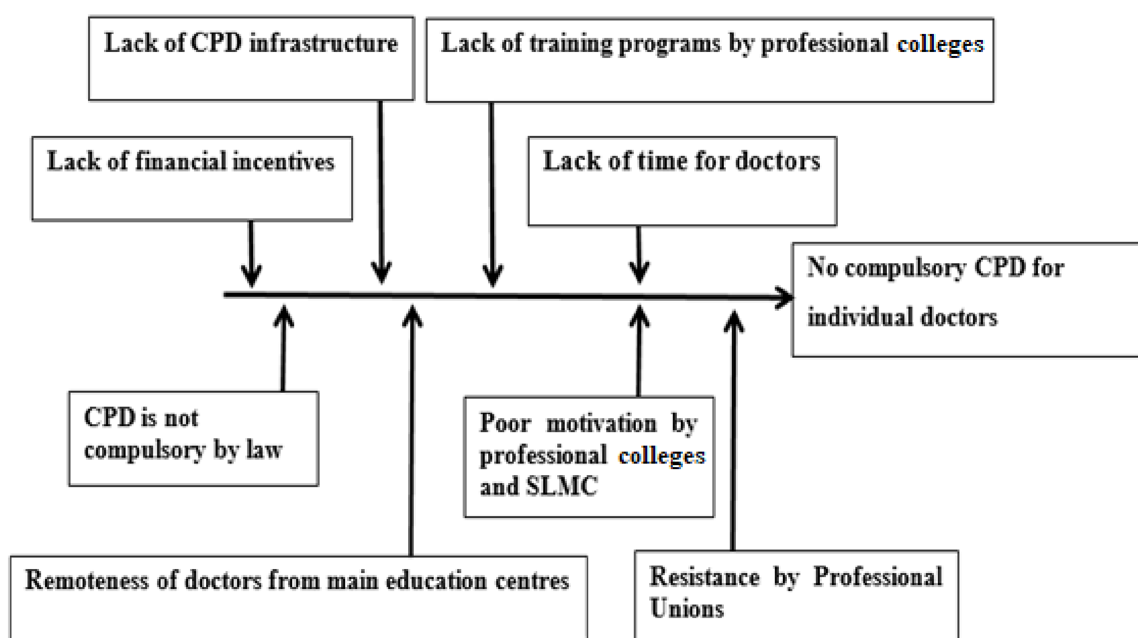

Figure 2: Ishikawa diagram of problem analysis

Results

In Sri Lanka, a handfull of doctors are currently engaged in CPD. Few attempts of implementing CPD has been unsuccessful due to few faults in the system. The main reason behind non-engagement in CPD is that SLMC revalidation doesn't need CPD updates of doctors in the current context (SLMA, 2019). There are few leading factors identified at situational analysis that influence a compulsory CPD system in Sri Lanka.

Lack of financial incentives

In UK, doctors are granted financial incentives to archive CPD goals in their practice. In UK, a £500 the CPD allowance is paid for a GP trainer for 2019/2020 financial year (Health Education England, 2019). Research findings revealed that underfunding is a barrier against CPD programmes (Davis & Parboosingh, 1993). When the figures are attributed to the Sri Lankan context, it is about 2500 Million rupees worth money for all the doctors of 25600. However, allocation of such financial incentives are a problem in Sri Lankan context because current health allocation remains at a low percentage (Epa, 2003). In 2016, expenditure on health for Sri Lanka was 3,184 million US dollars which is 3.9% of the total GDP (World Data Atlas, 2019) but this figure has become 3.5% in 2019. Therefore it's challenging of increasing further allocation on financing.

Lack of CPD infrastructure

Sri Lanka lacks the infrastructure and mechanism to offer appraisal and CPD for doctors (Epa, 2003). There is a need of such infrastructure at institutional level and provincial level in order to ensure a feasible platform for doctors for their CPD activities such as national level, provincial and institutional level CPD committees, clinical societies (Jayarathne *et al.,* 2016) and appraisal system for CPD for doctors (Epa, 2003).

Remoteness of doctors from main education centres

In NHS Scotland, research evidence shows that a significant proportion of doctors have increased perceptions of remoteness from main education centres as a barrier for CPD (Ikenwilo & Skåtun, 2014). In the Sri Lankan context, most doctors usually have to work in a rural setting during early years of their career. Junior consultants also need to start from remote areas once initially appointed.

Lack of time for doctors

Glazebrook and Harrison revealed in a study of rural remote medical practitioners that lack of time is the most identified barrier to CPD (Glazebrook & Harrison, 2006). Similarly, Price *et al.*, revealed that the most frequently reported barrier to implement CPD among a group of health care professionals in Colorado, was lack of time (Price *et al.,* 2010). Time factor and work load have been identified as barriers by many researchers (Davis & Parboosingh, 1993). In the Sri Lankan setting the government medical officers engage in private practice in their off-duty hours and provide the bulk of private primary outpatient care (Rannan-Eliya *et al.,* 2015). Hence the time factor is one of the major barriers against CPD in Sri Lanka.

Lack of training programmes by Professional colleges

Adequate CPD training programmes are not conducted by professional colleges. Aditionally, academic disciplines have not been introduced for continuous quality improvement for the undergraduate curriculum (Epa, 2003).

CPD is not compulsory by law

The CPD standards and policies are regulated either by the Ministry of Health or Medical Councils in countries such as UK, Australia, New Zealand and Singapore. However, policies in terms of CPD of doctors in Sri Lanka are not yet developed (Jayarathne, 2016). The SLMC has proposed legal amendments to medical ordinance during 2003 (Epa, 2003).

TOWS Matrix to identify strategies to implement CPD by MOH Sri Lanka

According to the SLMC there are 25600 registered doctors approximately (SLMC, 2019). In 2006, De Silva et al, revealed that 70 percent of active registrants are employed in the Health Ministry, 3 percent in the universities, 12 percent in the private sector and the remaining 15 percent are overseas (De Silva *et al.,* 2008).Therefore Ministry of health Sri Lanka is the largest institution which occupies biggest portion of medical doctors. Analysing its strengths and weaknesses will enable to formulate the strategies to establish alternative solutions to implement CPD system in health system.

Strengths(S)

1. Most of the funds allocated annually to ETR of MOH is returned at the end of the year usually. The DGHS is in an agreement to find financial allocations (Epa, 2003). The appropriation bill and budget proposals for 2019 has an allocation of Rs. 232.7 billion for the health sector which is about 3.5% of the total GDP. This includes Rs. 182 billion recurrent expenditure and Rs. 50.7 billion of capital expenditure. Out of that only a 936.5 million rupees have been allocated for all the training programmes of the Ministry of Health. But only 53.1 Million rupees have been allocated for training of doctors during 2019 (Table 2 and 3).

2. The MOH has the ETR an established body governed under a Deputy Director General is itself a strength (ETR Unit, 2019).

3. Research evidence in “Grade Medical Officers perception towards lifelong learning” by Jayaratne *et al.,* revealed that a majority of government medical officers (98%) perceived CPD as a requirement (Jayarathne, 2019).

Weaknesses (W)

1. Resistance of doctors against their quality assurance is found in all countries with healthcare systems. A research finding showed that, only around 50% were willing to undertake mandatory CPD (Jayarathne, 2019). Other factor for doctor’s resistance is lack of understanding about quality improvement.

2. Sri Lanka has lack of infrastructure and mechanism to offer appraisal and CPD for doctors (Epa, 2003) which creates wasting of time and remoteness working difficulties of doctors.

3. Currently Sri Lanka is lacking a policy to recognize the needs of CPD (MOH, 2019)

4. MOH has no policy on updated system of performance evaluation for medical professionals (MOH, 2019).

Opportunities (O)

1. The revalidation will enable doctors to get international job opportunities (NCPDC information and guidance book, 2010).

2. SLMA has taken an initiative with other professional colleges to establish island wide CPD programme for doctors (Epa, 2003). The NCPDC is the only programme run by the SLMA at current context (NCPDC information and guidance book, 2010).

3. There are donor funding agencies such as WHO and Asian development bank which are currently funding for health system strengthening such as primary healthcare strengthening projects (ADB, 2019).

4. The current political system can be utilized as an opportunity for system strengthening as the health sector is a critical factor concerning to people's wellbeing.

Threats (T)

1. The government finds it difficult to allocate financial incentives which are a problem in Sri Lankan context under current budgetary constraints.

2. The professional colleges and academic disciplines are lacking training programmes for CPD (Epa, 2003). The UK, Australia, New Zealand and Singapore were able to update their CPD standards and policies which are regulated either by the Ministry of Health or Medical Councils (GMC, 2012; MBA, 2014; MCNZ, 2014; SMC, 2014). However SLMC which is the statutory body is yet to develop policies and update the medical ordinance to support CPD of doctors in Sri Lanka. CPD not being mandatory by law is identified as a major weakness against CPD in Sri Lanka.

"Maxi-Maxi" Strategy (SO)

Strategies that use strengths to maximize opportunities

The MOH can accommodate contract basis foreign job opportunities for doctors having NCPDC issued by SLMA. Thereby MOH can popularize the need of CPD among doctors.

MOH ETR unit funds better utilized for advocacy programmes with professional bodies to initiate CPD activities and sustain CPD committee activities to legalize CPD as a priority factor.

"Maxi-Mini" Strategy (ST)

Strategies that use strengths to minimize threats

In 2019, 48.8 Million rupees have been allocated for GISTP and 4.3 Million rupees have been allocated for individual training programmes. However Dolmans and Schmidt revealed that, problem based learning is a method of interactive and more effective learning than traditional methods in terms learning skills (Dolmans & Schmidt, 1996). Another Cochrane study by Davis, *et al.*, shows that interactive CME activities show evidence of improving the performance while traditional didactic lectures don't do so (Davis *et al.,* 1999). Going by these research evidence the fund allocation used for individual and group in-service training programmes can be effectively utilized for CPD programmes of doctors. However out of 936.5 million rupees allocated for education and training, a reasonable bulk money should be allocated for doctors CPD as it has much more impact on health system in long run.

Necessary arrangements should be planned to better utilized Ministry funds to start and promote of CPD activities of professional colleges. The MOH should do sustainable advocacy programmes to SLMC to initiate necessary amendments to medical ordinance to support compulsory CPD for the revalidation process.

"Mini-Maxi" Strategy (WO)

Minimize weaknesses by taking advantage of opportunities

The MOH should intervene to get foreign job opportunities through CPD schemes for doctors by negotiating with foreign governments. The resistance of doctors for CPD can be minimized by such job opportunities.

Jayaratne *et al.,* point out that Sri Lanka need a good system for CPD establishment. It consists a system of SLMC as overall policy maker, MOH as the governing body, a national level CPD Committee which is the CPD planner at national level, provincial level CPD Committee which is the regulatory body from national level to provincial level and between different clinical societies and institutional level CPD Committees (Jayarathne, 2016).

One of the major weaknesses of MOH is lacking the infrastructure for CPD in provincial and institutional levels. Donor agencies like ADB and WHO can be utilized for strengthening the relevant infrastructure for this purpose.

The need of politicians for system strengthening, can be better utilized to overcome internal weaknesses such as infrastructure strengthening at provincial and institutional level to ensure good CPD programme.

The SLMA and the assistance of professional colleges can be obtained to introduce NCPDC programme at provincial set up to overcome the resistance of doctors through better awareness.

"Mini-Mini" Strategy (WT)

Strategies that minimize weaknesses and avoid threats

More advocacy must be conducted for academic disciplines such as medical faculties and professional colleges to introduce continuous quality improvement programmes for undergraduate curriculum to overcome resistance and more awareness of professional quality improvement of doctors.

The MOH should do advocacy to politicians to get their support for necessary amendments to medical ordinance to make CPD compulsory. Steps must be taken by DDG ETR to formulate a good policy of updated performance appraisal of medical doctors working in MOH.

A professional committee lead by MOH convening all professionals including union members should meet up regularly to solve barriers of CPD. The positive attitudes of most of doctors for CPD will help to overcome barriers against it. More and more awareness of union members and doctors will help to overcome their resistance against CPD.

Conclusion and Recommendations

There are few leading causes identified for failure of compulsory CPD programme such as lack of financial incentives, lack of CPD infrastructure, remoteness of doctors from main education centres, lack of time for doctors, lack of training programmes by professional colleges and CPD being non-compulsory by the law. The MOH should take a lead to of staring CPD as approximately 70% of doctors are occupied by them. The MOH should start a National CPD steering committee with a representation of SLMC, SLMA, all professional colleges, Medical faculties, Provincial directors, institutional heads and representation of government medical officers association. An agenda must be prepared to address most important issues such as establishing CPD infrastructure at provincial and institutional levels, starting CPD training programmes in professional colleges and institutional levels create necessary amendments in medical ordinance, provision of financial incentives for the doctors.

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