

“Heel gewoon, Handen schoon” onderzoek.

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Children who attend day care centres are at increased risk of contracting infectious diseases, notably gastro-intestinal and respiratory infections. These not only cause morbidity in the children but also considerable economic costs because of...

Ethische beoordeling	Niet van toepassing
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON27761

Bron

NTR

Aandoening

Hand hygiene, gastro-intestinal infections, respiratory infections, child day care centres, infection control

Ondersteuning

Primaire sponsor: Erasmus Medical Center in collaboration with the Municipal Public Health Service Rotterdam-Rijnmond

Overige ondersteuning: ZonMw, the Netherlands Organisation for Health Research and Development

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Observed compliance rates of both caregivers and children. The compliance rate is operationalized as the number of correct hand hygiene practices (i.e. hand washing with soap

and water followed by hand drying, or using hand alcohol) divided by the number of opportunities for hand hygiene according to the Dutch national guidelines.

Toelichting onderzoek

Achtergrond van het onderzoek

Hand washing with soap and water generally is accepted as the most simple and effective measure to reduce the spread of both gastro-intestinal and respiratory infections. Despite this acknowledged effectiveness of hand washing, hand hygiene compliance rates among both staff and children in day care centres are generally low. Interventions to increase hand hygiene compliance with lasting effects need to be tailored to the most important determinants of (non)compliance. We therefore conducted a study into determinants of (non)compliance to hand hygiene guidelines in Dutch day care centres. After obtaining insight into the predisposing, reinforcing and enabling factors that determine hand hygiene behaviour of staff of Dutch day care centres, and after consulting experts on effectiveness and feasibility of possible intervention strategies, it was possible to develop an intervention strategy that is likely to be successful and will hopefully have a lasting impact in the specific Dutch context.

The intervention will be a multifaceted, multilevel intervention, including multiple elements and targeting both caregivers and directors/management to ensure a cultural change. The intervention strategy will include training to increase the social norm consisting of three one hour sessions, where caregivers will develop as a team plans specifically for their day care centre to improve hand hygiene. Besides the training to improve the social norm, there will be training to improve knowledge. This will be an one hour training providing education about the national hand hygiene guidelines. It is important that caregivers know what is stated in the guidelines and on which moments hand hygiene should take place. The training on knowledge will also include education about transmission of gastro-intestinal and respiratory infections, the importance of hand washing (supported by evidence from literature that hand washing can reduce infections) and techniques of hand washing preferably “count to 10” to wash and “count to 10” to rinse; wash also between the fingers). Furthermore, we will use reminders/action cues to stimulate hand washing of both care givers and children by placing posters, brightly coloured signs, and labels with hand washing messages at the walls and near the sinks. Hand hygiene behaviour can also be influenced by changing the physical environment. We will therefore distribute paper hand towels and liquid hand soap, and also provide dispensers needed for this.

The intervention will be tested in a two-arm cluster randomised controlled trial, with 35 centres as intervention group and 35 centres as control group. The intervention will be

implemented in the 35 intervention centres during a period of 6 months. Hereafter, the control centres will also receive the intervention. Timing of the intervention will be the winter months when most infections take place, namely from the beginning of October 2011 till the end of March 2012. The intervention will be implemented in the whole day care centre, to facilitate support from the management and to make a culture change possible. In each intervention and control centre, two groups/classes will be selected to assess outcome measures (i.e. compliance rates and disease incidence). The primary outcome measure is the observed compliance rates of both caregivers and children. The compliance rate is operationalized as the number of correct hand hygiene practices (i.e. hand washing with soap and water followed by hand drying, or using hand alcohol) divided by the number of opportunities for hand hygiene according to the national guidelines. Hand hygiene compliance will be assessed through observations at baseline (T0), after two months (T1), after four months (T2) and after six months (T3). The secondary outcome measure is the incidence rate ratio of diarrhoea and upper respiratory tract infections in children in the participating day care centres/groups (i.e. incidence rate in intervention centres divided by incidence rate in control centres). Disease incidence will be assessed by asking parents to monitor disease of their children using a paper "infection calendar". Every two weeks parents will be asked to send back the calendar data either by regular post or by a web-based questionnaire. Monitoring by the parents will last for 6 months from October 2011 till the end of March 2012.

Doel van het onderzoek

Children who attend day care centres are at increased risk of contracting infectious diseases, notably gastro-intestinal and respiratory infections. These not only cause morbidity in the children but also considerable economic costs because of visits to a physician, medication and hospitalisation, and indirect costs due to parents' time lost from work. Hand hygiene measures of staff and children are of great importance in the prevention of infectious diseases, but compliance rates are generally low. In a recent study conducted in 122 Dutch day care centres, we found that hand hygiene is performed according to the guidelines in only 42% of observed hand hygiene opportunities. To address this problem, we developed an intervention to improve hand hygiene compliance in day care centres with the ultimate goal of reducing gastro-intestinal and upper respiratory tract infections among children attending these centres. This study aims to evaluate the intervention using observed compliance rates as primary outcome, and gastro-intestinal and upper respiratory tract infection incidence in the children as secondary outcomes.

Onderzoeksopzet

Observations to assess hand hygiene compliance:

T0: At baseline prior to implementation of the intervention;

T1: 1 month after implementation of the intervention;

T2: 3 months after implementation of the intervention;

T3: 6 months after implementation of the intervention.

Incidence of gastro-intestinal and respiratory infections will be monitored from implementation of the intervention until 6 months after.

Onderzoeksproduct en/of interventie

The intervention is a multifaceted, multilevel intervention, including multiple elements and targeting both caregivers and directors/management to ensure a cultural change. The intervention targets both individual and environmental determinants of hand hygiene. The intervention strategy will include a one-hour training to improve the caregivers' knowledge regarding the hand hygiene guidelines, a three-hour training component to increase the social norm, reminders/action cues by placing posters/stickers targeting both children and caregivers, and the provision of soap and disposable hand towels for children and caregivers.

The controlgroup will be placed on a waitinglist.

Contactpersonen

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Inclusion criteria for the children:

1. Between 6 months and 3,5 years old;
2. Present in the day care centre at least 2 days a week;
3. Intending to remain in the day care centre throughout the study;
4. Consenting Dutch-speaking parents with access to email, regular post or telephone.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

Exclusion criteria for the children:

1. Chronic illness or medication that would predispose them to infection;
2. Siblings taking part (1 child per family);
3. Children that started attending the day care centre in the previous three months before start of the study;
4. Children that start attending the day care centre after start of the study.

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	Geneesmiddel

Deelname

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	01-10-2011
Aantal proefpersonen:	70
Type:	Verwachte startdatum

Ethische beoordeling

Niet van toepassing	
Soort:	Niet van toepassing

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL2858
NTR-old	NTR3000
Ander register	ZonMw / MEC : 50-50800-98-088 / 2011-256
ISRCTN	ISRCTN wordt niet meer aangevraagd.

Resultaten

Samenvatting resultaten

N/A