Table 2. The multiple streams of Kingdon’s theory in terms of MDG 5 reduction in the nine studied countries

<table>
<thead>
<tr>
<th>Country (Islamic Republic of)</th>
<th>Problem Stream</th>
<th>Policy Stream</th>
<th>Political Stream</th>
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</thead>
<tbody>
<tr>
<td>Iran</td>
<td>At the same time as the establishment of the country health care network in 1985, maternal and child health was set as one of the important components of the health service delivery system (12).</td>
<td>- Emphasis on the reduction of maternal mortality in the third to fifth country development plans &lt;br&gt;- Launch of the higher school of midwifery in 1939 &lt;br&gt;- Establishment of the mother and child health office affiliated to the general office of family health at the ministry of health in 1976 &lt;br&gt;- Launch of the healthcare network system in 1985 &lt;br&gt;- Training family health technician in 1983 to provide integrated services &lt;br&gt;- Training local midwives in 1983 &lt;br&gt;- Training village midwife in 1990 &lt;br&gt;- Establishment of maternity facilities in villages along with rural health centers to increase access (28).</td>
<td>- Government commitment to promoting maternal health&lt;br&gt;- Government commitment to the Millennium Development Goals&lt;br&gt;- Publishing results of the RAMOS study in 2008(12).</td>
</tr>
<tr>
<td>Bhutan</td>
<td>Since 1990, the maternal mortality has been recognized as a problem) the high figure of 560 per 100,000 in 1990(12).</td>
<td>- The role of representative of the United Nations Population Fund, who has played a special role in advocacy</td>
<td>-The king's commitment to maternal health&lt;br&gt;- The queen's commitment to maternal health&lt;br&gt;-The government's commitment to achieve the MDGs (5)</td>
</tr>
</tbody>
</table>
In 2002, the trend assessment of the achievement of the MDGs was conducted and its results were published in which challenges ahead to reduce maternal mortality and the necessity of strengthening infrastructures were emphasized (5,29).

- Technical support of WHO for developing national plans
- Development of maternal and child health program within the National Action Plan 1997
- The following actions were taken to achieve the goal of this Action Plan:
  - Tetanus oxidation
  - Distribution of folic acid and iron to reduce anemia in pregnant women
  - Implementation of the Safe Motherhood and Maternal health program, focusing on the provision of “Women-Friendly Services” in 1997 with the following objectives:
    - Enhancement of pre and postnatal care
    - Increase the skilled birth attendance percentage
    - Distribution of safe delivery kits at home since 1998
    - Establishment of midwifery care centers for maternal emergencies (Emoc) since 2000 (14,29)
    - Development of a partnership document with WHO in early 2000
    - Development of a strategy for cooperation with WHO (2001-2002)
<table>
<thead>
<tr>
<th>Country</th>
<th>Since 2001, with publishing the first progress report on MDGs, maternal mortality has been considered as a problem. In the first national development plan 2002, which was developed in compliance with MDGs, “maternal mortality was mentioned as one of the major problems of the country” (20,21).</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Timor</td>
<td>During September 1999-January 2000, WHO, together with UNICEF, acted as a “Temporary Ministry of Health”. An Interim Health Authority was formed in February 2000, followed by the creation of the Division of Health Services in July 2000. The Ministry of Health came into being in September 2001. (the reduction of maternal and infant mortality was one of the mentioned goals) (20) - Establishment of the maternal and neonatal health unit in the structure of the ministry of health as a subset of the healthcare services delivery sector</td>
</tr>
<tr>
<td></td>
<td>- Change in the type of governance and political stability - The country, after centuries of being a colony, in 2002 gained independence and left behind the Internal conflicts and political instability. Statesmen's commitment to achieve the MDGs - Participation of East Timorese independence leader, who later became the first president, at the General Assembly for the development of MDGs in September 2000 - Participation of the prime minister, key ministers and representatives of the private sector in the committee on the management of MDGs (6)</td>
</tr>
</tbody>
</table>
- Training midwives on safe motherhood, safe childbirth, and management of sexually transmitted infections (STIs) in 2000 by three international agencies including UNFPA, WHO, UNICEF
- Employment of gynecologists and obstetricians by the United Nations Population Fund for the access to services in gynecological and obstetric emergencies
- Publishing the first official progress report on MDGs in 2001(6)
- Situation analysis report of the country, titled country general assessment with the participation of the International Agency in 2001
- Participation of the country’s delegate in regional conferences on MDGs – United Nations Development Fund Conference in Bangladesh in February 2003
A joint training workshop by the United Nations Development Fund and the World Bank in Fiji in March 2003
| **Rwanda** | After decades of tension and genocide, Rwanda faced many health problems. Severe labor shortage, constraints on health infrastructure, and high rates of maternal and infant mortality (26). | - Community-based measures to reduce maternal mortality in 1995; launch and employment of community health workers 
- Publishing the national report on the progress of the MDGs in Rwanda by the government with the participation of UNDP (2003, 2007) 
- Modification of the system of apprenticeship of the community health workers; for each village, three persons one man and one woman for health care and one woman particularly for maternity care during pregnancy and pre, post natal and neonatal care (2007) 
- Launch of maternal mortality audit in 2008 
- Development of a roadmap to accelerate the reduction of maternal mortality with the participation of the United Nations Population Fund in 2008 
- Changing the procedure of childbirth at home to childbirth at maternity centers 
- Decentralization of health services 
- Use of community participation (22,26) | After decades of tension and genocide in 1994, which resulted in more than two million homeless people, Rwanda has been politically stable for almost two decades. 
- The commitment of the president and the first lady to maternal health 
- The commitment of government to achieve the MDGs 
- Participation of the health minister in the 4th Africa Ministerial Conference, held in May 2009 at Addis Ababa 
- Launching a campaign to reduce maternal mortality in Africa with the motto “Women should not lose their lives when they save live” 
- Announcement of this campaign in Rwanda on 7 October, 2009 by the first lady of the country (22,26) |
<table>
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<tr>
<th>Country</th>
<th>Description</th>
<th>Initiatives</th>
<th>Notes</th>
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</table>
| Cabo Verde  | Maternal mortality was recognized as an issue in the 1990s and was put in the 2001-2005 as a priority. Maternal mortality reduction was targeted in the national plan 2000 (15) | - Support of the UN representative in the country  
- Developing the national strategy 2002-2005 for achieving the MDGs  
- Support of international organizations  
- Organizing the NGOs as part of the health system to offer clinical and counseling services for pregnancy and birth  
- Developing a national plan to integrate reproductive health and maternal mortality in the health system 2001  
- A reproduction health program has been designed as well as standards and procedures of services (15). | - After independence from Portugal in 1975, the political situation became meaningful and the power between various political groups was rotated and stabilized.  
- The prime minister’s commitment to maternal health  
- Commitment of the minister of economy to achieve the MDGs  
- Commitment of the government of Cabo Verde to include Maternal health in the health system(15) |
| Cambodia    | Maternal mortality has been mentioned as a major issue in the health system in the safe motherhood plan in 1997 (11,13) | - Agreement on the policy of birth interval and the implementation of several pilot projects in this area (1991)  
- Agreement with permanent contraception  
- National policy and strategy 1994-1996 | - After two decades of war and political instability, since the 1998 election a kind of political stability was gained that allows the continuity of policy making and planning. Political stability (23)  
- The prime minister’s commitment to maternal health  
- The commitment of the government and the minister of health to achieve the MDGs  
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<tr>
<td>Health system development plan 1994-1996</td>
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<tr>
<td>Development of the policy of birth spacing by the Ministry of Health in January 1995 as a solution for women’s health and influential on the health and nutrition (17)</td>
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<tr>
<td>Publishing the research results regarding the family planning demand on permanent methods (23)</td>
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<td>Health coverage program 1996</td>
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<tr>
<td>Guideline for the launch of a health centers in regions in Cambodia 1996</td>
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<tr>
<td>Implementation of programs related to maternal and neonatal health by the ministry of health in collaboration with the National Center for Maternal and Neonatal Health (1996-2000) (17)</td>
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<tr>
<td>Health human resources development plan 1996-2005</td>
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<tr>
<td>Publishing the results of the analysis of maternal health status in 1997</td>
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- Holding a workshop based on the results of the maternal health status analysis, 23-27 June 1997, with 120 participants from national and international entities
- Development of policy, strategy and action plan for safe motherhood 1997
- Initiation of the reproductive health program with the assistance of the WHO including safe maternity, prevention of unsafe abortion, prevention and management of STDs in 1997, and generalization to the whole country until 2000
- UNFPA assistance to the women’s health sector, the ministry of women’s affairs for capacity building and the ministry of health in planning and launching of sustainable programs on reproductive health
- Implementation of the Youth Reproductive Health Program in mid-1997 by the United Nations Population Fund and the European Union
- Implementation of the empowerment projects (TOT) for medical staff
<table>
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<tr>
<th>Country</th>
<th>Year</th>
<th>Action</th>
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<th>Action</th>
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<tbody>
<tr>
<td>Lao People’s Democratic Republic</td>
<td>1995</td>
<td>In 1995, the high maternal mortality rate was highlighted in the national birth spacing policy and with understanding the importance of the issue, this policy was developed in order to reduce maternal mortality and morbidity ((8,19)).</td>
<td>2005</td>
<td>Participation of the delegation of the country in the Cairo International Conference on Population and Development</td>
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<td></td>
<td>- Actions aimed at improving services during pregnancy, nutrition and post-natal care by the government of Japan (1997)</td>
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<td>- Development of national birth spacing policy in 1995</td>
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<td>- Publishing the first report on progress in MDGs (2003)</td>
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<td>- Development of national birth spacing policy in 1995</td>
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<td></td>
<td></td>
<td>- National report on the progress status of MDGs by the government with the participation of UNDP in 2004 ((8))</td>
<td></td>
<td>- Development of national birth spacing policy in 1995</td>
</tr>
</tbody>
</table>

Lao People’s Democratic Republic

In 1995, the high maternal mortality rate was highlighted in the national birth spacing policy and with understanding the importance of the issue, this policy was developed in order to reduce maternal mortality and morbidity \((8,19)\).

- Actions aimed at improving services during pregnancy, nutrition and post-natal care by the government of Japan \(1997\)
- Publishing the first report on progress in MDGs \(2003\)
- Development of national birth spacing policy in 1995
- Development of the safe motherhood and safe childbirth program in 1997
- Development of national population and development policy in 1999 \((19)\)
- Tetanus vaccination
- Prescribing folic acid and iron to prevent anemia during pregnancy
- National report on the progress status of MDGs by the government with the participation of UNDP in 2004 \((8)\)
- The commitment of the ministry of health to the national maternal, infant and child health programs
- Government commitment to achieve the MDGs \((19)\)
- The role of the deputy of the prime minister, who also was the minister of foreign affairs, as the head of the national committee for monitoring the achievement to MDGs
- Establishment of the national commission of mother and child (1999) \((8)\)
| Maldives | With the Introduction of a maternal death audit in 1997, more reliable data on MMR was available. In 1990 the maternal mortality rate stood at around 500 per 100,000 live births and was addressed as a health problem (16). | Development of the first three-year health program focusing on primary health care services 1980 (following the declaration of Alma-Ata in 1997)  
- maternal mortality assessment system since 1990  
- Increase the number of human resources in health system to 56% (1994-1999) (16)  
- Development of the second long term health plan (2006-2015)  
- detection of high risk pregnancies  
- Improving the quality of services in distant areas  
- Focusing on reduction of anemia in pregnant women (Distribution of supplement)  
- Development of hospitals  
- Employment of doctors in health centers  
- Education for health system human resources  
- Strengthening the provision of midwifery emergency services in remote islands | Government commitment to fulfill international goals (25) |
<table>
<thead>
<tr>
<th>Country</th>
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<th>Actions</th>
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</table>
| Mongolia | The country entered into a democratic phase in 1990 after the Soviet Union’s collapse. The years immediately following the political transition witnessed a deterioration of the health-care system and a resultant rise in maternal mortality. The high rate of maternal mortality has been recognized since 1990 (18) | - Change the service centers in remote islands to hospital (9)  
Publishing the progress report on MDGS by the ministry of health and ministry of planning 2005, 2007  
- Collaborative strategic approach for reducing maternal mortality  
Maternal mortality reduction strategy 2001-2004  
National strategic plan for reproductive health Support from national and international partners (10)  
- Training of staff about reproductive and sexual health (including gynecologists) with the assistance of the United Nations Population Fund and UNICEF  
- Providing required medicines in midwifery emergencies  
United Nations Population Fund support for contraceptive distribution  
- Conducting training and campaigns for family planning training that had impact on the acceptance and demand for reproductive health services.  
- Reestablishment of Maternal waiting homes |

- Government commitment to fulfill international obligations  
- Legal abortion act 1989  
- The adoption of the public health policy in 2001 by the parliament with the emphasis on the improved access to reproductive health services for vulnerable groups and remote areas (18)
near the hospital in 1993 (as an important part of the referral system)
- focusing on intrapartum care
- Opening of local diagnostic and therapeutic centers in three regions of the country
- Logistic services of the United Nations Population Fund for reproductive health programs (27)