

## Double Intrauterine Insemination for Pregnancy: A Case of Overuse

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Lack of resources is one of the most common problems of all health systems around the world. All countries are seeking to achieve sustainable resources for their health systems in order to achieve their main goals (health status, responsiveness and financial protection).

However, many health systems cannot achieve the stated goals despite allocating a large amount of funding. Evidence suggests that one of the most important problems that results in poor health systems efficiency is medical overuse. Medical overuse occurs when the harms of a particular services are greater than its benefits, it does not have any effect on the quality or quantity of life or even has a reverse effect and causing cost to the patient and the health system [1-3].

There are several reasons for the occurrence of medical overuse, such as information asymmetry, fee for service payment, defensive medicine, lack of clinical guidelines, the absence of a comprehensive health information system, and lack of evidence or non-use of existing evidence [4].

Intrauterine insemination (IUI) is a fairly simple fertility treatment, less invasive and less costly than other methods such as *in vitro* fertilization (IVF) and has therefore been used as the first treatment line in recent years [5]. IUI done in two ways: single and double. There are various and conflicting evidence regarding the use of single and double IUI that can affect evidence-based decision-making [6].

Due to differences in the results of randomized controlled trials (RCTs), several systematic reviews have been conducted in this field. In a systematic review of (RCT) that investigated the single versus double IUI in stimulated cycles for subfertile couples, the authors concluded that there are no significant benefit for double over single IUI in subfertile couples with partner semen [7]. The results of another systematic review have shown that there is no significant differences between single and double IUI [8]. Zavos., *et al.* in a systematic review investigated the double versus single IUI for male factor infertility. The result showed that the existing evidence regarding the use of double IUI in couples with male factor infertility is weak and incomplete [9]. Arab-zozani., *et al.* compared the single versus double IUI for pregnancy in a systematic review. Like other previous systematic reviews, the authors concluded that the evidence does not support the superiority of double over single IUI in clinical practice [10,11].

Nearly, the results of all these studies are somewhat vague and conservative, but all of these studies have stated in a way that double does not overcome the single. On the other hand, almost all studies have pointed to these issues that the use of double IUI make the treatment more complex and expensive and raises stress in patients [7-10].

Considering the disadvantages/harms of double IUI and given that its benefits are not superior to single IUI, and with respect to the definition of medical overuse, the use of the double IUI can be considered as the overuse in this service, and evidence also confirms this.

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