

INDIVIDUALIZED ADAPTATION OF CLOTHES FOR IMPAIRED PERSONS

A Comparison of Two Groups with and without Experience of Adapted Clothes

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ABSTRACT. Impaired persons often have difficulties in obtaining suitable clothing. Questionnaires on this subject were sent to a consecutive series of impaired persons. Group 1 ($n=50$) had received adapted clothes and group 2 ($n=81$) had not. Questionnaire A (both groups) contained general questions on clothes and questionnaire B (Group 1) contained questions on adapted clothes. The result of the study shows a significant difference ($p<0.01$) between the need for adapted clothing in group 1 and group 2. No significant difference was found between the groups regarding the reason for obtaining and using adapted clothes. It was difficult for 94% in group 1 and 85% in group 2 to obtain clothes which were suitable for the individual's impairment and which made their daily activities easier. In group 1 the adapted garments were of most value when dressing and undressing (86%). They also reduced the time needed, by 31% for the individual, by 43% for a helper; and by 62% when going to the toilet. The adapted garments were considered smarter and more comfortable by 64%. Eighteen per cent considered that wearing them had increased their self-confidence.

Key words: rehabilitation, occupational therapy, design, adapted clothes, disability.

Impaired persons need to find clothes that fit and are attractive (14). Recommendations for adaptations of clothes exist (3, 9, 10, 16). These adaptations can make dressing and undressing easier (4) and faster (15) for the individual or for a helper. Kaiser et al. (7) point out how the choice of clothes affects the individual's social interaction. Thus an adapted, well-fitting garment may contribute to building self-confidence (8). For older people (13) with reduced skin sensitivity, the quality and material of the cloth may play a role (12). It is the task of the occupational therapist (17) to guide impaired individuals so that they can be occupied and active. This requires knowledge of impairments and of the design of clothes. An occupational therapist and a designer (19) have in a one-case study evaluated an adapted garment for a 7-year-old handicapped girl. While their study shows a positive result, the results of adapting and altering numbers of different garments have not, as far as can be seen from the available literature, been documented in a controlled group study.

Aims

The aims of the study were (a) to evaluate differences between a group who had received adapted garments and a group without this experience, (b) to examine the need of, and the reasons for wearing, adapted clothes, (c) to describe individually adapted clothes in a group of individuals with impairments, and (d) to document how individuals with impairments obtain clothes, and what the demands on these garments are.

METHODS

Subjects

Group 1. A consecutive series of individuals ($n=50$) was selected from the occupational therapy course client list at the Stockholm College of Health and Caring Sciences. Thirty-six individuals (28% did not respond) aged from 5 to 76 years (mean 28 years), 17 males and 19 females, took part in the study. They had varying types of impairment resulting from e.g. cerebral palsy, paraparesis, tetraparesis and bodily deformities. Of the group, 80% had assistance with dressing and undressing. These individuals had each received at least one garment (total 39 garments). The garments were individually made or altered and adapted for the conditions mentioned.

Group 2. A consecutive series of individuals ($n=81$) was selected from the list of members of the Swedish Association for the Handicapped. Forty-six individuals (43% did not respond) aged from 15 to 75 years (mean 20 years), 21 males and 25 females, took part. All had cerebral palsy impairments and 56% had assistance with dressing and undressing. Of these 46 individuals, only 14 had experience of using adapted clothes.

Design

The questionnaire-based study was carried out during March and September 1988. Two questionnaires were used. Group 1 completed questionnaires A and B, Group two only Questionnaire A. Both questionnaires were sent to Group 1 an average of 2.5 years (range 0-6) after the garments had been individually adapted. Subjects who had not completed and returned the questionnaires within three weeks were sent reminders.

Questionnaire A. Questionnaire A contained questions on clothes in general, with 78 questions under the following headings (variables): *difficulties in obtaining clothes because*

Table 1. *Reliability of questionnaires A and B*

	Group 1		Group 2	
	α	<i>n</i>	α	<i>n</i>
Homogeneity of variables				
<i>Questionnaire A</i>				
Difficulties in obtaining clothes	0.73	26	0.80	34
Need to adapt clothes	0.44	26	0.68	24
Reasons for desire to wear adapted clothes	0.83	28	0.78	35
Requirements as to details of garments	0.55	25	0.84	35
<i>Questionnaire B</i>				
Value of adapted garment	0.60	33		
Generalization of idea	0.34	33		

of impaired function such as mobility (11 questions), the need of simplification and adaption of clothes (6 questions), the reason for the desire to use adapted clothes (14 questions), the requirements as to design of details on five articles of clothing (40 questions), and the information received concerning adapted clothes (7 questions).

Questionnaire B. Questionnaire B contained 30 questions on the individually adapted garment, under the following headings (variables): the value of the garment for the individual (7 questions), generalization of the adapted garment (4 questions), and the individual's use of the adapted garment and the adaptation made (19 questions). (By generalization is here meant that the individuals in Group 1 had developed knowledge of the adapted garment gained and applied it on subsequent occasions, e.g. in connection with the making of new clothes.)

Statistics

The differences between groups 1 and 2 were calculated using the *t*-test (18). The reliability of questionnaires A and B was assessed as the homogeneity (alpha coefficient) (2) of the summated ratings on the different subjects mentioned. The proportion of 'yes' answers was calculated for each question in Questionnaire A and is reported as a percentage.

RESULTS

Reliability of Questionnaire A and Questionnaire B

The homogeneity of the different parts of Questionnaire A when used in Group 1 and Group 2, and of Questionnaire B, is shown in Table I. Homogeneity in Group 1 for Questionnaire A varied between alpha 0.44 and 0.83 and in Group 2 between 0.68 and 0.84 for the different variables.

The questions in Questionnaire A on whether, and if so how, individuals had received information about

adapted clothes proved to be measuring different dimensions, and were therefore not summed to a scale.

The homogeneity of Questionnaire B was alpha 0.60 on the variable value of the garment for the individual and alpha 0.34 on the variable generalization of adapted clothes. The Questionnaire B questions where Group 1 answered whether they had used the adapted garment proved not to form a homogeneous summated variable, and are reported separately.

Evaluation of the adapted clothes

There was no difference between the groups regarding the reason for obtaining and wearing adapted clothes ($t = -1.51$, $df = 80$, $p = 0.13$), nor regarding the requirements as to the details of the garments ($t = 1.67$, $df = 79$, $p < 0.10$).

The need of adapted clothes had been met for Group 1 ($t = -4.02$, $df = 73$, $p < 0.001$), but not for Group 2. The adapted garments had eased the difficulty for individuals in Group 1 to obtain adapted garments ($t = 2.48$, $df = 80$, $p < 0.01$).

Views regarding clothes

Difficulties in obtaining clothes. In Group 1 77% and in Group 2 63% had difficulties in finding suitable clothes because of their impairments. These difficulties consisted of finding clothes that were easy to put on and take off (68% in Group 1, 39% in Group 2), that were comfortable (60% in Group 1, 44% in Group 2), and that followed the fashion (59% in Group 1, 22% in Group 2). In Group 1 94% and in Group 2 85% considered that external factors hampered their purchase of clothes (Questionnaire A). The external factors were that it was difficult to travel to and from the shop (Group 1 31%, Group 2 15%), that what the shop had did not suit the individual (Group 1 56%, Group 2 28%), that there was too little room in shops and fitting rooms (Group 1 38%, Group 2 52%), and that help needed from the staff was not offered (Group 1 34%, Group 2 20%).

Need and reason for adapted clothes. In Group 1, 63% considered that they needed, and could envisage always using, an adapted garment (Questionnaire A). The reasons were that the design of the garment made the helper's work easier (43%), that the garment was more comfortable for the wearer (46%), that dressing and undressing were quicker, and that the fit was better than with ready-made garments (40%).

Of the individuals who did not envisage using an adapted garment (37%), 17% gave as a reason that the garment was not in fashion.

Table II. Requirements for details of garments

Groups ...	Trousers		Sweater		Blouse/ shirt		Skirt		Jacket	
	1	2	1	2	1	2	1	2	1	2
That there are zips	50	41	15	6	80	0	41	9	42	56
Buttons	12	0	18	6	32	33	14	0	21	13
Velcro fasteners	31	12	10	6	21	6	9	18	21	6
Buttoning left or right	19	6	13	0	21	11	32	0	26	6
Garment is roomy	52	53	80	88	63	72	59	27	79	69
Material is stretchable	38	59	70	47	34	33	50	36	49	13
Special requirements	21	56	8	44	8	41	32	7	14	60

Of the individuals who thought they could usefully wear adapted garments, 86% of Group 1 stated that the greatest value of the garment was when dressing and undressing, and 62% when going to the toilet. Other situations such as exercise were of less importance.

In Group 2, 71% considered that they needed adapted clothes and that they could envisage always using an adapted garment (Questionnaire A). The reasons were that the design of the garment made things easier for their helper (26%), that the garment was more comfortable to wear (42%) and that dressing and undressing were quicker (47%), and also that the garment fitted better than ready-made clothes (24%).

Of the individuals who could not envisage wearing an adapted garment (29%), 33% gave the reason that the garment was not fashionable.

Of those who thought they could envisage using adapted garments, 34% of Group 2 stated that the garment was of most value when dressing and undressing, and 36% when going to the toilet. Other situations such as exercise were of less importance.

Sources of information on adapted clothes. In Group 1 (Questionnaire A), 63% had information on the possibility of being able to buy adapted clothes, while in group 2, 57% had received this information. The most important sources of information for both groups had been advertising (50% in Group 1 and 26% in Group 2) and the associations for the handicapped (45% in Group 1 and 26% in Group 2).

Requirements for details of garments in general. The requirements for the various articles of clothing (Questionnaire A) are reported in Table II. Both groups stressed the value of all garments being roomy. For trousers and jackets, the groups considered that

the most important thing was that these garments did up with zips. For pullovers, the groups stated that stretchable material was most important. For shirts/blouses it was most important that they should do up with buttons and not with Velcro fasteners. For trousers and skirts, the groups thought they should have a stretch waist (elastic).

Views regarding the individually adapted clothes

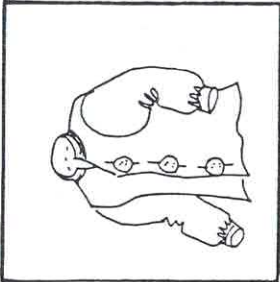
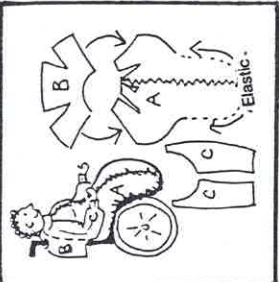
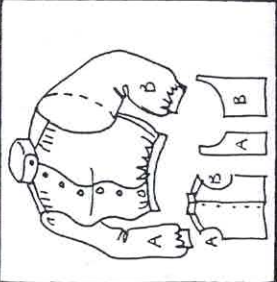
Adaptations made. An overview of the adaptations made to garments for Group 1 ($n=18$) is presented in Table III a-c. Thirty-nine garments were adapted: overalls ($n=1$), capes ($n=2$), jackets ($n=13$), ladies' coats ($n=1$), trousers ($n=12$), skirts ($n=3$), dresses ($n=1$), shirts/blouses ($n=3$), waistcoats ($n=1$) and aprons ($n=2$).

Use of the adapted garments. In Group 1 (Questionnaire B) 29 individuals wore their adapted garment regularly and six used it on special occasions. One individual stated that the garment had never been used since the material was somewhat unsuitable. The adapted garments had been used for a mean of 2.5 years. Individuals had stopped wearing their adapted garment because it was worn out (48%) and/or outgrown (58%). None had stopped wearing their garment because it was out of fashion.

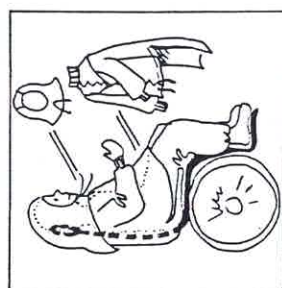
Value of the adapted garment. The individuals in Group 1 who were favourably inclined towards wearing an adapted garment confirmed the value of the garment (Questionnaire B). Group 1 considered that adapted garments were of greatest value when dressing and undressing, 70% stating that the activity was made easier and 45% that the time needed was reduced. Group 1 also considered that the garment was smarter and more comfortable (65%) to wear than

Table III a. *Adaptation of garments*

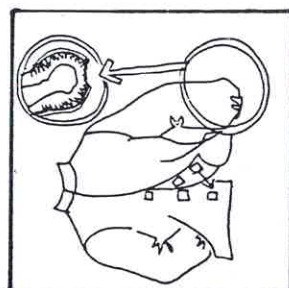
Impairment and disability figures refer to the International Classification of Disability, Impairment and Handicap (ICDIH) (6)

	<p>Case 1 Sex m Age 11 Diagnoses Cerebral palsy Impairment 74.5 Motor impairment of upper and lower limbs. And 72.3.3 Disability 35.3 Clothing over the head Garment Shirt Aim Learn to dress and undress unaided, particularly to do up buttons Adaptation Larger sleeve holes than normal for his stage of development. Extra-large buttons and buttonholes aimed for training Material: pink and grey flannelette Model: altered normal pattern</p>	<p>Case 4 Sex m Age 16 Diagnoses Endocrine disease, causing enlargement and oedema in arms and hands Impairment 86.5 Other swelling, complete lymphoedema Garment Jacket Aim To enable him to wear a jacket To divert focus of attention from hands To be able to use pockets Much enlarged arm breadth adapted to size of jacket, lengthened sleeves Elastic in fold at lower edge of sleeves because of oedema Adaptation Openings in patch pockets adapted to hand size Material: Windproof, with quilted lining; "jacket quilting" Model: fashion model altered as adaptation</p>
	<p>Case 2 Sex m Age 6 Diagnoses Congenital muscular atrophy Impairment 70.54 Involuntary body movements. And 71.3 Disability 35 Clothing disability. And 2, 4 Garment Cape Aim To be able to go out and play during cold and rainy weather Adaptation Adapted for specially designed "Matrix" seat Features Wind and waterproof sailcloth, spinnaker weave, quilted cotton material. Model: specially designed</p>	<p>Case 5 Sex f Age 6 Diagnoses Cerebral palsy, diplegia, blindness Impairment 51.0 Total visual impairment of both eyes. And 71.3 Personal care disabilities. And 4 Garment Jacket Aim Development of self-care: unaided dressing and undressing Training of tactile function Outer material with structure "showing", which way up garment is Shiny lining material Material: corduroy Model: normal pattern</p>
	<p>Case 3 Sex f Age 74 Diagnoses Breast cancer, oedema left arm & hand, rheumatoid arthritis Impairment 86.6 oedema. And 71.5 Disability 5.54 Other disability in arm function. And 35.2 Garment Blouse Aim To enable her to wear a blouse as she always had done. Avoid circulatory stasis Enlarged sleeve breadth adapted to blouse size Left sleeve larger round than right Adapted elastic size at wrist because of oedema Vertical buttonholes Material: Blue rayon jersey, large buttons Model: fashion model altered as adaptation</p>	<p>Case 6 Sex m Age 16 Diagnoses Cerebral palsy, myelocoele, triplegia Impairment 73.6 Paralysis of three limbs. And 73.3 Disability 4 Locomotor disabilities. And 3 Garment Jacket Aim Adapted for sitting, wheelchair, reduce wear on sleeves Easy to put on and take off Adapted to individual's identity (punk) Increased shoulder breadth Full sleeves Longer back than front Sleeve protection against splashing of dirt from wheelchair Reinforcement of lower sleeves Extra long sleeve ribbing Allow room for corset worn by individual Large buttons and buttonholes Material: black sports poplin with quilted lining Model: Normal pattern Altered as adaptation Short black jacket with leather collar and lapel as prescribed punk fashion</p>

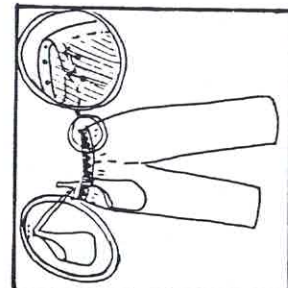
Impairment and disability figures refer to the International Classification of Disability, Impairment and Handicap (ICD/H) (6)



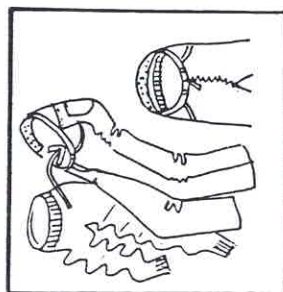
Case 7
Sex f
Age 7
Diagnoses Cerebral palsy
Impairment 70.54 Involuntary body movements, And 72.6
Disability 3 Personal care, And 1, 2, 4
Garment Jacket
Aim For wear in both hot and cold weather
Adaptation Fit in Matrix seat
Removable lining
Enclose Matrix seat
Wedge design of sleeves
Full breadth at front to be formed over knees
Rib top at front and wrists
Sewn-in draw-cords below
Material: windproof poplin, cotton/polyester
lining: quilted
Model: specially designed



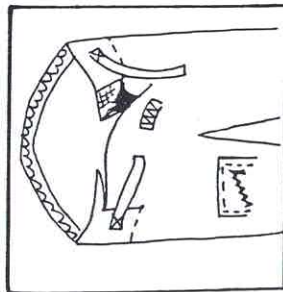
Case 8
Sex m
Age 24
Diagnoses Deformity, absence of fingers
Impairment 13.0 Mentally retarded
Disability 3 Personal care disabilities
Garment Jacket
Aim To be able to open and close jacket unaided
(does not want to use gloves)
To be able to use pockets
Adaptation Velcro fastening
Special position of pockets
Material: Windproof, quilted lining, fleece
lining to lower sleeves
Model: normal pattern, altered as adaptation



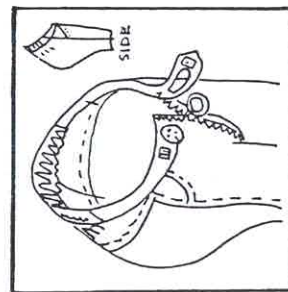
Csdr 9
Sex m
Age 27
Diagnoses Thalidomide-induced anomalies, blindness
Impairment 84.0 Congenital deformity, And 51.0, 4
Disability 35.1 Lower part of body, And 25, 53, 63
Garment Trousers
Aim Facilitate unaided dressing and undressing
Reach bottom of pocket with his shorter arm,
room for a technical aid
Press-studs in underpants and trousers making
them into one garment. Elastic at waist.
Hanging pockets, with a speaking clock
leg lengths
Different trouser-leg lengths suited to man's
Material: corduroy
Model: normal pattern



Case 10
Sex m
Age 57
Diagnoses Cerebral palsy, diplegia, blindness
Impairment 74.4 Other motor impairment of lower limb,
And 51.0, 73.0
Disability 72 Disability relating to temperature tolerance
Garment Trousers
Aim Warm lining of off-the-peg jeans
Adapted jeans for sitting in wheelchair
Facilitate going to the toilet
Avoid chilling of back
Adaptation Seat longer than normal at crutch
Front part shorter than normal at crutch
Long zip at fly
Rubber elastic at waist
Features Garment: jeans and fleece-lined underpants
Model: off-the-peg jeans



Case 11
Sex f
Age 8
Diagnoses Congenital muscular atrophy, scoliosis
Impairment 70.5 Impairment of posture
Disability 35 Clothing disability
Garment Trousers
Aim Avoid pain caused by pressure on musculature
Adapted to sitting and to form of scoliosis
Pocket placed so less muscular power required
to reach it
Adaptation Adjustable waist measurement in form of front
flap fastened with tabs and Velcro fastener
Extra-lengthened seat
Pocket on thigh with zip fastener
Material: soft blue corduroy
Model: pattern for sitting-down



Case 12
Sex m
Age 12
Diagnoses Osteochondrodysplasia (dwarf growth),
multiple joint deformities
Impairment 70.60 Dwarfism
Disability 35 Clothing disability
Garment Trousers
Aim Adapted to build and for sitting
Easy to put on and take off
Adaptation Shorter leg length
Adapted leg width in relation to leg length
Shorter front & longer seat
Fastening at waist with eye, large button and
Velcro fastener
Key ring on zip at fly
Elastic at wrists, back of waist
Material: blue denim
Model: standing-and-sitting pattern

Table III c. *Adaptation of garments*

Impairment and disability figures refer to the International Classification of Disability, Impairment and Handicap (ICDIH) (6)

	<p>Case 13 Sex m Age 10 Diagnoses Cerebral palsy Impairment 72 Spastic paralysis of more than one limb Disability 3 Personal care Garment Over-trousers Aim Stay in wheelchair while being dressed/undressed Time to get out and play during break Adaptation No seat to trousers Features Elastic strap under foot Material: blue wind & waterproof quilted & lined Model: normal pattern altered as adaptation</p>		<p>Case 16 Sex f Age 24 Diagnoses Tetraparesis Impairment 72.6 Complete paralysis of all four limbs. And 61.9 Disability 3 Personal care, And 4 Garment Trousers Aim Warm over-trousers Easy for helper to put on and take off Not time-consuming Adaptation Special design in cutting-out Features Material: poplin warmly lined with polyester filling (quilted jacket material) Model: normal pattern altered as adaptation</p>
	<p>Case 14 Sex m Age 14 Diagnoses Myelocoele, diabetes mellitus Impairment 73.3 Bilateral paralysis of lower limb, And 63.3 Disability 35 Clothing disability Garment Trousers Aim Room for nappy Adaptation Allow self-injection without removing trousers Features Lengthened crutch seam Seat longer than normal at crutch Front shorter than normal at crutch Zips at two places on thigh of each trouser leg Extra long zip at fly Adjustable waist with elastic, buckles and strings Material: blue corduroy Model: pattern for sitting-down trousers altered as adaptation</p>		<p>Case 17 Sex f Age 45 Diagnoses Multiple sclerosis Impairment 72.4 Other bilateral spastic paralysis of lower limbs Disability 35 Clothing disability Garment Skirt Aim Facilitate dressing/undressing, going to toilet Adaptation Adapted for sitting in wheelchair Features Skirt shorter at back and longer in front (conceal knees) Material: cotton Model: wrap-around skirt, pattern altered as adaptation</p>
	<p>Case 15 Sex m Age 17 Diagnoses Mentally retarded Impairment 11 Severe mental retardation, And 27.6 Disability 1 Behaviour disability, And 2, 3 Garment Bib-and-braces overalls Aim Prevent socially unacceptable behaviour (exposure) Room for nappy Facilitate dressing and undressing by helper Features Possibilities of developing model Lengthened crutch seam Seat longer than normal at crutch Velcro fastening in side seams Elastic braces Material: blue twill Model: normal pattern altered as adaptation</p>		<p>Case 18 Sex m Age 5 Diagnoses Down's syndrome Impairment 26 Impairment of emotion, affect, and mood Disability 8a Particular skill disabilities Garment Bib Aim Facilitate helper's care of clothes Protect other clothes at mealtimes Long full sleeves with elastic at wrists Close-fitting at neck Fastening at back, which boy cannot unfasten Large collecting pocket in middle of front Adaptation Adapted for sitting Features Material: waterproof, plastic-coated red cloth Model: normal pattern for rain cape, altered as adaptation</p>

ready-mades. For 18% of Group 1, the garment also increased the wearer's self-confidence.

In Group 1 the adapted garment had increased comfort when the wearer was sitting down (33%) and increased the wearer's mobility (21%). For 15%, the risk of pressure and chafing was less when wearing adapted clothes intended for this.

Generalization of information regarding the adapted garment. In Group 1 (Questionnaire B) 97% of the individuals and their helpers stated that they had received information and ideas regarding adapted clothes. Of these, 29% had later applied the information and ideas, themselves making further garments with the same adaptation. The ideas had been further developed by 18% of the group, for example where individuals made suggestions for development of the adaptations, see Table III *b* case 7.

DISCUSSION

The result shows that the requirements of Group 1 for adapted clothes had been met and that, unlike in Group 2, the difficulty in finding suitable clothes had lessened. The adaptations (Table III *a-c*) were in all cases specially designed and combined with choice of material and model to meet individual needs, wishes and current fashions. In 31% of cases, the adaptations had made dressing and undressing easier for the individual (Table III *a-c*, cases 2, 3, 4, 6, 9, 12, 13, 14, 17) and in 43% for their helpers (Table III *a-c*, cases 7, 11, 13, 15, 16, 18). In cases 1, 5 and 8 (Table III *a-c*) the adaptations had contributed to development of the individual's function of unaided dressing and undressing.

The two questionnaires used in the study proved to comprise variables that relatively well fulfilled homogeneity requirements. With certain modifications, the questionnaires can be used in other contexts.

Grimby & Fugl-Meyer (5) consider that the International Classification of Disability, Impairment and Handicap (ICIDH) (6) is most suitable for epidemiological studies, for describing the consequences of disease or injury. In the present study it has been found very suitable for describing the individuals' impairments and disabilities. However, the ICIDH concept of 'handicap' has not been used.

Kaiser et al. (7) point out that adapted clothes facilitate social interaction, which was also true for cases 3, 4, 6 and 15 in the present study (table III *a-c*). The adaptations (Table III *a-c*, cases 3, 10, 11) were intended to prevent the occurrence of, e.g., pressure

sores and chilling with infections as a consequence of reduced temperature control in individuals with tetra- and paraparesis. It was not possible in the study, however, to demonstrate that this objective had been achieved.

The population of this study had encountered various difficulties in finding suitable ready-made clothes. The individuals' requirements regarding details of clothes may appear to be generally applicable and to be met in ready-made wear, but the study shows that the details should be adapted to the disability without looking different from the details of modern ready-mades. In about half the cases, the adapted garments had been used for so long that they had become worn out or outgrown. Although most individuals in Group 1 knew how to make individually adapted clothes, only a third used this knowledge later. This tallies with the results of earlier questionnaire studies (4), and indicates the need for the individual to be able to consult experts (occupational therapists, vocational teachers, designers) if individually adapted clothes are to be obtained.

There is some manufacture of adapted garments by the clothing industry, but attempts to sell these by mail order have not been very successful. The present study shows that about half the individuals in Group 1 and Group 2 were aware that it is possible to buy adapted clothes, but this information was used only by a third of the individuals in Group 2, which shows that the clothes do not meet each individual need. The need can be met only through continual communication between consultant experts and the individuals affected. The best thing for the individual would be if individually adapted clothes were put on the same footing as technical aids. Their supply could then be organized at, for example, the technical aids centre. Apart from ensuring that individuals received individually adapted clothes, such an organisation would reduce the cost to the individual.

The literature of the last 25 years includes information on adaptations of clothes for various types of impairment, and questionnaire studies charting impaired individuals' wishes regarding clothes. The present study shows a positive result—the need of adapted clothes has been met—but there is doubt as to whether this result may be generalized to other groups of impaired individuals. The population studied was representative of impaired individuals who need individually adapted clothes, but each group contained so few representatives of each ICIDH impairment class (6) that no subgroups could be formed.

In about 2/3 of the questionnaire answers it is the individual's own view that has emerged. In the other cases, a relative or helper completed the questionnaire.

There was a large non-response rate (Group 1: 28 %, Group 2: 43 %), which is presumably reflected in the result since the non-responders probably include the individuals who had been uninterested in, or unfavourably inclined towards, adapted clothes. The two groups were comparable as to age and sex, but there may have been differences between them in the degree of impairment and disability, since this is very difficult to assess without using functional assessments and medical examinations.

The study shows that for impaired individuals to receive individually adapted clothes is valuable and fulfills a need.

Information on distribution of aids for the handicapped and where patterns may be obtained is available from the author.

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