload / safeload and Mirena...all of these?	236(94.4%)	5(2%)	9(3.6%)
Its MOA (Mechanism of action) is to cause endometrial reaction preventing pregnancy?	215(86%)	32(12.8%)	3(1.2%)
Availability of these methods in govt. Hospital is free?	239(95.6%)	4(1.6%)	7(2.8%)
Service availability for its insertion is free?	243(97.2%)	2(0.8%)	5(2%)
Most important common advantages is long term contraception till its inside proper site?	234(93.6%)	8(3.2%)	8(3.2%)
Effective duration is usually 05 years?	201(80.4%)	49(19.6%)	0
Aware of insertion and removal procedure?	166(66.4%)	79(31.6%)	5(2%)
<b>Attitude</b>			
It is overall safe for user?	154(61.6%)	96(38.4%)	0
Does it cause any infection?	179(71.6%)	71(28.4%)	0
Pakistan is facing population explosion?	244(97.6%)	6(2.4%)	0
Unplanned, unwanted pregnancies are a common finding presenting in Gynae OPD?	246(98.4%)	2(0.8%)	2(0.8%)
LARC are effective option for reducing number of unintended pregnancies?	235(94%)	13(5.2%)	2(0.8%)
Religious beliefs are a factor for its less acceptance	218(87.2%)	32(12.8%)	0
LARC are easily available in Govt hospitals?	231(92.4%)	15(6%)	4(1.6%)
QOL ( Quality of life ) is not compromised after it?	127(50.8%)	113(45.2%)	10(4%)
<b>Practices</b>			
A safe option for lady after 1/ 2/3 C-section?	205(82%)	39(15.6%)	6(2.4%)
Often patient and husband both are easily counseled for it?	174(69.6%)	73(29.2%)	3(1.2%)
Husband is called for discussion before its insertion?	210(84%)	40(16%)	0
Feedback of patient using it, is taken after 1-2 Month after its insertion?	163(65.2%)	84(33.6%)	3(1.2%)
Do you specifically counsel patient after 2-3 kids for it?	233(93.2%)	17(6.8%)	0
Are you familiar with its insertion procedure?	158(63.2%)	90(36%)	2(0.8%)
Are you familiar with its insertion timings?	173(69.2%)	66(26.4%)	11(4.4%)
Is there lack of its training regarding its insertion timing, procedure and complications	182(72.8%)	48(19.2%)	20(8%)
Is LARC safe for a para 1 patient requesting contraception?	160(64%)	73(29.2%)	17(6.8%)
Is LARC safe for 40 years or older lady requesting contraception?	149(59.6%)	80(32%)	21(8.4%)

Still 71.6% believe it cause any infection. Religious believes are considered a factor for it's less acceptance by 87.2% of the participants and only 12.8% don't consider it. Nearly all of the participants agreed that Pakistan is facing population explosion , unplanned, unwanted pregnancies is common finding and LARC are effective option to reduce this burden, and their easily availability in Govt. hospitals (97.6%, 98.4%, 94% and 98.2% respectively). To our surprise, only 50.8% participants were of the view that Quality of life is not compromised with LARC (Table 2 & Fig. 2).

Regarding their practice to advise it, 82% consider it safe for lady after having C section but 15.6% were of negative opinion. 29.2% believe, patient and husband are not easily convinced for LARC, although husband is called for discussion prior to its insertion according to 84.0% of the participants. 33.6% of the participants feel that patient

is not called for follow up after its insertion for feedback. 93.2% of participants specifically counsel a patient for its long term benefits. 63% were aware of its insertion procedure and 69.2% are familiar with its insertion timing but still 72.8 percent believe there is lack of due training regarding its insertion, removal and its complication. 29.2% don't consider it suitable for a lady Para 1 and 32% don't consider it suitable for more than 40 years old lady requesting contraceptive (Table 2 & Fig. 3)

### DISCUSSION

A good knowledge of LARC methods with a positive attitude can increase contraceptive prevalence rate of a country and can improve health indicators of that country by increasing its uptake<sup>15</sup>. This study was aimed to explore the barriers for decrease uptake of LARC in our society,

considering the role of paramedics as more frequently encountered first line health advisor for most of the population of Pakistan. In our study, all the participants were highly knowledgeable regarding LARC, correctly identifying population explosion as our burden and unintended, unplanned pregnancies as major contributor for it. The participants were somewhat aware of its insertion and removal procedure and timings and still showed a positive attitude for its further training but majority still consider it unsafe for user, compromising the quality of life of the lady using it, blaming LARC for causing infection, consider it unsafe for a patient having previous scar, or a lady requesting for contraception after one child or who is 40 year of age. All of these believe are in contrary to evidence based knowledge<sup>15,18</sup>.

In conformity to the findings of current research, a same study was conducted in Kohat in 2005, among LHW for their knowledge, attitude and practices for their job skills. The author found that despite 94% of LHW were aware of importance of family planning methods yet 70% showed deficient in providing full knowledge of contraception to woman<sup>16</sup>. Thus highlighting the deficiency of health system due to contradiction in concepts of the participants for old and new methods of contraception.

Another cross sectional study conducted at Muzaffargarh, in 2016 showed a good knowledge of the participants ranging from 78% to 99% on different aspects of family planning except the knowledge about accuracy of contraceptive methods and their use were poorly known<sup>17</sup>. The author also found that majority of the participants found themselves as most suitable choice for family planning consultation with having high false perceptions associated with family planning methods.

A similar study in Maharashtra, India was done by Hogmak S, Klindberg Allvin M and others, among final year medical students to know their knowledge, attitude and perception regarding LARC, considering their role as future consultants for family planning advice. The author found both positive and negative attitude towards modern contraceptives and family planning counseling<sup>19</sup>.

## CONCLUSION

Even though the majority of paramedics were sufficiently knowledgeable regarding long active reversible contraceptive methods, significantly higher number were still not having supportive attitude for favoring its increase uptake. This is due to combination of lack of proper knowledge, ineffective training for making their concepts, both positive and negative perceptions for the LARC methods, myths and misinformation on their behalf and most importantly delinking the health of the mother with LARC. There is a need to design health intervention that use counseling sessions to improve the knowledge of health care professionals, as they are key determinant involved in mind preparation of the woman opting for contraceptive need.

**Recommendation:** Intensive reinforcement through continuous education programs for paramedics should be carried with the strong emphasis on clearing the myths and false believes, addressing their high perception of associated side effects of LARC with key focus on their benefits of healthy timing and spacing of pregnancy and positive health benefits.

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