

## Motherhood; blessing or a curse! A nephrologists' view

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Motherhood is a natural desire for women world over; a pregnant woman receives special gentle care in most of the societies. The UNICEF estimates that global crude birth rate is 4.3 births every second (as of Dec. 2013 estimate). Pakistan demographic and health survey of 2012-13, carried out by the National Institute of Population Studies (NIPS) reveals that fertility rate among women of 25-29 years is 224 births per 1,000.<sup>1</sup> While motherhood is often a positive and fulfilling experience, for too many women it is associated with suffering, ill-health and even death in others. The factsheet of World Health Organization of the year 2013, reveals that 289,000 women died during one year, due to complications of child birth. The major causes of maternal morbidity and mortality include haemorrhage, infection, high blood pressure, unsafe abortion, and obstructed labour. According to WHO's report, the risk of a woman in a developing country, dying from a maternal-related cause during her lifetime is about 23 times higher compared to a woman living in a developed country.<sup>2</sup>

Acute kidney injury (AKI), in association with pregnancy invariably occurs as a result of a potentially preventable cause. In the developed world pregnancy related AKI (PR-AKI) has almost disappeared and incidence has reduced from 22% in 1950's to 1% in 1990s,<sup>3</sup> while the more recent reported incidence is 1 in 20,000 deliveries.<sup>4</sup> In our neighboring country, India, abortion has been legalized as in the developed world. A few years back, a programme was launched offering cash rewards to women who gave birth to their children in health care facilities.<sup>5</sup> After this provision, there has been a substantial increase in the number of women delivering in institutions,<sup>6</sup> and PR-AKI has shown decline from 15 to 10% of total AKI.<sup>7</sup> The figures have further reduced to 4.68% as quoted in a recent study by same group. Whereas, published reports from Pakistan exhibit PR-AKI from 18% of total AKI<sup>8</sup> to 35% during last five years.<sup>9</sup> This marked rise reported from the same institution highlights an exponential increase of patients coming to this hospital to get renal care and an unchanged or unaddressed status of obstetrical and

maternal health care. Furthermore; considerable number of women with PR-AKI develop end stage renal failure requiring lifelong renal replacement therapy. This may be particularly the case in women who have acute cortical necrosis (ACN) as a result of extensive bleeding and intense renal ischaemia. Chugh et al from India have published a series of 113 cases of ACN and 56.6% of these were of obstetrical origin<sup>10</sup> whereas another study from Greece around the same time period reports obstetrical AKI 9% of total AKI population and ACN 11% of obstetrical AKI.<sup>11</sup> At our institution (SIUT) we have seen 29% of our PR- AKI patients having ACN (unpublished data).

These serious concerns demand designing and implementation of drastic measures to improve maternal health care, which begins with basic health unit establishment and training of health care workers. Provision of if not cash rewards (like India) then at least all free treatment and facilities to transfer women to district hospital in case of need should be provided. This also requires appointing well trained doctors at district health centers, who can manage complicated cases with expertise. More over provision of renal replacement therapy facility free to all at district level are the issues to be addressed.

Being a mother is a blessing and should not be considered as a curse, as seen by those who suffer from renal failure which in some cases is irreversible causing the surviving women lifelong misery of going through replacement therapy. An event which starts with joy and pride becomes a curse with neglected and scarce health care facilities in the country.

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