

## POST-CLINICAL FOLLOW-UP OF SPINAL PATIENTS THROUGH DOMESTIC CHECK-UPS (KOBLENZ MODEL)

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**Abstract.** One hundred spine-injured patients have been visited at their homes, examined and questioned about their medical and social situation. The medical conditions have improved, compared with a former similar check-up. But the tendency to work has decreased and is lagging behind other countries. Possible reasons are pointed out.

**Key words:** Follow-up; professional rehabilitation; complications; social conditions.

WITH the ambulatory follow-up of spine-injured patients there is a discrepancy between the best possible care and reality. This is due to the behaviour of the patients themselves, the environment and the lack of experience of spinal injuries by general practitioners.

Our knowledge of the actual circumstances is based on visits to spinal patients in their homes. This has been performed since 1967 by a team consisting of a teacher of physical education, a rehabilitation assistant and a physician of the Koblenz special unit with financial support from industrial insurance organisations. We report on 100 visits since 1972.

TABLE I

### Tasks

<b>Rehabilitation assistant</b>	Construction changes of the flat, financing of physical aids, car, vocational help
<b>Physical Education Teacher</b>	Motivation and advice of sports activities, check of sports equipment, walking aids
<b>Physician</b>	Check-up of medical situation, recommendation for the family doctor, indication for re-admission

TABLE II

### Questions of interest

Intensity and quality of medical care at home
Family care
Family and financial situation
Job
Participation in sports activities
Possibility of vacation
Private car
Daily routine

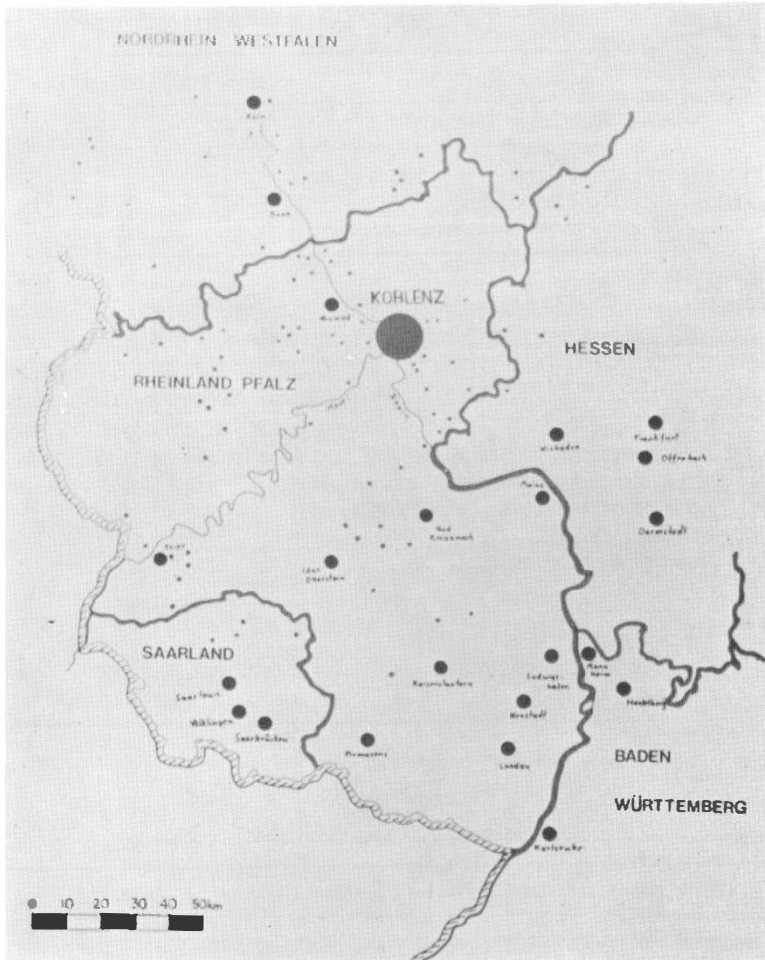


FIG. 1  
Geography of visits.

The following observations were made: the general practitioner's help is mostly asked for urinary tract infections. It seems that the most difficult problem is the technique of sterile sampling of urine. The family supply urine for examination out of the urinal. Urine is often examined only for bacteria by microscope whereas control of pH, antibiogramm and measuring of residual urine is omitted for technical or time reasons.

TABLE III

Urinary check-up in general	(n = 100)
Every 4-6 weeks (as recommended)	42
Quarterly	8
Semi-annual	24
None	26

TABLE IV

Use of walking aids	(n = 100)
Regularly	20
Irregularly	10
Not used	32
Not necessary (Tetraplegics or incomplete)	38

TABLE V

Medical complications	(n = 100)
Small sores	15
Large sores	4
High blood pressure (over 150 mmHg)	22
Low blood pressure (below 100 mmHg)	5
Crural oedemata	8
Mis-use of medicaments	3
Purulent toes	1
Dysaesthesia arm	1
Ulcus cruris	1
Deterioration of urination and bowel movement	1
Pain	1

TABLE VI

## Professional rehabilitation

Literature	Author	Year	%
England } Germany }	quoted from Meinecke		80 17
Germany Koblenz	Lang <i>et. al.</i>	1979	20

The vocational rehabilitation in Germany is lagging behind other countries. Possible reasons for inability to work are:

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Fear of cuts in pension  
 Lack of self-confidence  
 Concern by family  
 Lack of employer's understanding regarding the ability of the injured  
 Employer's concern in the pension situation  
 Unfavourable situation regarding employment  
 Local distance to place of employment  
 Insufficient adaptation of working place  
 Failure of re-training measures (separation from family, lack of skills)  
 Lack of motivation to work

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In our sample the following reasons were mentioned:

TABLE VII  
Impeding reasons for work

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Mainly rural area  
Age  
Kind of injury

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According to Guttman and Meinecke the number of divorces in spinal patients does not exceed the rate among the healthy population. Among our 100 spinal-cord-injured patients there were only 2 divorced persons. However, quite a number of couples would be divorced if the financial situation for married couples was not as generous as it proved to be.

The monthly total income of our population ranges between DM 1.000 and DM 4.000.

TABLE VIII

Total income in DM	(n = 100)
Under 1.000	5
1.000 to 2.000	36
2.000 to 3.000	44
3.000 to 4.000	10
Over 4.000	5

TABLE IX

Social environment	(n = 100)
Private home	72
At their parents	4
Flat adapted to the disabled	24
Private car	72
Vacation	38
No vacation any more	62

TABLE X

Changes 1970-1979 own sample %

	Meine 1970 n = 91	Lang <i>et al.</i> , 1979 n = 100
Sores	25	19
Urethral fistulas	6	0
Private car	56	72
Ability to work	43	20
Sports activities	42	32
Walking aids not used	13	32

According to Vögtle-Junkert and Zureck, in Germany only 2·7 per cent out of 15 000 spinal-cord-injured patients confined to wheel chairs, are integrated in sports groups for the disabled. In our sample 32 participated in sports clubs for the disabled.

#### RÉSUMÉ

De 1973 à 1979 on a examiné par contre-visite chez eux cent malades de section transversale traumatique en leur demandant la situation médicale et sociale. Par comparaison à de pareilles contrôles antérieures leur situation médicale en somme a amélioré tandis que leur capacité de travailler a Par la suite on va démontrer les causes de ce développement.

#### ZUSAMMENFASSUNG

100 traumatisch Querschnittsgelähmte wurden von 1973-1979 zu Hause aufgesucht, nachuntersucht und über ihre medizinische und soziale Lage befragt. Während sich der medizinische Zustand im Vergleich zu einer früheren ähnlichen Untersuchung insgesamt gebessert hat, hat die Berufstätigkeit abgenommen. Die möglichen Gründe hierfür werden aufgezeigt.

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