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Utilization of Maternal Health Care Services among Married Women in Pakistan: Insight from Pakistan Demographic and Health Survey 2017-2018

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Abstract: Maternal health care services during pregnancy, delivery and postpartum period are important for the survival of mother and infant. In Pakistan the services are extended particularly among rural married women through various government initiatives and programs. Due to government initiatives child births increased in health facility with the help of skilled health service providers. In present research study researchers mainly focused to summarizes the patterns, levels and trends in maternal health care utilization drawn from Pakistan Demographic and Health Survey 2017-18. The total 15, 671 sample household were selected for survey in which 15, 051 were occupied. The statistical results showed that 86% of the pregnant women received antenatal care services in health facility with assistance of health care service provider. Statistics shown that one third 66% child births are taken place in health facility and overall 69% of child births are conducted by health service providers. The research findings showed that maternal health care services are extended to all married women particularly in rural setting and government on track to reduce maternal and infant mortality as per target set in sustainable development goal no. 03.

Key words: Pregnancy · Child Birth · Health Facility · Pakistan

INTRODUCTION

According to World Health Organization maternal health is the health of women during pregnancy, delivery and postpartum period [1]. The maternal health care services are included care during antenatal, delivery and postpartum period [2]. A mother should be provided maternal health care services during pregnancy, delivery and postpartum period [3]. Availing these services contribute to reduce maternal mortality and morbidity. However the utilization of maternal health care services is very low in developing countries. Research studies reveal that poor maternal health is one of the public health issues among women around the world [4, 5]. According to WHO report [6], every day 810 women died due to preventable causes during pregnancy and child birth. It is very alarming situation that 94% of all maternal deaths occur in low and lower-middle income countries. Sub-Saharan Africa and South Asia accounted for approximately 86% (254000) of the estimated global maternal deaths in 2017. South Asia accounted for merely one-fifth (58000) of global maternal deaths.

According to State of World Population Report [7], Maternal Mortality Rate (MMR) in Pakistan is 178/100,000 live births. In the report it is statistically shown that more than fifty percent (52%) of the births are attended by skill health personnel in the country.

The prevalence rate of modern method of contraceptive is one third 33% in the country [7]. WHO defined the standard Antenatal Care Visits (ANCs) are 4+ ANC [8]. In the country according to Pakistan Demographic and Health Survey report 2018, more than fifty percent (51%) of pregnant women make standard ANC visits to health facility in last five years. It is statistically shown that women with no or less education prefer to stay in home during pregnancy and avoid ANC

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visits. Similarly the pregnant women in the age of less than 35 years prefer to follow standard 4+ ANC visits to health facilities. In Pakistan majority 66% of the deliveries are taking place in health facility which is attended by health service providers [9]. The prevalence of heath facility delivery is high among the educated women and living in urban setting. In the country women with highest wealth quintile 92% deliver at health facility [9].

According to National Institute of Population Studies (NIPS) [10] the maternal health condition improved among married women in the country. It is important to mention that to improve maternal health (SDG no. 03), reduce poverty (SGD no. 01), and bring gender equality (SGD no. 05), in the country government initiated various policies and programs. Pakistan was first to become the signatory of Millennium Declaration with commitment in MDG Goal no. 05 to improve maternal health and reduce MMR in the country. Now they are the signatory of Sustainable Deceleration and fully committed in SDG Goal no. 03 to improve maternal health and reduce MMR less than 70/100,000 live births. The government of Pakistan adopted National Vision 2016-2025 for Coordinated Priority Actions to address Challenges of Reproductive, Maternal Newborn Child, Adolescent Health and Nutrition. The government of Pakistan announced National Health Vision 2016-2025 with focus to improve the health of all Pakistanis particularly women and children. They focused to attain the SDGs and to fulfill other global health commitment and responsibilities [11].

In 2007 the government lunched the National MNCH program. The main focus of the program is to providing emergency obstetric services and community midwives, and promoting institutional deliveries and skilled birth attendant. In Khyber Pakhtunkhwa province the government developed a Health Sector Strategy 2010-2017. The strategy was mainly focused to improve the health status of population living in the province through ensuring access to high quality health care services in the province. One of the major contributions in health sector in the province of Khyber Pakhtunkhwa is development of Khyber Pakhtunkhwa Health Policy 2018-2025 [12]. The health policy mainly focused to improve health of the population in the province and to achieve SDGs and fulfill all other international commitments.

Objectives of the Study: The study mainly covered the following objectives;

- To examine the patterns and level of maternal health care utilization in Pakistan
- To analyze the trends in maternal health care utilization among married women in Pakistan
- To investigate the improvement in maternal health condition in the country.

MATERIALS AND METHODS

Researchers reviewed and summarized maternal health care situation in 2017-18 Pakistan Demographic and Health Survey report [9]. The survey was conducted by National Institute of Population Studies (NIPS) supported by Ministry of National Health Services, Regulation and Coordination. Field survey in the present research was conducted in the period of November 22, 2017 to April 30, 2018. The research survey was financially supported by United States Agency for International Development (USAID), Department for International Development (DFID) and United Nations Population Fund (UNFPA).

In present study sampling frame was selected from enumeration blocks which are developed in last official national population and housing census, 2017. In selection of survey sample population, Pakistan Bureau of Statistics (PBS) supported the wok of NIPS [13]. For the first time in PDHS 2017-18 Azad Jammu and Kashmir (AJK) and newly merged districts previously called Federally Administrated Tribal Areas (FATA) were included. The survey results showed the estimates of four provinces namely Punjab, Sindh, Khyber Pahtunkhwa, and Balochistan. The survey included two regions AJK and Gilgit Baltistan (GB). The Islamabad Capital Territory (ICT) and FATA are also covered in the field household survey.

In present survey quantitative research design was used. Sample of the study was selected through stratified two-stage sampling technique. In the present research study 16 sampling strata were developed and sample was selected from every stratum through implicit stratification and proportional allocation. In the present research study systematic sampling method was applied in household selection.

In the study all ever-married women aged 15-49 years were included who are permanently resided in the survey area. In the survey men aged 15-49 years were included as one-third of the sample household. In the present study one ever-married woman is selected randomly from every sample household. The total 15, 671 sample household were selected for survey in which 15, 051 were occupied. NIPS used six questionnaires in 2017-18 PDHS in which

five were based on DHS Program's standard demographic and health survey questionnaires while community questionnaire was based on the instrument used in previous rounds in national demographic health survey. In survey the protocol was reviewed and approved by various committees and councils namely; National Bioethics Committee, Pakistan Health Research Council, and ICF Institutional Review Board. The questionnaire after finalized was translated to Urdu and Sindhi for easy understanding among the sample respondents. The quantitative data entry and editing were carried by using CSPro software package. The results were presented in bar chart, pie chart, line graph, and histogram.

RESULTS

Fig. 1 shows the antenatal care services and its utilization in Pakistan. Pakistan Demographic and Health Survey was first conducted in 1990-91 and recently conducted in 2017-18. The figure shows the trend to utilize antenatal care from first to recent PDHS. The ANC visits and services in 1990-91 PDHS was observed 26% from skilled health service provider while only 14% had made 4+ ANC visits during their most recent pregnancy. In second 2006-07 PDHS 61% women received ANC services from skilled health service provider while the 4+ ANC visits were increased to 28%. In third 2012-13 PDHS 73% women received ANC services from skilled health service provider while more than one third 37% had made 4+ ANC visits in their last pregnancy. It is observed that ANC services from skilled health service provider are increased from 26% in 1990-91 PDHS to 86% in 2017-18 PDHS. Similarly the 4+ANC visits increased from 14% in 1990-91 PDHS to 51% in 2017-18 PDHS.

Fig. 2 shows trends in place of birth among married women in last five years before the survey. The trends were observed with main two indicators either a women delivered child in home or health facility. In first 1990-91 PDHS only 13% women delivered their child in health facility while majority 85% women delivered in home their last child. In second 2006-07 PDHS the results shown improvement as 34% women delivered in health facility while 65% delivered in home. In 2012-13 PDHS almost fifty percent 48% delivered in health facility and 52% delivered at home. In most recent 2017-18 PDHS it is found that two third 66% delivered in health facility and 34% delivered at home. It is concluded that married women delivered in health facility only 13% in 1990-91 PDHS which is increased to 66% in last 2017-18 PDHS.

Fig. 3 shows the health facility birth by education. The bar chart shows that among illiterate women 52% are used health facility as a place of birth, among women having primary education 67% are used health facility as a place of birth, the use of health facility increased with increased level of education as among women with middle education 78% are used health facility as place of birth, the increased observed among women with secondary education with 86% delivered in health facility, and women with higher education 93% delivered their child in health facility. It is concluded from the figure that educated women prefer and delivered child in health facility in the country.

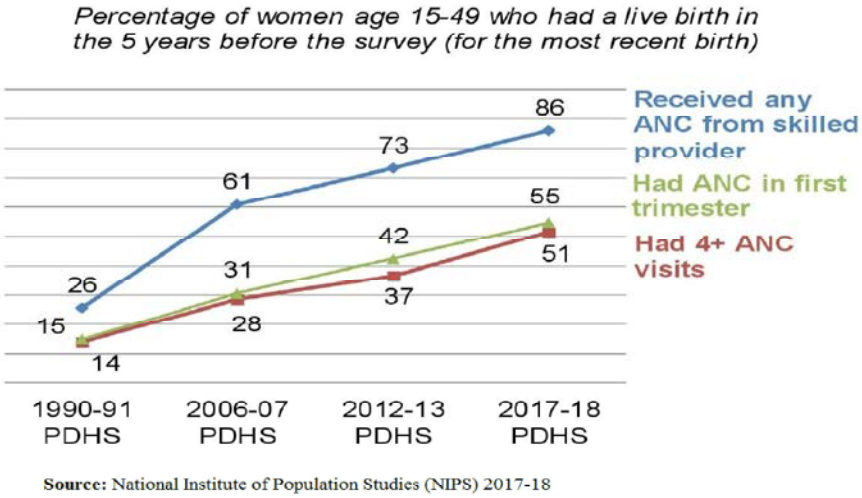

Fig. 1: Trends in antenatal care coverage

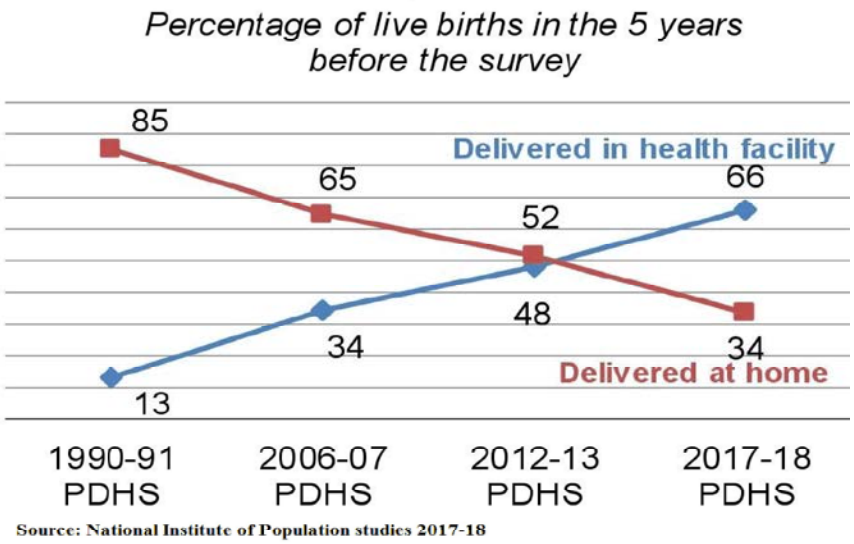

Fig. 2: Trends in place of birth

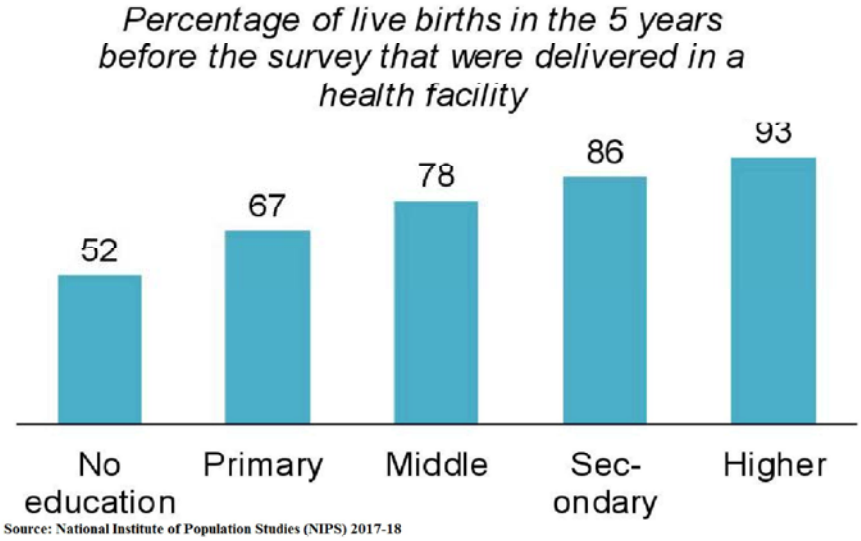

Fig. 3: Health Facility births by education

Fig. 4 shows health facility birth by region in the country. In Punjab province 69% of women delivered their child in health facility in last five years, in Islamabad capital territory 84% of the women delivered their child in health facility, in province of Sindh 72% of the women delivered child in health facility, in Khyber Pakhtunkhwa province, Gilgit Baltistan, and Azad Jammu and Kashmir 62% of the women delivered in health facility their last child, while the newly merged FATA districts 49% of the women delivered their child in health facility as shown in 2017-18 PDHS report.

Fig. 5 shows assistance during delivery. It is very encouraging in the country that majority 60% of the child birth is assisted by doctor in health facility. 10% of the child birth is attended by Nurse/Midwife/LHV/CMW, 24% of the child birth still attended by DAI/TBA, 5% by relatives, 1% by LHW/FWW, and less than 1% is not attended by any one.

Fig. 6 shows the relationship between skilled service provider during child birth and mother's education. It is shown that among women with no education 56% is assisted by skilled service provider during child birth,

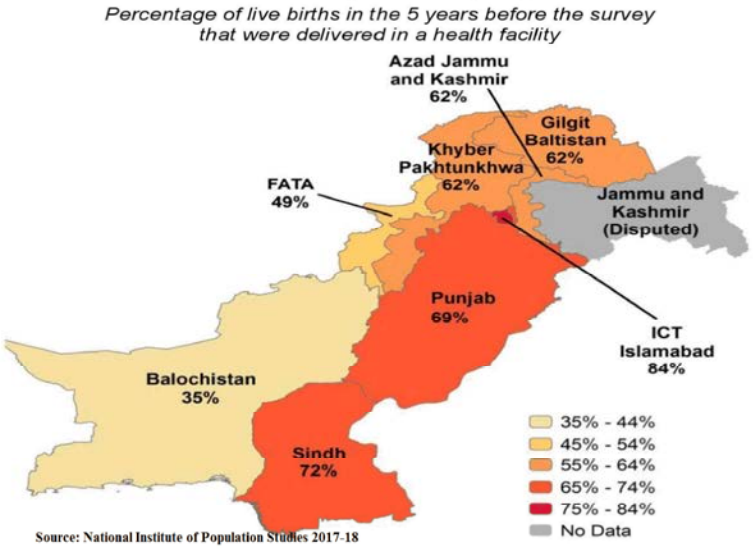

Fig. 4: Health facility births by region

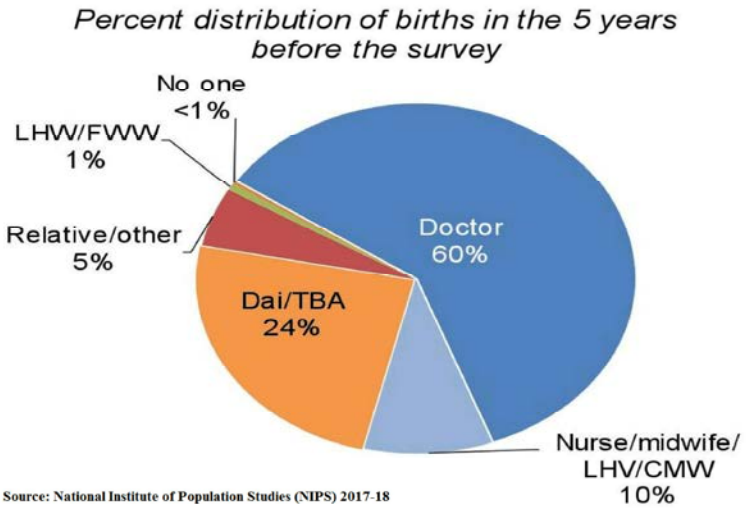

Fig. 5: Assistance during pregnancy

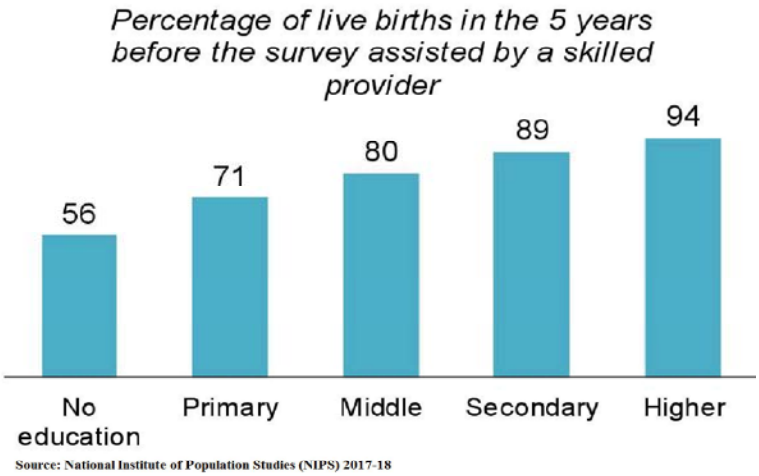

Fig. 6: Skilled assistance at delivery by mother's education

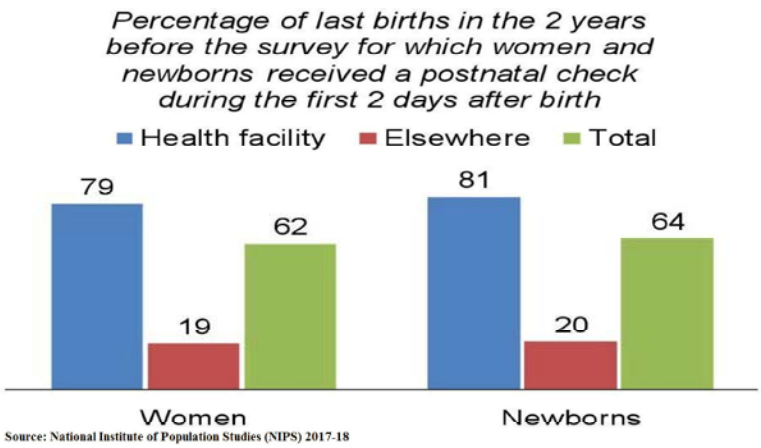

Fig. 7: Postnatal care by place of delivery

among women with primary education 71% are assisted by skilled service provider during child birth, among middle passed women 80% are assisted by skilled service provider during child birth, among women with secondary education 89% child birth are assisted by skilled service provider and among higher degree education majority 94% child birth are assisted by skilled service provider in the country.

Fig. 7 shows percentage of last births in the 2 years before the survey for which women and newborn received a postnatal check during the first 2 days after birth. It is shown that majority 79% of the women received postnatal care within two days after birth in health facility, 19% received from elsewhere and the overall 62% women received postnatal care from any facility within two days after delivery. Among the new born children majority 81% received postnatal care in health facility, 20% received from elsewhere while the overall postnatal care among newly born children are 64% in the country.

DISCUSSION

According to 2017-18 Pakistan Demographic and Health Survey (PDHS) country has seen accomplished major improvement in both maternal and neonatal health care. It is reported that MMR reduced to 178/100,000 live births in 2018 as compare to 276/100,000 live births reported in 2012-13 PDHS report [9].

It has shown that more than fifty percent women had made 4+ ANC visits to health facility which was observed only thirty seven percent in 2012-13 PDHS report. Other researchers discussed that 4+ ANC visits greatly contribute to reduce MMR among married women. Researches discussed that pregnant woman high number of contact during pregnancy with doctor, nurse or midwife reduces the high risk of maternal mortality [14]. It is found in the recent PDHS report that ANC utilization increased in the country. The present research analysis mentioned that majority eighty six percent of pregnant women received checkup from skilled service provider. The high percent of pregnant women checkup from skilled service provider in the country reduced MMR. It is also discussed in other researches that women with 4+ ANC visits are encouraged to use other maternal health care services. It is also found that those women who make regular visits during ANC are more likely deliver their child in health facility and visit for postnatal care than women with less ANC visits [15].

It is also found in the present report that delivery of child in health facility increased in the country. Majority sixty six percent deliveries are currently taking place in health facility. In many recent researches it is discussed that health facility birth with the help of skilled personnel reduced both infant and maternal mortality [16]. A research conducted in India shown that proportion of women delivery in health facility increased which reduced the maternal mortality among pregnant women in the country [17]. Other researches revealed that childbirth in health facility contributed to lower the rate of maternal morbidity and mortality than home delivery. Institutional delivery also contributes to prevent still births and make improvement in the survival of newborn [18, 19].

The results showed that majority ninety four percent of the women with higher education deliver their child in health facility in the country. Another study conducted in Pakistan also discussed education variable as major contributor to reduce MMR in the country. It is highlighted that women with education are prefer more to

make ANC visits and deliver their child in health facility [20, 21].

The place of residence also makes significant changes in the choice to select a place of ANC services and delivery [22, 23]. In PDHS report it is shown that women living in urban areas prefer to make ANC visits to health facility and deliver their child in health facility. The same preference is also discussed in other research studies. Around the world women living in urban setting are more likely to deliver in hospital and other health facility rather than women reside in rural setting [24-26].

CONCLUSIONS

It is concluded that major improvements in maternal health care are reported in 2017-18 Pakistan Demographic and Health Survey. Among married women 4+ ANC visits are increased as compare to statistics shown in previous reports. Similarly the women institutional delivery increased and they are also availing postnatal care services in health facility. Major improvement is reported among educated women and living in urban setting as compare to uneducated and women living in rural setting. Conclusively, it is stated that Pakistan on track to fulfill the sustainable declaration to reduce maternal mortality in the country. The country is initiating various health sector policies and programs to reduce MMR and increased institutional child birth.

Recommendations: The following recommendations are suggested to improve maternal health care and reduce MMR in the country.

- Government should provide health facility to women living in rural areas as most of the population are reside in rural setting in the country
- Government should start cash incentive for pregnant women to encourage their access and utilization of maternal health care services in health facility
- Government and civil society start public service messages and awareness sessions at community level to educate women about the facilities available in health facility and benefits of institutional delivery for mother and newborn child.

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