New Frontiers: Innovation and Access

F-DOT

A patient-centered model of care

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F-DOT and patient centered care

Person Centered Care (PCC) in TB treatment:
A treatment approach focused on the patient in their environment. It aims to return autonomy to patients, reduce hardship and stigma and minimize the challenges of treatment with the aim of achieving greater adherence and better outcomes (2018, Zander et al)

Family-DOT (F-DOT):
Caregivers are trained to administer the medication to the patient at home. Principles of traditional DOT, but increased autonomy, flexibility and responsibility to families.
What is F-DOT?

“Family based Direct-Observation Therapy”

Caregiver is trained to administer medication to their child at home, and provided with one week to one month worth of medication supply.

Other drug-delivery methods guided by patient centered care:
• self-administered therapy (SAT)
• video-observed therapy (VOT)
• short message service (SMS)
• medication monitors (MMs)
• community-based therapy (CB-DOT)
• Professional-Family Mix DOTS (PFM-DOTS)
Why F-DOT?

- Population being pediatric patients
- DOT patients overwhelm health care system (staff work load)
- Daily visits to DOT centers: an impediment to the daily routine of families.
- Distance to DOT centers may cause a barrier to treatment
- Providing drugs in hand frequently occurs in many places regardless of stipulated daily DOT due to impracticality.
F-DOT inclusion criteria

- focus on patients below 18 years of age, but all can be considered based on treatment need
- have an uncomplicated and injection-free regimen
- are under care within the existing area of operations
- are supported by committed and literate caregivers
- have a good history of adherence
F-DOT procedures

1. Identification of the child by multidisciplinary team
2. Discussion with child/family to identify a supporter in family, as well as responsible MoH doctor and nurse on approval to enroll
3. Training of F-DOT supporter (2 training/counseling sessions)
4. Preparation of F-DOT supply: provide pill boxes
5. Arrangement of follow-up visits and monitoring of adherence plan (medication, visit to MoH doctors) until end of treatment. First follow up visit once a week, then after 2 weeks, and eventually once a month.

→ Satisfaction surveys: after one month, and at end of F-DOT treatment
Step 3: Training of F-DOT supporter

- Provide health education on TB and TB treatment
- Review medication regime
- Teach about side effects and how to manage them
- Create adherence plan (identify possible barriers and how to overcome them)
- Discuss planning for visits with MoH doctor
- Review Emergency Contacts Form (who to contact when)

During follow-up visits MSF team and MoH nurse assess progress and problems, and address any gaps or confusions they observe.
MSF Dushanbe F-DOT program

- First in the EECA region
- Started April 2017 in Dushanbe
- First patient: 6 year old female MDR TB patient, in continuation phase of treatment
- Expanded to districts around Dushanbe (Rudaki and Hissor)
Cohort description

25 patients
- 17 active patients
- 8 patients finished
- 14 female, 11 male
- 2 parents, and 4 18-year-olds

Age Groups

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Count</th>
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<tbody>
<tr>
<td>&gt;15 YEARS</td>
<td>10</td>
</tr>
<tr>
<td>5-15 YEARS</td>
<td>12</td>
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<tr>
<td>0-5 YEARS</td>
<td>3</td>
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</tbody>
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Resistance profile

- MDR (11)
- XDR (12)
- Pre-XDR (2)

- 44% MDR
- 48% XDR
- 8% Pre-XDR
Treatment outcomes

Thus far 8 patients have finished treatment, all successfully:

• 5 MDR, 3XDR
• 3 EPTB, 5 PTB
• 1 patient was still sputum positive at start of the F-DOT, but converted to negative while on F-DOT program
• All patients improved clinically during treatment as observed by e.g. weight gain and improvements of clinical complaints
Side effect management

Of the 8 patients who have successfully finished our F-DOT program:

• 5 patients did not report any side effects during F-DOT treatment

• 2 patients reported side effects such as joint pain and vomiting, all of which have been managed by local family doctor at initiative of the patient or MSF doctor during routine visits

• 1 patient (1 year old), on one occasion, experienced diarrhea which was resolved effectively during our visits by MSF staff discussing with parent
Satisfaction Survey

Preliminary results

9 initial surveys were done
- Average score of 14.8 out of 15

2 final surveys were done
1 completed both initial and final
- Average score: 16.5 out of 21

“For our family it was very good and in-time. Both for time and funds, as I did not always find money to go to the center”

“I agree for treatment at home, as I don’t want my child to go to DOT every day for drugs, as my child is ashamed of the illness”

“Always I met with them and took their advices and good talks. Their coming day was certain. Thousand thanks to you all.”

“I became happy as in winter, in cold weather, my child will not go to the village ambulatory center in future every day or every other day. It became easier for my child to take drugs”
F-DOT is relevant as a Person Centered Care approach

Our experiences thus far show that F-DOT is a suitable model of care, provided that the right training and supervision is provided to caregivers:

- Outcomes successful
- Side effects that occur throughout treatment but can be easily managed by team
- Patient satisfaction questionnaire reveal that this model of care is received very well by the patients.

“I would like to express appreciation to you for providing me with such simple and accessible method of treatment. It has decreased my difficulties so much, and now I consumed my drugs without hesitation”
Resources

Publication on F-DOT program, for those who want to know more:


Thank you for your attention!