

District team problem solving as an approach to district health programme planning: a review, and survey of its status in selected districts in Indonesia

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Accepted on 8 January 2018

Abstract

District team problem solving (DTPS) was developed by WHO in the 1980s to explicitly engage local stakeholders in decentralized planning and, in later iterations, budgeting of health services. It became WHO's global flagship approach to district-level health priority-setting and planning. DTPS entails multisectoral stakeholders (the team) using local data to prioritize and fund services, and should enhance capacity in management of decentralized healthcare. From the late 1990s, DTPS evolved through several phases in Indonesia. Multiple donors supported its use for planning maternal and child health (MCH) services, with substantive national government input, despite no formal assessment of its sustained uptake or benefits. In the context of new interest to promote DTPS for MCH in Indonesia, we assessed its status there in 2013–14, focussing on its implementation status and on associated MCH data collection (PWS-KIA). We used mixed methods to capture local challenges to and opportunities for DTPS in seven sub-national locations in 6 of Indonesia's 31 provinces. DTPS remained active only in the two locations whose local government ever allocated funds to the process; in the others, it stopped once the initial non-government funding ceased. An official decree establishing DTPS and team membership was only issued in four locations, and it was not evident that the intended multisectoral representation was achieved in any site. Trained DTPS facilitators remained available in only four locations. In all districts, interviewees described PWS-KIA as potentially serving a revived DTPS, but insufficiently robust to underwrite local advocacy for investment in MCH. Although efforts to introduce DTPS as a uniform approach to district MCH planning in Indonesia have not been sustained, strong commitment to evidence-based planning remains. Decentralized health planning processes require quality data, local government buy-in and associated funding, and should link explicitly to broader administrative planning processes and budget cycles.

Keywords: District health planning, district health priority-setting, district health resource allocation, health budgeting, Indonesia, maternal and child health

Key Messages

- District team problem solving (DTPS) was developed in the 1980s and became WHO's global flagship approach to district-level health priority-setting and planning. From the late 1990s, DTPS evolved through several phases in Indonesia.
- In the context of new interest to promote DTPS for MCH in Indonesia, we assessed its status there in 2013–14, using mixed methods to capture local challenges to and opportunities for DTPS in 6 of Indonesia's 31 provinces.
- DTPS only remained active where local government ever allocated funds to the process; in the others, it stopped once the initial non-government funding ceased. Trained DTPS facilitators were available in only four locations.
- However, strong commitment to evidence-based, decentralized planning remains. This requires quality data, local government buy-in, and should link explicitly to broader administrative planning processes and budget cycles.

Introduction

District team problem solving (DTPS) is a formal approach to health sector planning that evolved from project management concepts conceived in the early 1970s (Bainbridge and Sapirie 1974). It was developed by the World Health Organization (WHO) to strengthen district-level planning and management capacity as governments became progressively decentralized, particularly for planning and budget allocation in the health sector (Tarimo 1996). First piloted in several states in India in the mid-1980s, DTPS became the flagship district health planning approach promoted by WHO for over 20 years, with local variants used widely in many nations, on each continent (World Health Organization 1993).

DTPS engages stakeholders from the district health administration and government to develop solutions to public health problems. It relies on good quality data, excellent team work and good management. It emphasizes local ownership and delegation of responsibility for different elements of each solution, ultimately strengthening district health services. Evaluation of progress and adaptation at agreed intervals is a key element. The original iteration of DTPS specifically mentions that additional resources are not needed (World Health Organization 1993).

Early pilots of DTPS were high-level and no-doubt expensive. They involved national and sub-national health authorities, international trainers and attempts to establish national training capacity to replicate WHO-funded workshops at sub-national level. They were also long, with participants attending for 9–10 days, following which district teams were expected to further develop and implement solutions to locally prioritized health problems. An evaluation exercise was required, in plenary, after 12 months (Malawi Ministry of Health Family Health Services Department *et al.* 1988; Thailand Ministry of Public Health Family Health Division *et al.* 1992). Most descriptions of DTPS focus on maternal and child health (MCH) (Malawi Ministry of Health Family Health Services Department *et al.* 1988) although others prioritized hypertension and diabetes management (Centre National de Formation et de Recherche Pédagogique *et al.* 1992), communicable diseases and even health systems issues (Tawfeek 2009). Supplementary Web-Appendix S1 provides more information on the previous use of DTPS.

Reports indicate that DTPS was well-received; national replication proceeded in some countries. However, there were few formal evaluations of DTPS during the first decade after its introduction. A 1992 report by Thorne and Sapirie, the WHO-based architects of DTPS, is positive and specifically mentions the funding issue:

By using DTPS, 30 district teams in 5 developing countries (Malaysia, Malawi, Zimbabwe, Zambia, and Tunisia) have conceived and made constructive changes in their health services over a period of 9–12 months without an additional budget. In most districts, team morale and active participation remained high,

communities participated, and progress was made toward reducing a priority health problem ... (Thorne and Sapirie 1992, p.1).

DTPS activities in Indonesia

DTPS continues to be used for district-level health planning in some nations, including Indonesia. During the 1990s and early 2000s, bilateral assistance from the Australian, British, German and USA governments funded its extensive use in MCH and health systems strengthening throughout the country, as did UNICEF and WHO. It was later promoted by the large, US-funded Health Services Programme (HSP: 2006–09), further demonstrating a harmonised donor approach to decentralized planning in Indonesia's health sector over this period. A 2008 update trained two DTPS facilitators in every province, and national funds supported its introduction in two districts in each.

There was, however, growing recognition that DTPS processes often lacked reliable data (especially on cost effectiveness) and an adequate focus on costing and budgeting, had limited influence on higher level determinants, and were not appropriately aligned to existing planning and budgeting processes (Hendro 2007; Anonymous 2009; Trisnantoro *et al.* 2009, 2011), threatening its viability. The HSP suggested including both planning and budgeting in DTPS, and developed an adapted DTPS manual (World Health Organization & Indonesia Ministry of Health 2005) that expanded the MCH focus to include newborn health (DTPS KIBBLA—'kesehatan ibu, bayi baru lahir dan anak balita') and drug logistics, using the national standard budget planning template. This allowed the results of a DTPS exercise to be dropped directly into district health budget proposals, replacing the casual 'grandfathering' of budgets year-on-year. Budget development became based on situation analysis and activity costing. An independent evaluation of the HSP-designed DTPS in 2008 (Caro *et al.* 2008) noted a number of strengths but described challenges similar to those noted earlier by government (Hendro 2007). A more comprehensive approach to the planning and financing of district health programmes was recommended (Supplementary Web-Appendix S1).

Current status and study background

Evidence-based planning using local data are often recommended to underwrite the development of investment cases for problem-focussed health interventions or systems strengthening. In addition to technical validity, these interventions are often supported by cost-benefit and -effectiveness analyses, and are explicitly embedded in the national and local financing, economic and social development context (Hipgrave *et al.* 2014). These additional elements might augment a process of traditional DTPS. However, there have been no assessments of the sustained uptake or benefits of DTPS in Indonesia, whether planned local replication took place, its links with investment cases or other government processes and whether it

Table 1. Topics discussed and information sought at district-level

- The history and origins of DTPS in the Province and District, number of facilitators or team members trained and the pattern and impact of changes over time;
- The level of local participation in and support for DTPS or DTPS for MCH, including the existence of terms of reference, guidelines and a formal team with members listed by the 'Bupati' (District Chief); the availability and source of at least one trained facilitator, of funding for the DTPS process, and the availability of related data to help identify problems and solutions;
- Issues related to DTPS implementation, including an overview of the relationships between the various health and non-health agency team members; its duration and timing relative to other planning and budgeting processes (including 'musrenbang', Indonesia's annual participatory planning process) and relative to the various annual budget disbursements; the budgets developed relative to those available, year-by-year; the number and conduct of stakeholders' workshops, planning workshops and advocacy sessions; the number of participants and their level of engagement, the local health management information system, including on MCH and the use of data in DTPS;
- Any process or output documentation produced during DTPS; whether it was timely and fed advocacy for support for the solutions identified, or whether other forms of advocacy were also developed; and whether these documents and advocacy materials are retained and used effectively with the right stakeholders and authorities, at the right time;
- Whether the proposed plans, budgets and activities were translated into budget lines adequate for the problem and the relevant area of health service;
- Perspectives on the existence of a cause-and-effect relationship between the DTPS process and resolution of problems identified, and whether it is useful/necessary and itself cost-effective; on the degree of cross-sectorality in the solutions identified; on gaps in the process and how it could be improved;
- Whether the outputs of the process led to the improvement of relevant indicators, for example in MCH, and
- Whether DTPS is monitored locally, evaluated, or could be improved in any way?

should be retained; it seems no peer-reviewed reports emanated from the projects promoting it.

Indonesia's persisting high-maternal mortality ratio (Statistics Indonesia & Macro International 2008; Statistics Indonesia and Measure DHS ICF International 2013) maintained government and donor interest in improving district-level planning and budgeting for related activities. The relevant national authority considered that local familiarity with DTPS would have sustained use of its traditional elements (local data, multisectoral engagement etc.), augmented by new elements (improved local advocacy; a focus on efficiency and affordability; detailed budgeting and better public financial management), and better timing of DTPS in relation to resource distribution and other planning processes. These components sit well with the improving governance and planning environment; and accountability in Indonesia as a whole (Aspinall 2014).

However, despite its former widespread introduction and the ongoing support for DTPS KIBBLA in the Ministry of Health (MoH), there is a perception that DTPS might be better replaced with a planning process aligned with those used by other health programmes or government sectors. Accordingly, at the request of and in partnership with MoH experts, UNICEF supported an assessment of the status, usage and impact of DTPS in a sample of districts across Indonesia, focussing on the level to which the original or subsequent DTPS processes continue in local annual planning, are funded, and are effective for activity prioritization and budgeting.

Methods

Review process and tools

DTPS activities in 6 of Indonesia's 31 provinces were assessed. After piloting in one province, a review team was assembled, comprising a UNICEF-funded consultant, five MoH personnel as team leaders (one per province), four other members for each of five teams (interviewers), and one administrator (all MoH staff). All participated in an orientation exercise. UNICEF staff participated in the assessment design and as observers in field activities.

The methodology was developed by personnel at the MoH Directorates of Maternal Health and Child Health, Indonesian health professional associations, UNICEF and academics at the Faculty of Public Health, Diponegoro University. As identifying information was not retained, ethical approval was deemed not necessary. It was

piloted in Sorong municipality and in Sorong district, West Papua province, during early November 2013. After refinement of a prepared questionnaire (Supplementary Web-Appendix S2) and process, the team surveyed one district in each of another five provinces over December 2013 and January 2014, totalling seven sites. Based on consultation with province health authorities, only districts known to have introduced DTPS or MCH planning within the previous 6 years were assessed. Province missions, each of 4 days, comprised a day of travel and local introductions, 2 full days of data checking, interviews, document review and discussion/feedback, and return travel. Each group assessed a maximum of two districts.

At each of three sites per district (Health Bureau, Planning Authority and Hospital), the assessment team also gathered a mix of qualitative and quantitative information, using focussed group discussions, in-depth interviews and direct observation (Table 1). Participants at district level included implementers, planners and administrative personnel. In each district, the team also investigated the status of MCH planning and use of a nationally standardized data collection tool ('pemantauan wilayah setempat kesehatan ibu dan anak' or PWS-KIA), which could inform a DTPS process.

The field visits were planned, not spontaneous. Notification letters were issued to the district health offices, planning agencies and hospitals several weeks in advance, to ensure personnel and document availability. Chiefs of these offices or their delegates participated in a joint discussion of the collective observations made and conclusions drawn by the review team on day three or four of each field mission. During this discussion the chiefs or delegates were also interviewed for their views on current planning practices.

At national level the authors discussed the results with programme personnel at the MoH, Indonesia's professional associations and relevant non-government agencies (Table 2). These discussants included officials from the MoH Directorates of Maternal Health, Child Health, Basic Health Care, and Referral Health Care; the Bureau of Planning, and information managers from the Secretariats of the Nutrition, MCH and Health Care Directorates.

Results

In total, 86 personnel were interviewed at district and province levels and 22 at national level (Table 2). Findings are reported in

Table 2. Survey locations and the number and title/role of persons surveyed

National level	Ministry/ Department	Interviewees	Interviewee titles/roles
	MoH Directorates of Maternal Health and Child Health	22	Head of Delivery Care and Postpartum Division and staff Head of Under-five children section and staff Technical Staff Family Planning Division Head of Pregnant Women Division Doctor at Harapan Kita Hospital Technical Staff at Family Planning Division Head of Directorate of Child Health and staff General Administration Staff Head of Maternal and Complication Avoidance Division Head of Evaluation and Assistance at Pregnant Mother Division Head of Evaluation and Assistance at Family Planning Division Head and staff of Subdivision at Directorate of Child Health Head of Health Protection at Reproduction Health Division Head of Sub-Directorate Family Planning Division Head of Sub-Directorate at Directorate of Child Health Other staff of these directorates and divisions
Province	Locality	Interviewees	Interviewee titles/roles
West Papua	Province Health Office (PHO)	2	Head, Division of Public Health Services Chief, MCH Section
	Sorong Municipality	12	Head, Municipal Health Office (MHO) Chief, Social-Cultural Section of Municipal Planning Agency Chief, Social Welfare Section of Municipal Planning Agency and staff Chief of Communicable Disease Control (CDC), MHO Head, Planning, Information and Maintenance Division, Municipal Hospital Chief, Nursing, Municipal Hospital Staff member, Medical Supply Division Chief, Medical Records
	Sorong District	6	Head MCH staff, Midwife Coordinator, Tanjung Kasuari Health Centre Head, District Health Office (DHO) Chief, Family Health Division Chief, CDC Division Chief, DHO Planning division DTPS facilitators at district level DTPS provincial level facilitator
North Sumatra	PHO	1	DTPS provincial level facilitator
	Deli Serdang District	12	DHO, Secretary DTPS team: Staff of District Planning Authority ('Bappeda'), Social Services, Family Planning, DHO, MCH, CDC, EPI and District Hospital (MCH ward, obstetrician and paediatrician)
South Sulawesi	PHO	1	PHO planning officer
	Bulukumba District	12	Head, District Planning Agency (Bappeda) and staff Director and Chief District Hospital Planning Division Head, DHO and Chiefs of Planning, MCH, CDC, Health Services Head of Health Centre Bontobangun with planning and MCH staff
East Java	PHO	1	MCH Section staff PHO
	Pasaruan District	11	Head, DHO Chief, DHO Planning Division Chief, CDC Division, DHO District Family Planning Agency Chief, MCH DHO Chief, Social Cultural Division, District Planning Agency, and staff DTPS facilitator at district level Chief, District Hospital Planning and Data Division Obstetrician and Gynaecology physician Head of one Health Centre
Central Java	PHO	1	MCH staff
	Wonosobo District	9	Division Head, MCH and Nutrition Chief, Maternal Health Section Chief, Child Health Section Chief, Nutrition Section

(continued)

Table 2. (continued)

National level	Ministry/ Department	Interviewees	Interviewee titles/roles
West Java	PHO Subang District	1 17	Head, District Planning Agency
			Chief, Social Cultural Division of District Planning Agency
			Director, District Hospital
			Head, Sapuran Health Centre
			Head, Indonesian Midwives Association, Wonosobo Chapter
			MCH staff
			Head, DHO
			DHO MCH staff
			Chief, DHO MCH Section
			Chief, Planning, District Hospital
			Chief, Medical Records, District Hospital
			District Hospital Medical Service Division
			Chiefs, Perinatology and Obstetrics and Gynaecology, District Hospital
			Head, Cibogo Health Centre
			MCH, EPI, and Midwife Coordinator, Cibogo Health Centre
			Two village midwives
Total		86	Division Head, Social Cultural of District Planning Agency
			Three DTPS facilitators

Table 3, and include the two pilot locations to present as much data as possible.

The conduct and status of DTPS

Table 3 lists the seven local authorities surveyed (including the pilots) and a limited amount of information on their conduct of DTPS. The effort made to develop the assessment tool was not matched by the amount of information available at local level. There was no data available on the stages of DTPS, as implemented in Indonesia (World Health Organization & Indonesia Ministry of Health 2005; Hendro 2007). Data on current planning processes were only available for MCH, not for other health sectors or non-health sectors influencing MCH; this reflected the current status of DTPS in the districts surveyed.

DTPS was ongoing in only two of the seven locations assessed, the only two in which government funds were ever allocated to the process. In all seven, DTPS was established with funds provided either by the USAID-funded HSP or UNICEF; in five, it ceased once project funding ended. In fact, an official decree establishing DTPS and its membership was only issued in four of the seven locations, by differing agencies with differing budgetary discretion and authority; only two were issued by the district planning authority ('Bappeda'). Only one district had conducted DTPS in 2013. Funding for DTPS remained problematic even in the two districts where local resources sustained it after external funding ceased, and it has been difficult to ensure its conduct before Indonesia's official government planning period in February each year. Trained DTPS facilitators only remain available in four districts.

The assessment confirmed that several versions of DTPS were established, focussing initially on Making Pregnancy Safer and subsequently on MCH, including newborn health, as DTPS-KIBBLA under the US-funded HSP. In some districts this was reflected in the placement of responsibility for DTPS in the Maternal and Child Survival Development and Protection team of the district health office, although even this team was subsequently disbanded. In all districts, interviewees described DTPS in the context of current MCH data collection (PWS-KIA) and planning processes, discussed below.

DTPS was designed to be cross-sectoral, involving not only personnel from the various programmes and departments that

collectively support MCH (maternity, family planning, child health, malaria, immunization, supplies and logistics, pharmaceuticals etc.) but also health administration and finance, 'Bappeda' and other sectors (education, water and sanitation etc.), depending on the priorities selected. In the districts assessed, it was not evident that this 'team' quality was ever achieved. At best, multiple levels of the government MCH hierarchy participated in DTPS workshops (best acknowledged in Deli Serdang and Wonosobo), but with the exception of 'Bappeda', which approves sectoral activities and budget allocations, non-health sectors did not participate at any stage in any district. Moreover, DTPS was not sufficiently robust to yield a strong case for advocacy and investment, limiting its impact on fund allocation, the related political economy of MCH and hence its objective, to reduce maternal mortality.

Current MCH planning at district and sub-district level

In each district, the team also investigated use of the PWS-KIA, which should be gathered at community health centre- or 'puskesmas'-level each month. In theory, PWS-KIA involves standardized monthly collection of data by village midwives, 'puskesmas' MCH personnel and others responsible for associated programmes, its collation at district level and transmission up to province health offices and the MoH. PWS-KIA could be the data source for DTPS. Online submission is available in some locations.

Interviews at national and sub-national level concluded that awareness of and commitment to PWS-KIA was relatively strong, and that it appears linked to broader planning processes in both the health sector and more generally within local government. However, concerns were expressed about data regularity and quality, staff capacity (e.g. to prepare the spreadsheets and charts involved), the format and consistency of data presentation and whether it influenced fund allocation. Moreover, in no district did the PWS-KIA include data collected at the district hospital, which is usually managed directly by local government, not the district health authority.

Although most districts and national authorities indicated that the PWS-KIA links to national MCH priorities, in only one (Deli Serdang) was it felt that the data enabled advocacy for solutions to

Table 3. Summary of DTPS, annual planning and data gathering data by topic area and district/municipality surveyed

District or Municipality	Sorong District and Municipality, West Papua	Deli Serdang District, North Sumatra	Subang District, West Java	Wonosobo District, Central Java	Bulukumba District, South Sulawesi	Pasaruan District, East Java
Background	Project funded	Initially project funded, then locally	Project funded only	UNICEF and government funded (deconcentration funds)	Government funded in 2010	USAID Health Services Programme (HSP)-funded in 2007 and 2009, as DTPS for MCH (DTPS KIBBLA)
Year of introduction	2006 as DTPS 2010 as DTPS KIBBLA	2008–09 via HSP 2010–12 via local funds 2012 DTPS was for the 2014 planning Not done in 2013	2004–07 as DTPS- Making Pregnancy Safer (MPS), funded by UNICEF.	Initially funded by deconcentration funds, then by UNICEF as DTPS MPS. Since 2010, supported by District authority. The team is part of the district MCSDP* team.	Training of facilitators in 2010 ('Bappeda, puskesmas', basic health service and family welfare staff). Follow up information not available; not now implemented	2007—full DTPS undertaken, multiparty, planning and advocacy. Not continued after HSP.
Personnel	Health only; not cross-sectoral; no 'Bappeda' involvement	Cross-sectoral, including a family-planning facilitator from the PHO, and previously the province 'Bappeda'	Was cross-sectoral and 'had impact' on maternal and child mortality. Was a sub-team under the district MCSDP team established by the District Chief ('Bupati'). All those trained have retired or moved on	Cross-sectoral within MCSDP team, including province and district health and administration officials, midwives. Focus on MPS, but advocacy strategy and materials not prepared by the DTPS team.	Remaining personnel with DTPS knowledge are have rotated or are inactive.	Most advocacy done by HSP and NGOs, not much DHO engagement. DTPS was supported by a decree placing it in "social and culture division" at <i>Bappeda</i> , with DHO and DH support.
Funding	2006–07: UNICEF 2010: GAVI	Local, but delay in funding meant it is conducted too late for next year's plans.	UNICEF project funds	Local government funding	No funding for DTPS. A bilateral donor funds <i>puskesmas</i> -level planning	HSP 2006–09
Status	Stopped in 2010 due to lack of funds Replaced by in-house process of district health planning, signed off by 'Bappeda'	DTPS involves DHO planning division, not only MCH; cross-sectoral. Advocacy is done in 2013. DTPS takes 5 days, but doesn't involve district hospital	DTPS stopped with project funding. But aspects continue. Community action plans are undertaken coordinated by village midwives and <i>puskesmas</i> staff. These are incorporated into MCH planning via the MCSDP, but this also stopped in 2010 due to lack of budget. Now using PWS KIA with 'puskesmas' and hospital data	Ongoing planning process still called DTPS but seems just local planning; no formal DTPS process.	Replaced by 'puskesmas' planning, with modules, facilitators and funding. Monthly mini-workshop of midwives and a notional quarterly meeting with Chief, family-planning, Women's Association etc. In fact planned only once for 2014	DTPS has stopped. MCH planning now PWS KIA monthly. Doesn't involve non-MCH teams like EPI or malaria. Proposal is submitted and budget adapted to local priorities.

(continued)

Table 3. (continued)

District or Municipality	Sorong District and Municipality, West Papua	Deli Serdang District, North Sumatra	Subang District, West Java	Wonosobo District, Central Java	Bulukumba District, South Sulawesi	Pasaruan District, East Java
Data sources and scoring	PWS KIA at 'puskesmas' level by local staff now. Quality varies. Scoring not well linked to problem or activity selection.	Specialist data administrators but not MCH specialists. For 'puskesmas', not district hospital; online submissions to province/Ministry. Usually requires additional data management	Seems that it had input from village midwives and 'puskesmas' staff. Limited information available.	PWS KIA as 'puskesmas' each month. Does not include data from district hospital.	Now using PWS KIA but there are many errors. Format seems not agreed; needs revising, and communication is unsatisfactory	PWS KIA data from village level. Coordination with nutrition, MCH and family planning. But only within MCH. No hospital data. Report format not approved or consistent
Timing	Planning is irregular; not related to data or budget process	There are problems with fund distribution which affect timing of DTPS. 2014 DTPS done in 2012 quarter 4	No information available	Quarterly meetings to discuss data/plans at district level; monthly PWS KIA at 'puskesmas' level.	'Puskesmas' monthly (only midwives) and theoretically every quarter with donor funding, but not reliable.	No information
Linked to RPJMD ^b and national priorities	Yes—if not aligned, 'Bappeda' will reject. Limited outreach from national level. Advocacy for selected activities also limited. DTPS recommended for a reboot, especially the advocacy aspect	DTPS decree signed off by 'Bupati'. DTPS result aligned to district 'musrenbang' by Bappeda, which does advocacy	Yes, seems it linked to other district and sub-district planning activity when implemented.	Not stated, but seems linked at all levels	No information	No information
Other			DTPS needs a technical team and a reboot, prompted by the MoH.	Could coordinate with local government work units. Need relevant decree, and guarantee of funds	Not linked to advocacy at with local government	Multiparty DTPS stakeholder workshop was not repeated and so it failed.

^aMCSDP, maternal and child survival, development and protection programme.

^bRPJMD, medium-term village development plan.

the problems identified. This advocacy was undertaken at the general district planning event or 'musrenbang'.

Discussion

This small study has confirmed the impression of UNICEF and other MCH partners that despite prolonged and considerable promotion, and financial and technical support, DTPS is not commonly used for annual planning in the health sector in Indonesia. Among six districts and one municipality known to have used DTPS since 2008, only two had implemented it during 2012–13, and only one in 2013. In most, funding for and implementation of DTPS ceased once the project underwriting its introduction ended. Moreover, the original multi-sectoral design of DTPS was never seriously pursued, and a local decree to establish the process was issued in a minority of districts. These are confronting findings for investigators from the Indonesian MoH authority most supportive of DTPS, in a survey funded by UNICEF, one of the international agencies that invested most strongly in the process. Some important lessons may be drawn.

DTPS or any new planning process requires two important means of support: local government buy-in to the process, and associated funding. It is evident that for DTPS in Indonesia, despite near-universal interest of the health personnel surveyed in its re-establishment, both of these elements were lacking. Lack of local government support was a risk that could have been foreseen in the design of the projects funding it, and may have arisen due to the lack of concern for financing the DTPS process in its original design, and the technically narrow focus (only on MCH) of the planning supported. However, the two exceptions (Deli Serdang and Wonosobo) suggest that local governments can be persuaded to fund and participate in such a process; follow up investigation of what makes them different is suggested. Follow up in the other countries where DTPS gained early traction is also recommended. There are examples of local government buy-in to formal health planning processes in Indonesia; a technical support team for annual MCH planning at district level (using many DTPS principles), established by UNICEF, government and academic partners in Papua province is now funded by the province government. The USAID-funded Kinerja project (www.kinerja.or.id) generated good buy-in by working with the local administrative leadership and supporting local governance principles, in several sectors. However, the observed failure to establish DTPS is most likely a casualty of Indonesia's rapid and comprehensive decentralization (Aspinall 2014). Devolution of power to, and limited funding at district level reduced the influence of the MoH and province authorities in maintaining a uniform district health planning process (Rokx et al. 2009; Heywood and Choi 2010).

A major problem for DTPS is that it was inadequately linked to routine government planning and also to the government budget cycle. To be effective, any sectoral planning process must precede the disbursement of national funds, and must inform existing planning activities that use local or national funds. Examples include Indonesia's annual 'musrenbang' process held at all levels of government in the first four months of each year (USAID Local Governance Support Program 2007). Moreover, despite a design appropriate for all health planning, DTPS has suffered from being MCH-specific in Indonesia, and from not being taken up by other health or other government planning processes (Supplementary Web-Appendix S3). In retrospect, DTPS should probably have been promoted in Indonesia as a pan-health-sector planning process, as originally conceived by WHO (World Health Organization 1993). Finally, it seems evident that DTPS was inadequately linked to the political economy of the district

governments. A more recent MCH project in 14 districts of Nusa Tenggara Timur explicitly linked gender-responsive integrated health planning to the political capital of the local leadership, with excellent results (Coffey International Development 2015).

Notwithstanding the disappointing findings on DTPS, its emphasis on local data gathering, use of data for problem management and broad engagement (albeit only within the health sector) are still given priority via PWS-KIA. Indeed, there was clear enthusiasm for this among those interviewed. However, it is not clear how much the monthly PWS-KIA data currently influences MCH planning, given concerns about data quality, exclusion of district hospital data, and its weak links to other district health data. Moreover, the survey concluded that the data collected is not used effectively to advocate for fund allocation to MCH.

As indicated, this survey has several limitations. It was small, internal (non-independent), makes no claims to being representative, used an un-validated instrument and acquired a very limited amount of data due to missing personnel and the lack of written records. Most of those who were trained in the original DTPS workshops at local level had retired or rotated, and the survey team's aspirations to determine the influence of DTPS on local priorities and budgets could not be fulfilled. On the other hand, the findings matched *pre-hoc* perceptions and there can be no accusation of a cover-up. The fact that many other districts in the selected provinces were not even considered for assessment indicates that DTPS is not used widely in those locations.

DTPS was not included in a recent review of meso-level health priority-setting and planning in low- and middle-income countries (Hipgrave et al. 2014) because it has not previously been evaluated outside a project setting. That review concluded that no process could yet be recommended at this level, but suggested first assessing health system weaknesses and then applying principles established internationally to local health sector planning. Many of these principles are included in the original DTPS concepts developed by Thorne and Sapirie over 30 years ago. DTPS evolved during the years it received support, both in usage and content, and many planning processes now recommended include similar principles (IHP+Inter-Agency Working Group 2011). Whether MCH planning in Indonesia is called DTPS or takes a different approach, it is probably more important that the process is timely, harmonised with other planning processes, supported (including financially) by local government and based on robust, locally collected data, as intended via PWS-KIA.

Indonesia's DTPS module was revised in 2015 to specifically include evidence-based planning, a greater emphasis on equity and just such harmonization. This will be increasingly important in the Sustainable Development Goal (SDG) era, with its multiple indicators requiring explicit monitoring and evaluation of progress and planning accordingly. The formal government report of this survey recommended many steps to re-establish DTPS along these lines, not detailed here. A comprehensive, cross-departmental discussion on these recommendations is needed, particularly given Indonesia's recent re-empowerment of its provinces, and its commitment to universal health coverage (UHC). Options might include more formal inclusion of DTPS principles (cross-sectoral engagement, prioritization of data quality, data-based planning) in the annual, bottom-up 'musrenbang' process, or inclusion of training on these principles for newly appointed mid-level civil service managers, as undertaken in the Philippines. Recent estimation of the cost of various bottlenecks to health service delivery (conducted with the support of the national planning authority, 'Bappenas') may also raise district-level awareness of the magnitude of the problems faced, and provide actuarial analysis useful in resource allocation. Dissemination of these

estimates and institutionalization of their use may improve local-level budgeting and accountability. Quality planning and budgeting will be even more important in the SDG era, with the myriad new priorities it has introduced, and also in the context of Indonesia's evolving approach to UHC (which requires a specific focus on equity, and efficiency in the use of public funds).

Supplementary data

Supplementary data are available at *Health Policy and Planning* online.

Funding

This research was funded by UNICEF Indonesia.

Conflict of interest statement. None declared.

Ethical approval

The methodology was developed by personnel at the MoH Directorates of Maternal Health and Child Health, Indonesian health professional associations, UNICEF and academics at the Faculty of Public Health, Diponegoro University. As identifying information was not retained, ethical approval was deemed not necessary.

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